WHAT YOUR DOCTOR MAY NOT TELL YOU ABOUT PARASITES!

A simple, yet scientifically supported book, that teaches you:

• Why “stealth” parasites might be causing your bloating, heartburn, “IBS” and other digestive disorders.
• How and why parasites might be the secret reason you feel tired, anxious or grumpy.
• How and why parasites might be disrupting your sleep, interfering with your sex function and causing skin, hair and nail problems.
• How to find out whether you have parasites, and how to successfully eliminate them for good.

David Hompes, M.Sc
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Introduction

I would like to begin by asking a question: Are you experiencing any of the following symptoms?

- Heartburn or acid reflux
- Stomach pain
- Excessive belching and burping
- Bad breath
- Bloating
- Abdominal pain
- Excess wind/gas
- Constipation
- Loose stools and diarrhoea

If so, you and I are not so different as in the past I too experienced several of these complaints. An array of “bad bugs” living in my digestive system caused my symptoms and I wonder if they’re mischievously interfering with your digestive tract as well?

Perhaps you are also experiencing uncomfortable or even intolerable symptoms in other areas of your body?

- Low energy levels
- Uneven moods – feeling anxious, depressed or irritable
- Frequent headaches or migraines
- Unexplained aches and pains in your muscles and joints
- Menstrual irregularities such as period pains, PMS and painful breasts
- Urinary tract symptoms such as a burning sensation or foul odour
- Sleep disturbances
- Skin rashes, dandruff or ridged, brittle nails
- Fungal nails or athlete’s foot
- Dry or oily hair, or even hair falling out
- Grinding teeth at night
- Other oral problems such as gingivitis or a white-coated tongue
- Sinus problems such as post-nasal drip
- Seemingly catching every cold and flu bug that goes around

Again, you and I are not so different - I had a fair few of these symptoms myself not so long ago and it wasn’t until I got rid of the “bad bugs” in my digestive system that I was able to feel better.

As crazy as it might seem, any or all of the symptoms listed above can be caused by parasites living in your digestive system. I am not saying that all the symptoms listed above are always caused by parasites, but I am guaranteeing you with absolute certainty that parasites are capable of causing a huge range of weird symptoms, whether they’re living in your digestive system or elsewhere in your body.
This book teaches you the truth about parasites and how they can create all kinds of havoc in your body that ultimately make you feel unwell. Parasites, or “bad bugs” as I call them, represent a secret, hidden epidemic that’s largely ignored in Western medicine.

In addition to contributing to a host of common, every day symptoms, parasites and other bad bugs have the ability to play roles in causing serious illness, including cancer, heart disease, diabetes and autoimmune conditions. They should not be taken lightly!

It’s my intention in this book to reveal to you how these bad bugs may be contributing to current health challenges you might have, and how they may increase your risk of developing more serious health problems later in life. It’s also my intention to show you how you can test for these bad bugs – often from the comfort of your own home – and how to rid yourself of them once and for all. First, though, a little about my background.

In 1995, I was in my final year of a joint honours bachelor’s degree in Sports Science and Geography at Loughborough University. I chose that programme with the idea of becoming a P.E. teacher, with geography as my second subject. I studied anatomy, physiology, sports nutrition, physical conditioning and a host of other interesting biology-related subjects as part of the sports science portion of my degree, but the most enjoyable module was one called “The Ecology of Disease”, taught by a great guy by the name of Malcolm Greenwood.

In this module, my fellow students and I were taught about parasitic diseases. They included malaria, African sleeping sickness, river blindness and Leishmaniasis. These diseases are generally regarded as exotic, tropical and distant diseases by the medical system and they cause enormous problems in the developing world.

I developed a morbid fascination with parasites and was intrigued at how a tiny parasite could get into a human body and create such a powerful array of symptoms. The only problem was that Mr. Greenwood scored me 67 per cent in the module exam – the lowest grade I achieved all year – for which I still haven’t forgiven him! I joke, of course, and am eternally grateful for Mr. Greenwood’s teachings. After graduating, I opted for post-graduate study in sports science and didn’t return to the subject of parasites until around 2004.

Between 1998 and 2003 I worked as a personal trainer and was very fortunate to have an opportunity to work with some high level athletes, including the junior and senior England rugby union squads. I also spent a year traveling to far-flung regions such as South East Asia, Australia, New Zealand and parts of Africa. I’ve since looked back at my travel journals and noted several occasions where I reported significant cases of digestive upset! The most noteworthy of these were in travellers’ diarrhoea “hot-spots” such as Thailand and Kenya, though admittedly I had a major incident that involved a “very hurried” trip to the bathroom whilst camping in Australia’s outback. Clearly I picked up my fair share of gut-loving bad bugs during those treasured times traveling.
The deal-breaker came in 2004 when I was on holiday in Egypt. I love SCUBA diving so my girlfriend and I decided to book a week’s trip to Sharm El Sheikh, on the Red Sea coast. During the trip, we ate all but one meal together. The one meal we ate apart proved to be one of the most important meals of my life. A few hours later, I was lying on my back in bed thinking that my chest and stomach were going to explode. Thankfully, I proceeded to vomit several times and my inferno of an upper abdomen began to settle down.

Over the next week or so, my upper gastrointestinal symptoms were replaced by what I can only describe as a “washing-machine” sensation in my abdomen, accompanied by nausea and weakness. I might also liken the sensation to having an out of control fire hose in my gut. My bowel movements were awkward, to say the least, and contained some mucus and blood.

On returning to the U.K. my digestion improved considerably but I noticed that I had a thick, white coating on my tongue and my energy levels and mood were flat. Several weeks later, everything returned to normal and I must admit that the incident was largely forgotten.

Around this time, I began taking classes with a holistic healthcare practitioner named Paul Chek, out of San Diego in California. Paul’s Holistic Lifestyle Practitioner training – some of the finest in the industry – touched on the role of chronic infections in creating health challenges. Over his extensive career, Paul had worked with many clients who were struggling with parasite infestations, chronic bacterial imbalances and fungal overgrowth and his teachings reignited my interest in “bad bugs”.

By now, I was working as a personal trainer in London. I was busy and, if honest, I was burning the candle at both ends. I wasn’t looking after myself the way I had been taught. My previous business venture had not gone too well and I was in quite a lot of debt. My monthly earnings, in fact, were barely covering the interest on the debt, let alone my rent and food. In early 2007, amidst a bombardment of threatening phone calls from my creditors, I looked at my financial situation and realised I was, to use a technical term, screwed. I ended up declaring myself bankrupt on 21st February that year.

It was at this time that I began to feel my symptoms creep back in – my heartburn returned, accompanied by bloating and loose stools. I was feeling absolutely awful in the mornings and on several occasions I had to break-off from personal training sessions to visit the bathroom and vomit. Being a man, I was fairly sure I hadn’t fallen pregnant, so the morning vomiting was most odd. I wasn’t sleeping very well, which was causing me to feel tired during the day. My moods were very uneven and my sex drive dropped through the floor.
The pain of my symptoms was bad enough, but amidst my symptoms I was also
cancelling training sessions, losing clients and earning less and less money. The
symptoms wouldn’t budge even though I was eating well, practicing stress
reduction techniques and following the recommendations instilled during my
courses with Paul Chek. The situation reached a point where I knew I had to bite
the bullet and take action.

I’d learned of a doctor, again in California, who was able to consult by phone and
who could also send lab test kits to check for parasites, bacterial overgrowth, and
hormone levels and so on. I ran a consultation with Dr. Dan Kalish and he
recommended I check for “bad bugs” in my digestive system using a stool test. He
also sent me a saliva testing kit to check my hormone levels. The results were
very interesting:

- The stool test revealed I was carrying high levels of a stomach bacterium
called *Helicobacter pylori*, or *H. pylori* for short. This little critter is
  responsible for a lot of the heartburn or acid reflux symptoms folk are
  walking around with, and was also the perpetrator of my nausea and
  morning sickness.

- My adrenal hormones were low in the morning when they needed to be
  high, and high at night when they needed to be low. This went a long way
to explaining why I had no energy in the morning, and couldn’t get to
  sleep at night.

Dr. Kalish recommended I take some herbs to rebalance my digestive bacteria
along with a specific natural protocol to rebalance my hormones. Within 90-days
I had experienced the following improvements:

- Heartburn completely gone
- Nausea completely resolved
- No morning sickness
- Vastly improved sleep and morning energy levels
- Much calmer, more stable and brighter moods
- Sex drive returned to normal (phew!)

The improvement was not without a twist. Dr. Kalish’s protocol to help rebalance
my stomach bacteria actually made me feel worse. This happens from time-to-
time because no single, one-size-fits-all approach works perfectly for every
unique person. I researched other options and ultimately designed my own anti-
*H. pylori* herbal cleanse. It worked extremely well and on the back of my success,
I developed an entire project to help people understand *H. pylori*, including a
very resourceful website, two books and an online step-by-step *H. Pylori* home
recovery plan.

One thing still puzzled me: why did I still have excess wind, loose stools and
abdominal cramping on visiting the bathroom when my heartburn and nausea
had gone? Pain on defecation, bloating and gas are classic symptoms of irritable
bowel syndrome, but I wasn’t content with that diagnosis and wanted to find out
why these symptoms were ongoing.
By now, I'd actually begun a six-month functional medicine internship with Dr. Kalish because I'd been thrilled with my own results and dearly wanted to help others achieve similar, life changing outcomes. Dr. Kalish recommended I re-test my digestion using the same stool test. The test confirmed that H. pylori had been eradicated, but interestingly, it revealed some more bad bugs.

This time, the laboratory detected a microscopic parasite called *Blastocystis hominis*, which is heavily associated with irritable bowel syndrome, or “IBS” among other symptoms. The test also revealed the presence of a mold called *Aspergillus*. Again, I used a specific herbal cleanse to fight the parasite and mold organisms. Predictably, my excessive wind and gas, loose stools and abdominal pains disappeared.

Since 2007, I have worked with close to two thousand clients and interpreted roughly the same number of stool tests. I have observed more than forty different parasitic, bacterial and fungal species in my clients’ test results and can state with absolute certainty that “bad gut bugs” have the potential to cause symptoms both within the gut and in the body as a whole. What’s more, practitioners whom I have trained to deliver use the same techniques – which I call The Hompes Method - continually report the same observations.

On detecting and removing bad bugs, clients report higher energy levels, improved sleep, better moods, the disappearance of skin rashes, greater clarity of thought, reduced joint and muscle pain and many other seemingly unrelated health challenges. I find it odd that the majority of my clients came across my website having been unable to find a solution to their symptoms through regular medical care. It seems western medicine has not yet picked up on the fact that chronic parasite infestation causes common symptoms.

Yet anyone who is prepared to delve into the scientific and medical literature, attend courses, conferences and symposia and keep on top of the rapidly evolving research in microbiology, as I have, can explain why an overgrowth of bad bugs in the digestive system causes such a wide variety of symptoms. As you read this book, I am certain you’ll experience the “nod factor”, meaning that the information will strike a chord with you and you’ll think, “Yeah, I get that – it makes sense and it’s probably why I don’t feel so great.”

For whatever reason, conventional medical doctors do not receive training in chronic infectious disease. Western medicine does an absolutely fantastic job of treating acute and sometimes life-threatening infections, but it has not yet acknowledged the role of chronic or long-term bad bug infestations in creating every day symptoms.

Nor does it acknowledge the confirmed or probable roles played by chronic infections in serious conditions like chronic fatigue syndrome, heart disease, rheumatoid arthritis, Alzheimer’s and Parkinson’s disease. Would you believe that at least twenty per cent of the global cancer burden is caused by infections?^1
A lot of the bad bugs you'll learn about in this book hide in the gut. Importantly, digestive function is intimately connected to every other system in your body, which means that a seemingly innocuous bug in your digestive system can lead to a domino effect that creates or contributes to multiple symptoms elsewhere in your body. These “global” body symptoms tend to develop as a result of four main factors:

- **First**, when you have a bunch of bad bugs in your stomach and intestine, they can create an immune response that damages the delicate lining of your digestive tract. Cells in the intestinal wall become separated and all of a sudden you have developed a condition that doctors call “increased intestinal permeability” or its common name, “leaky gut syndrome.”

- **Second**, once a leaky gut has developed, undigested food particles, bacterial and toxins, and parasite by-products can enter your bloodstream. All the blood draining from your digestive system flows to your liver for filtering and processing. If your liver is overwhelmed, or undernourished, its filtering mechanisms can’t work properly and you end up with a whole bunch of “dirty” blood being released into general circulation. Toxins and irritants in “dirty blood” begin irritating tissues and organs, contributing to energy, mood, sleep, skin, sexual, muscle and joint problems.

- **Third**, a damaged digestive system can lead to nutrient deficiencies. It is common to find low stomach acid levels, low digestive enzyme secretions and compromised bile production in people with chronic bad bug infestations. These factors prevent the proper digestion of food and lead to inadequate nutrient absorption. Resulting nutrient deficiencies can literally create pretty much any symptom.

- **Fourth**, when you have bad bugs in your body, you set the scene for three key processes: inflammation, oxidative stress and autoimmunity. These three processes underpin virtually all symptoms and even diseases such as cancer, autoimmune and cardiovascular diseases.

There is a significant amount of research showing that digestive invaders such as parasites, bacteria and fungi produce chemicals that may be involved in the development of neurological diseases such as Alzheimer’s disease, dementia and autism, cardiovascular disease, certain cancers and autoimmune diseases such as lupus, Hashimoto’s thyroiditis, multiple sclerosis and ALS (Lou Gherig’s disease). I will, of course, be sharing some of this research with you throughout this book.
Why I Have Written This Book?

I want you to be healthy and happy – I want to help you make sense of the symptoms you may be experiencing right now and to help you minimise your future disease risk. I shouldn’t need to write this book because, in my humble opinion, chronic parasite, bacterial, fungal and other infections should be dealt with more adequately and comprehensively by conventional medicine. But they are not, and here we are.

My own experiences, those of my two thousand or so clients, and the clinical observations of many other forward-thinking doctors and practitioners show beyond doubt that the presence of unwanted bugs in your body can cause a myriad of symptoms.

It’s my intention in this book to teach you about these bad bugs in a simple, jargon-free way. It’s my hope that by the end, you will be in a position to make decisions that help you solve and overcome your symptoms, whilst reducing any risk for future disease.

In **Chapter One**, I’ll quickly define what a parasite is and introduce some common examples. I’ll also introduce to you bacteria, fungi and even certain viruses that can also colonise or overgrow in your body and cause problems. We’ll initially focus on the digestive system because that’s where many of the little critters live.

In **Chapter Two**, we’ll look at the extent of the parasite problem by exploring the distribution patterns around the world. We won’t spend a lot of time on this topic, but it is mightily important for me to show you that parasites are not just an exotic and tropical problem. In fact, they inhabit millions and millions of people in the “developed” western world, too.

**Chapter Three** is fairly controversial and focuses on the reasons why parasites and other chronic infections are largely ignored by the medical system despite overwhelming evidence that they cause symptoms and disease. I’ll pay particular attention to the digestive system and explain how common digestive symptoms such as “irritable bowel syndrome”, heartburn, bloating, gas and wind, are caused by unwanted parasites, bacteria, yeast and fungi.

A common question asked by my clients is, “But Dave, how on Earth could I possibly get infected by something these bad bugs?” It’s a *great* question, and one that needs answering. In **Chapter Four** I’ll help you understand how parasites, bacteria and fungi get into your body in the first place. You will begin to realise that it is actually the condition of your body that determines whether parasites and other bad bugs are able to colonise and cause problems.
In Chapter Five we’ll look at the main signs and symptoms that appear when you have parasites. We’ll discuss common parasite-related symptoms that doctors tend to ignore or pass off as being “normal”. Such symptoms include fatigue, mood imbalances, sleep and skin problems, heartburn, bloating, excess gas, abdominal pain, constipation and loose stools. I’ll explain how parasites and other bad bugs trigger so many weird and wonderful symptoms around the body and we’ll touch on the role of parasites in serious disease.

Chapter Six is devoted to easing your confusion about why medical tests frequently fail to detect parasites. We’ll discuss the benefits and drawbacks of different parasite tests and, paying special attention to the digestive system, I’ll teach you why they can return negative results even when you have an army of bad bugs in your body. We’ll also cover how you can access superior testing without needing your doctor’s permission to enable you to quickly discover why your symptoms are likely to be occurring.

Chapter Seven teaches you how to effectively eradicate bad bugs. In many cases, the process of eliminating these critters involves much more than taking pills, potions and lotions to kill them. In fact, this “shotgun” strategy may not work at all! Care must be taken to invigorate and rejuvenate your own vitality because doing so will make your body less hospitable to parasitic invaders. Believe it or not, you may never successfully eliminate bad bugs without rejuvenating your own vitality!

Chapter Eight is the last of our main chapters and offers a brief discussion of some of the more frequently detected parasites, bacteria and fungi detected in patients, including how they are transmitted, the symptoms they tend to cause and the standard medical treatments that are recommended to help knock them out.

How This Information Will Help You

If you are currently experiencing unexplained symptoms, I can predict with a reasonably high degree of confidence that your body is playing host to at least one unwanted visitor, usually more than one. By the end of this book, you will understand exactly how and why bad bugs are likely contributing to your symptoms. You will also learn how to access powerful tools that help you discover which bugs you’re harbouring, as well as how to quickly and safely expel them from your body.

Remember I had three bad bug colonies in my digestive system alone – a bacterial infection called H. pylori, the parasite Blastocystis hominis and a mold organism called Aspergillus. Believe it or not, the highest number of individual organisms I’ve seen in a client’s stool test result is seven – that’s seven different bad bugs in one client’s digestive system alone!
Even in extreme cases such as these, I have been able to help my clients rejuvenate and revitalise their vitality by removing the bugs, supporting detoxification, and repairing any damage that may have been done while the bugs were present. The end result of these processes is a total rejuvenation of body and mind.

It is my dear hope that this book finally helps to end any confusion you might have about longstanding, unexplained symptoms, whilst opening the door for you to achieve similar health improvements to the two thousand clients I have assisted over the seven years or so. Irrespective of what your doctor says, I’m here to tell you that your dream vitality level is within reach, as long as you take on board what I have to say and implement the recommendations made herein.

With love,

Dave Hompes.

December 29th, 2014.
Chapter One

What Is A Parasite?

In this chapter, I’d like to explain what a parasite is in technical terms, but also in the specific context of this book. According to Wikipedia, parasitism is defined as:

“A non-mutual symbiotic relationship between species, where one species, the parasite, benefits at the expense of the other, the host. Traditionally, “parasite” referred primarily to organisms visible to the naked eye, or macroparasites (such as lice and worms). “Parasite” now includes microparasites, which are typically smaller, such as viruses and bacteria.” ¹

This is quite a long and drawn out technical definition and I prefer to use Paul Chek’s excellent definition for the purpose of this book, though as you will see, it’s not entirely accurate because we know that some organisms that are classically known as parasites may bring benefit to their hosts! ²

“In biology, the term parasite refers to an organism that grows, feeds and is sheltered on or in a different organism, while contributing nothing to the survival of its host.”

In other words, a parasite is an organism that lives on or in another organism without providing any obvious benefit to the host organism. A parasite takes resources from its host, but doesn’t give anything back in return. This one-sided relationship can end up causing damage to the host organism and the damage can be expressed through symptoms and disease.

In humans, parasites have the potential to cause mild, moderate or serious problems depending on severity of infection and the general underlying health of the person harbouring the parasitic organism. Some parasites are truly pathogenic (symptom and disease-causing) and should not be in the body at all. However others may actually be friendly and only cause problems when the host’s defenses are lowered due to poor diet, toxins and stress.

As humans, we play host to well over a thousand different bacterial species. Some of these helpful and friendly bugs can become parasitic under certain circumstances and conditions. Simply put, good bugs can become bad bugs if conditions in the host’s body allow them to proliferate. In the context of this book, the host is you or I.
How Many Parasites Are There?

Conservative estimates suggest that well over a thousand different bacteria, viruses, fungi, molds and parasites have the potential to cause problems for us humans. Some are relatively common and some are extremely rare. As I mentioned in the Introduction, I have personally observed well over forty different kinds of “bad bug” in client stool tests alone.

Whilst bacteria, viruses and fungi are not typically classified as “parasites”, the way some of them inhabit and use the human body arguably puts them in the parasite category. For the purposes of this book, I would like to keep things as simple as possible and refer to four separate and distinct organism classes:

1. Parasites
2. Bacteria
3. Fungi / mold
4. Viruses

For the purposes of broad discussion, I’m going to lump all four into one umbrella term – “bad bugs”. It’s just easier to do it that way. If we need to focus in on a specific group of bad bugs, or one in particular, I’ll be sure to let you know. The four bad bug classes are illustrated in figure 1.

Figure 1: There are four “bad bug” categories.
Bad bugs can overgrow or infect the human body – including your body, no matter how bulletproof you might think you are - and they have the potential to cause symptoms and disease. Some organisms are *ectoparasites* and live on the body’s surface. Others are *endoparasites*, living within and inside their host.

Some endoparasites are *extracellular*, meaning they inhabit spaces in the body and others are *intracellular*, meaning they actually live inside cells. They can live on your skin, in your mouth, your intestine, your genitourinary tract, your muscles, your joints, your brain and your nervous system – in fact, they can live virtually anywhere. Perhaps you can already begin to get a feel for how and why they might create a wide range of health challenges?

**Bad Bugs #1 - Parasites**

Bacteria, fungi and other organisms can be parasitic, but there is a broad classification of organisms that is simply referred to as “parasites”. Parasites can be tiny microscopic organisms, or they can be macroscopic, meaning you can see them with your naked eye. Here is a partial list of some specific parasites. Are you familiar with any of these little critters?

**Microscopic parasite (affect the digestive system unless otherwise stated):**

- *Giardia lamblia* (also known as *Giardia intestinalis* or *duodenalis*)
- *Blastocystis hominis* (this is the one I had)
- *Cryptosporidium parvum*
- *Dientameba fragilis*
- *Entameba histolytica*
- *Endolimax nana*
- *Isospora*
- *Cyclospora*
- *Chilomastix mesnili*
- *Balantidium coli*
- *Plasmodium falciparum* (causes malaria)
- *Trypanosoma* (causes African sleeping sickness)
- *Leishmania* (causes skin and mucosal disease)
- *Babesia* (co-infection in Lyme disease)

**Macroscopic parasites:**

- *Ascaris lumricoides* (roundworm)
- *Necator Americanus* (hookworm)
- *Enterobius vermicularis* (pinworm)
- *Taenia soleum* (pork tapeworm)
- *Trichuris trichiura* (whipworm)
- *Fasciolopsis buskii* (liver fluke)
These are just a handful of the many parasites that we observe in client stool or blood tests. As gross as it may seem, some of these parasites are quite common and have the ability to cause a vast array of symptoms! I have seen most of them in client stool tests over the years. You can read individual articles covering many these “bugs” in greater detail on the Hompes Method Website.

**Bad Bugs #2 - Bacteria**

Your body plays host to more than a thousand bacterial species. Some bacteria are *pathogenic* and are not considered to be part of the normal human bacterial population. Other bacteria hang around quite happily under normal circumstances without causing problems and conveying significant benefit. Under some circumstances, however, even your friendly bacteria can become problematic. We call these bugs *opportunistic*.

It’s actually quite tricky to determine whether bacterial species are pathogenic or opportunistic – it really depends on the relationship between the bug and its host (you). In one person, a bacterium might be pathogenic, yet in someone else it proves to be relatively harmless. It’s the complex interplay between the bugs and your body that creates harmony or disharmony, peace or war.

Are you familiar with one or two of the following bad bacteria?

- *Helicobacter pylori* (known as *H. pylori* - the one I had)
- *E. coli*
- *Salmonella*
- *Campylobacter*
- *Clostridium difficile* (*C. diff*)
- *Vibrio*
- *Klebsiella*
- *Yersinia*
- *Staphylococcus aureus*
- *Pseudomonas*
- *Citrobacter*
- *Shigella*
- *Serratia*
- *Aeromonas*
- *Proteus*
- *Borrelia*
- *Bartonella*

Some of these bacteria are classed as truly pathogenic (disease-causing) whereas others are known to be constituent parts of a normal and healthy bacterial population. The “normal” bugs may cause symptoms and even disease if they barge their way in and overgrow in places they’re not really meant to inhabit – it’s analogous to weeds growing in a flowerbed.
Even bacterial species found in fermented foods and probiotic supplement products, such as *Lactobacillus acidophilus*, can cause major problems when they break out of their designated intestinal niche in the gut and begin overgrowing. I've seen many cases where clients had *Lactobacillus* overgrowth in the wrong part of their intestine.

**Bad Bugs #3 – Yeast, Fungi and Mold**

Fungi are *everywhere* – around you, in you and on you. They are essential for all life and we couldn’t live without them. But like bacteria, these fungi can overgrow your body when conditions are favourable. There are many types of fungi, as well as yeast and mold. Indeed, some yeast organisms can shape shift into fungal forms and back again. Regarding these bugs, are you familiar with any of these names?

- *Candida albicans*
- *Candida tropicalis*
- *Geotrichum*
- *Rhodotorula*
- *Kloeckeri*
- *Aspergillus*
- *Stachybotrys chartarum* (“black mold”)

Again, I’ve seen many of these organisms show up on client stool test results. Furthermore, their metabolic by-products frequently show up in a urine test known as “organic acids”. *Candida* organisms are by far the most frequently detected fungi; *Candida* overgrowth is extremely common and can affect the sinuses, mouth, gut, genitourinary tract and skin.

**Bad Bugs #4 - Viruses**

When you see the word “virus”, it may well conjure thoughts of the good old common cold or “man-flu.” But you may be surprised to learn that science is discovering important roles for viruses in many different chronic health conditions, including persistent digestive problems, chronic fatigue syndrome, various types of cancer and even heart disease. Viruses you may have heard of include:

- *Influenza*
- *Varicella* (VZV)
- *Rotavirus*
- *Norovirus*
- *Astrovirus*
- *Cytomegalovirus* (CMV)
- *Herpes* virus
- *Hepatitis A, B, C, D and E*
- *Epstein Barr Virus* (EBV)
- *Human papilloma* virus (HPV)
- *XMRV*
- *HIV*
Interestingly, scientists have recently discovered that chronic digestive symptoms may have a viral component in some people and specific stool tests are now able to detect suspected some of these viral agents. It is clear that viruses are capable of causing a lot more problems over and above common colds and flu.

**Where Do Bad Bugs Live?**

As previously stated, bad bugs can reach pretty much any nook and cranny in your body. They can inhabit your gut, skin, muscles, liver, kidneys, bladder, vaginal tract, prostate gland, eyes, blood, heart and even your brain. Some of them can migrate around your body and infect different areas at the same time. I’ll forgive you for feeling a little repulsed at the thought of all this!

For the purposes of this book, we’re mainly going to focus on bad bugs that inhabit the main entry and exit points of your body, namely your:

- Oral cavity
- Nasal passageways
- Stomach and intestines
- Genitourinary tract

These four areas of the body comprise the areas in which I have gained the most experience during my time working with clients, especially the stomach and intestines. Where relevant, I’ll also touch on bad bugs that cause problems in your:

- Lungs
- Liver and its ducts and tubes
- Blood
- Skin
- Muscles and joints
- Nerves

**Your Body’s Entry and Exit Points**

There is a reason why bad bugs inhabit sites such as your skin, digestive system, airways and genitourinary tract. It’s because they are the body’s entry and exit points. As you will see later, bad bugs enter your body via air, food, water, through your skin, via sexual contact, or when you are bitten by something that acts as a parasite vector (for example, a mosquito or tse-tse fly).

Your body has a lot of neurological and immune activity in and around its entry and exit points. This makes sense because the skin, airways and digestive system come into direct and immediate contact with lot of substances from the outside world: You inhale air, eat food and drink water; your skin comes into contact with all manner of things. Just as your skin acts as an outer barrier, your respiratory, digestive and urinary systems have delicate linings that act as inner barriers.
These barriers are there for a reason: they prevent “bad stuff” from entering your body. Skin, digestive and urinary tract tissues, sinuses and lung tissues house a large proportion of your immune system. Immune soldiers and supporting molecules act like gatekeepers or doormen at the nightclub entrance, selectively allowing “good stuff” like oxygen, water and nutrients to enter, while intercepting and neutralising “bad stuff” such as toxins and parasites.

As well as being rich in immune activity, these tissues also have plenty of detoxification activity in the form of cytochrome enzymes. These enzymes help to clear out debris once all that bad stuff has been neutralised by your immune system’s doormen.

Why am I telling you this? Well, it’s simply because the majority of parasites, bacteria, fungi and viruses are kept at bay in and around these barriers. When working properly, your immune and detoxification systems prevent bad bugs from entering your bloodstream. But any malfunction in the immune and detoxification processes may lead to any number of bad bugs entering, getting comfortable and setting up home in your body. David’s case illustrates the role bad bugs can play in causing symptoms, and how removing these bad bugs can help improve or resolve a whole range of symptoms.

David, a very active gentleman in his 60’s, ordered a stool test because he’d been struggling with a wide range of symptoms for some time, including painful muscles & joints (finger and knee stiffness), nasal drip & mucus, mild asthma chest pains, heartburn, a skin condition (hives), bloating, gas, belching following meals, abdominal/intestinal pain, mood problems, sleep issues (this was really bothering him) and lower than ideal energy levels. David’s stool test revealed a whole range of bad bugs residing in his gut. David was playing host to Staphylococcus aureus, H. pylori, a fungal overgrowth and Blastocystis hominis. In other words, he had FIVE different potentially bad bugs – no wonder he wasn’t feeling in top shape. Furthermore, David was also not digesting protein properly and he’d had his gallbladder removed several years earlier. It’s fair to say that we had a fair bit of work to do! The first step was to straighten out David’s eating habits using “Hompes Method Basics’ nutrition and lifestyle recommendations. David then followed a strict anti-parasite and anti-fungal herbal protocol for 60-days. He then followed a protocol to address H. pylori. Recall David’s symptom list and look at the progress he made, in his own words: I’ve had no real problems with my asthma, my chest pains and heartburn have gone, I haven’t had hives for a while, my bloating and gas have improved, my sleep and mood have improved vastly and my energy is good. David was grateful for the stool test we did, as he may not have discovered why he’d been feeling under the weather. He did a good – no, a great job – in following the eating plan and the protocols laid out for him and it’s testament to his commitment that he achieved such exceptional results.
Are All Parasites Bad?

This is one of the hardest questions to answer because it requires a thorough exploration of how your digestive, immune and detoxification systems work. We don’t have room to go into enormous detail in this book and, to be honest some of the information can get very technical and nerdy. What I can do for you is break down a lot of complex jargon and offer a simple explanation. In order to determine whether parasites are always bad, let’s first consider the following bullet points that have been identified through scientific endeavor:

- Fungi and parasites are ubiquitous in nature; they are everywhere and they perform critically important roles in nature.²
- There are many more bacterial cells in your body than there are human cells.
- In fact, bacterial cells and DNA outweigh human cells and DNA tenfold!
- There may be up to 100 trillion microbes in your intestine alone.
- The combined weight of your gut bacteria is around 3-4 pounds.
- Bacteria comprise about half the weight of your poop.
- The microbes in your gut and, indeed in your body as whole, perform many vital functions.

A rather long statement, written by Joel Achenbach in the November 2005 issue of National Geographic, sums up our incredible relationship with microbes:

“The vast majority of cells in your body – by a factor of 100 – are microbes. They are everywhere. They are in your eyeball, in your mouth, nose, ears, and all over your skin. They include microscopic creatures that, magnified, look like horror movie monsters. They are particularly abundant in your gut. There are up to 100 trillion microorganisms in your intestines. You are really a composite of species… So, what does it mean to be human? The water molecules in your body in and of themselves are not what make you human. Your DNA is not what makes you human since 98% of it is shared. You host between 500 and 1,000 species of microbes, representing about 8,000 subspecies. This internal multitude varies so distinctly from person-to-person that it can serve an identifying function like your fingerprint. Microbes are not a bunch of invaders. You and they co-evolved. Your body is like a complex ecosystem, a biosphere. Different species follow their own agendas, but collectively they advance the cause of your whole body and wellbeing. Gut microbes perform some indispensable functions: they help you digest food, produce vitamins, and ward off disease. They form a "strategic alliance", a symbiosis between mammals and microbes. Our evolution depends upon them.”³

It’s a fact: microbes essential for our survival and evolution. I recently attended an advanced training called “The Mysteries of the Living Cell”, with Dr. John F. Demartini. In this five-day programme, we explored and retraced the four-billion-year history of life on Earth, from the first biomolecules to the human mind. Quite a journey, I’m sure you’ll agree.
We explored what Dr. Demartini calls the ages of:
- Prechemistry
- Chemistry
- Information
- Protocell
- Single Cell
- Multicellular Organisms
- Mind
- Unknown.

What became clear is that all human cells possess the characteristics of the very earliest bacterial cells on record and I graduated from the class feeling extremely grateful for bacteria, parasites and fungi. It’s fair to say I love these little critters for the role they have played in giving me my existence.

Scientists now estimate that we play host to more than 1,300 microbial species, not 500-1,000 as stated by Achenbach in 2005. When pondering the question, “Are all parasites bad?” it’s pertinent to consider our long-standing relationship with them. Consider just some of the beneficial roles performed by microbes found in a healthy digestive system alone. These gut microbes:
- Help develop an infant’s GI tract and immune system
- Assist in the digestion of food
- Aid detoxification
- Resist colonisation by pathogenic & opportunistic organisms (bad bugs)
- Help and support the gut immune response
- Manufacture certain vitamins and other nutritional factors
- Stimulate gut motility (bowel movements)
- Reduce allergies
- Produce chemicals called short-chain fatty acids that feed colon cells
- Reduce inflammation
- Respond to and stimulate neurological activity

It is prudent to be careful about the labels we place on these bugs, for they are not all bad! Some organisms are true invaders and we know they shouldn’t really be present at all. Others are questionable, causing problems for some people but not others. Some bugs seem relatively harmless to everyone.

Are You The Problem, Or Is It The Bugs?

In the nineteenth century, Louis Pasteur and Claude Bernard had a bit of a squabble. They were both very clever men: Pasteur believed that humans were helplessly at the mercy of bad bugs, and that we needed to kill them before they killed us. Bernard believed that bugs caused problems only in circumstances where our own “biological terrain” was dysfunctional. It’s rumoured that Pasteur stated on his deathbed that Claude Bernard was correct, submitting that:

“Bernard was right; the pathogen is nothing; the terrain is everything.”
The reason I mention the Pasteur/Bernard debate is to answer an important question that frequently comes up in client consultations, which is, “Dave, if so many people have parasites, how come we don’t all have symptoms? Why is it that I have symptoms and my husband doesn’t? It’s not fair!”

The terrain, as Claude Bernard called it, is the general state of balance, health and vitality of the host. In other words, it’s your overall level of health. Bad bugs, according to Bernard’s theory, are far less likely to cause problems if you’re healthy, with strong immune function, optimal nutrient status and a well-balanced microbial population.

Sure, you may acquire a bad bug here or there, but you’ll probably just have some short-term symptoms as your immune system does what it needs to knock out the invader. If you’ve ever experienced fever, diarrhoea, vomiting, coughing and sneezing, they’re signals that your immune system is doing its job.

However, if your general level of vitality is low and your beneficial microbes are depleted, you are more susceptible to developing an on-going chronic bad bug problem. You’re more likely to acquire an infection and you’re more likely to have one that hangs around for longer because your immune system will not be capable of completely knocking out the bugs.

Furthermore, when your vitality is low and your immune function is compromised, some of thirteen hundred or so “good bug” species that live in harmony within your body can suddenly spot an opportunity to overgrow and flourish. When this happens, a good bug can suddenly become a bad bug. Paul Chek describes the delicate balance eloquently:

“A healthy immune system is capable of resisting most of these organisms, but when they become a problem and cause an infection it’s time to see what might have caused these tiny organisms to infect you... In humans, fungal and parasite infections are usually thought of as opportunistic infections. Infection results when the magnitude of a parasitic organism (such as a tape worm) or organisms such as single celled ameba parasites or fungi can’t be effectively managed by the immune system. Infection can be identified by the nature of, and number of symptoms that manifest.”

This is all very well, but why would your biological terrain become depleted or damaged to a point where it might allow opportunistic infections to develop? Well, there are several reasons, each of which will be discussed later in this book:

- Poor diet, including processed food and alcohol consumption
- Food allergy and sensitivity
- Antibiotic use
- Nutrient depletion and a malnourished body
- Hypothyroidism
- Low stomach acid and pancreatic enzyme levels
- Excessive toxin levels
- Poor liver function
- “Stress” in all its forms
These factors have the potential to disrupt the health of your own cells and the delicate and complex balance of microorganisms in your body. Of course, this is a simplified version, but it explains why some folk carry around bad bugs without feeling any symptoms whatsoever, whereas others might develop a huge array of chronic health complaints.

One case that springs to mind is that of Maggie, a somewhat frail lady who sounded very frightened when she first left a voicemail on the office phone. Here was a lady who was desperate for help. Maggie and I spoke on the phone and it was clear she was having a very tough time. Her story will give hope to you, no matter how out of shape your digestive system is. Maggie told me she had experienced digestive problems since she was five years old, after playing in a stream at the bottom of her garden. She told me she’d been diagnosed with “irritable bowels” and had been informed there was nothing that could be done. More recently, a bigger problem had developed in which Maggie had been diagnosed with *H. pylori*. Astonishingly, this lady in her seventies had then been given three consecutive courses of strong antibiotics to try to clear the *H. pylori*. The only trouble was that each time she took the antibiotics, she felt worse and worse, to the point where she was suffering with very bad diarrhoea that was keeping her housebound. She also felt depressed and extremely tired. What happened over the next 90-days was remarkable, and I’ll be eternally grateful for the opportunity to have worked with this wonderful and courageous lady. I asked Maggie to remove cow’s milk, gluten, soy and as much sugar as possible from her diet. She began feeling a little better. I also suggested Maggie run a stool test to check for “bad bugs”. The results showed that Maggie still had *H. pylori*, despite three heavy-duty antibiotic treatments. She also had a *Candida* overgrowth, plus two parasites – *Blastocystis hominis* and *Endolimax nana*. I needed to help Maggie eliminate these bugs as quickly and as safely as possible because she did not want to take any more antibiotics. In the first 30-days, I designed a herbal programme to fight *H. pylori*. In the second 30-days, Maggie took herbs to fight the parasites. Finally, in the third 30-day protocol, I asked Maggie to take herbs to fight her yeast and fungal overgrowth. All of this was done whilst maintaining a healthy eating plan. I spoke with Maggie every two weeks to support her and hold her hand through the process. Upon completion of the 90-day supplement plan, we ran a re-test. Maggie’s *H. pylori*, yeast overgrowth and *Endolimax* parasite had been eradicated. The *Blastocystis* was still there. It can be tough to get rid of and sometimes needs a little more detailed attention. More importantly, how did Maggie feel? Well, her incapacitating diarrhoea completely stopped; her energy and low moods had lifted and she could get out of the house again and lead a normal social life. Furthermore, the background symptoms she’d experienced for more than seventy-years also vanished. Maggie sent me a lovely testimonial and it was a pleasure working with her. “After three months on Dave’s natural programme, I am delighted to tell the world, I feel fabulous! No more antidepressants! It hasn’t been easy, but I would advise anyone reading this to give Dave a try. His knowledge is extensive; go for it!”

Maggie’s was a case of mistaken diagnosis. As you will see, the western medical system doesn’t tend to recognise chronic parasite infections in situations where people have ongoing symptoms. Maggie’s doctors had not been taught in medical school how these common bad bugs can contribute to such a wide array of
symptoms. When *H. pylori* was eventually detected, the antibiotics prescribed to eliminate the bug actually overwhelmed Maggie’s system, causing more symptoms to develop.

Returning to the question of whether parasites are always bad, it is worth mentioning the work of Joel Weinstock at the Tufts Medical Centre. Weinstock’s team has conducted extensive studies with patients suffering with colitis and Crohn’s disease, both of which are nasty inflammatory bowel diseases.

They have shown that many patients experience relief from their condition when they are purposefully infected with the pork whipworm, *Trichuris suis*. This parasite does not cause problems for humans as it dies a few weeks after being implanted. “Yuk”, I hear you cry, “How can purposefully infecting someone with worms possibly bring improvements in these disorders?

Well, it turns out that whipworms possess an ability to modulate the gut immune system in a way that makes it easier for them to survive. When patients are suffering with inflammatory bowel disorders, this immune modulation leads to a reduction in the level of inflammation, thereby conferring a benefit.

In one study, which was published in the journal *Gastroenterology*, patients had a 50 per cent positive response to “worm therapy” compared with a 15.8 per cent response in the control group, indicating a strong anti-inflammatory and immune-modulating response in the people who were inoculated with worms.

If this sounds far-fetched, it is worth noting that studies are underway to create a “whipworm drug” that may end up being approved for symptoms and illnesses as wide-ranging as allergic rhinitis, multiple sclerosis, food allergy, asthma, Crohn’s and ulcerative colitis. Yes, the immune modulating potential of worms in the human gut is that promising!

**Summary - What I’d Love You To Know About Defining Parasites**

- A parasite is defined as an organism that grows, feeds and is sheltered on/in a different organism, while contributing nothing to the survival of its host.

- Parasites encompass bacteria, fungi and viruses as well as organisms that are actually classified as parasites in their own right.

- I have observed well over forty different bad bugs in client stool and urine tests over more than half a decade of clinical observation.

- Parasites can live virtually anywhere in your body, but they are most likely to inhabit the entry and exit points.

- These “hot spots” are your digestive system, airways, skin and genitourinary tract.

- It’s prudent to be careful when labelling parasites as “bad” because, in
actual fact, they may bring benefit when present in the optimum balance.

- Your body is more bug than human – you have ten times more microbial cells in your body than human cells, and ten times more bug DNA than your own!

- It is your unique, individual interaction with a given parasite that determines whether you experience symptoms or disease.

- It is your body’s “terrain” – the beneficial bug community, immune function, nutrient status, toxin levels and so on - that determines how you interact with the bugs in your body.

- “Good bugs” may become “bad bugs” when your terrain provides them with an environment that they can opportunistically exploit.

- Some parasites may help in the treatment of various diseases by modulating the way your immune system works.

In the next Chapter, let’s briefly look at parasite distribution around the world and explode the medically held myth that parasite-borne illnesses are limited to tropical and exotic climes.
Chapter Two

Where Are Parasites To Be Found?

Parasites are incredibly common - far more common, in fact, than your regular doctor will ever tell you. The word “parasite” typically conjures in the mind images of exotic and tropical diseases. True, parasites are widespread in tropical regions but it is absolutely critical to realise that they are also widespread in Europe, North America and Australasia.

Recall that for our purposes, a parasite is defined as any organism that lives in or your body without conveying benefit. At the same time, it uses up your body’s resources, potentially causing symptoms and disease. Four groups of organism can be classified as parasites – bacteria, fungi, viruses and parasites themselves.

When we’re discussing the worldwide distribution of parasites, it’s therefore important to make sure we consider all four bad bug families. I’d like to begin by using the example of H. pylori, which is a bug I've come to understand in a lot of detail.

My Best Friend - H. Pylori

Having struggled with my own H. pylori infection for several years, I decided to research and write two books about the little critter, as well as an online home recovery plan. H. pylori alone is thought to be present in two thirds or more of the world’s population, a percentage that translates into approximately five billion people.

Statistically, it’s believed that around 40 per cent of the U.S. and 30 per cent of the U.K. population carries H. pylori. In Australia and New Zealand, where many of my readers are located, infection rates are a little lower, estimated to be 10-20 per cent. ¹

Despite their high prevalence, H. pylori infections don’t always cause symptoms. This leads to some experts claiming that the bacterium is “normal” and is actually supposed to inhabit you’re the stomach. I tend to agree with them – whether H. pylori causes a true infection depends on more than simply the presence of H. pylori in the stomach. The specific H. pylori strain and state of a person’s immune system create the outcome. But that’s not the point right now - I just want to show you that H. pylori is ultra-common before we even consider other bugs.

The FDA “Bad Bug Book”

The U.S. Food and Drugs Administration (FDA) has a publication titled The Bad Bug Book. It’s a helpful resource with a catchy name. Within the book, it is stated that the U.S. Centers for Disease Control and Prevention (CDC) estimate that each year, food-borne illness – in other words bad bugs acquired from food – accounts for:
- Roughly 1 of 6 Americans (48 million people) getting sick
- 128,000 people being hospitalised
- 3,000 deaths

According to the CDC, 31 bad bugs are known to cause foodborne illness. Here, symptoms develop after people eat poorly cooked or spoiled food. Medical institutions and health authorities have the ability to track these illnesses and link them to specific bad bugs.

In some cases, however, the cause of a particular illness may be unknown. “Unspecified agents” are bugs and chemicals that are not yet firmly identified as causing foodborne illness. Because authorities can’t track what isn’t yet identified, it’s difficult for them to know how many illnesses bad bugs cause and how many might be caused by other agents such as chemicals and toxins.

Table 1, taken from the *Bad Bug Book*, shows the estimated number of annual illnesses, hospitalisations and deaths resulting from bad bugs and unspecified agents in the U.S.²

<table>
<thead>
<tr>
<th>Foodborne agents</th>
<th>Estimated annual number of illnesses (90% credible interval)</th>
<th>%</th>
<th>Estimated annual number of hospitalizations (90% credible interval)</th>
<th>%</th>
<th>Estimated annual number of deaths (90% credible interval)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 known pathogens</td>
<td>9.4 million (6.6–12.7 million)</td>
<td>20</td>
<td>55,961 (39,534–75,741)</td>
<td>44</td>
<td>1,351 (712–2,268)</td>
<td>44</td>
</tr>
<tr>
<td>Unspecified agents</td>
<td>38.4 million (19.8–61.2 million)</td>
<td>80</td>
<td>71,878 (9,924–157,340)</td>
<td>56</td>
<td>1,686 (369–3,338)</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>47.8 million (28.7–71.1 million)</td>
<td>100</td>
<td>127,839 (62,529–215,562)</td>
<td>100</td>
<td>3,037 (1,492–4,983)</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2 shows the top five pathogens that cause domestically acquired foodborne illness in the U.S. Again, this table is taken from the FDA’s *Bad Bug Book*.²

<table>
<thead>
<tr>
<th>Pathogen</th>
<th>Estimated annual number of illnesses</th>
<th>90% Credible Interval</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norovirus</td>
<td>5,461,731</td>
<td>3,227,078–8,309,480</td>
<td>58</td>
</tr>
<tr>
<td><em>Salmonella</em>, nonpoultry</td>
<td>1,027,561</td>
<td>644,786–1,679,667</td>
<td>11</td>
</tr>
<tr>
<td><em>Clostridium perfringens</em></td>
<td>965,958</td>
<td>192,316–2,483,309</td>
<td>10</td>
</tr>
<tr>
<td><em>Campylobacter</em> spp.</td>
<td>845,024</td>
<td>337,031–1,611,083</td>
<td>9</td>
</tr>
<tr>
<td><em>Staphylococcus aureus</em></td>
<td>241,148</td>
<td>72,341–529,417</td>
<td>3</td>
</tr>
</tbody>
</table>

Subtotal | 91 |
As you can see, there’s a lot of food borne illness in the United States! It is worth noting that these figures only represent \textit{reported cases}. How many people might get a mild, moderate or even a quite severe case of “food poisoning” without reporting it to their doctor, and how many folk acquire such illnesses abroad?

In the context of this book it’s also crucial to realise that the CDC statistics don’t include \textit{chronic} cases in which folk might wander round for months, years or even decades complaining of nagging symptoms that are actually being caused by longstanding bad bug infestations.

As you are no doubt aware, acute infections tend to cause symptoms such as sickness, pain, fever and diarrhea, which may last a few days or a week. These acute symptoms can subside either with or without antibiotic treatment. However, just because the main, acute symptoms go away it doesn’t mean the bad bugs have been completely eliminated.

The very same bad bugs can hang around in smaller numbers and produce \textit{chronic}, or long-term complaints if they are not cleared properly. Antibiotics or, indeed, a person’s immune system, might kill off a large proportion of troublesome bad bugs in an acute episode, but what happens if some are left behind?

The answer is simple: any remaining bad bugs can lead to ongoing symptoms. These symptoms tend to be milder, but can still be very uncomfortable, causing a significant reduction in quality of life. To reiterate, these chronic cases are not included in any official statistics. This is largely because the medical system doesn’t acknowledge \textit{chronic} infections anywhere near as much as I feel it ought to.

I’ve seen the above situation play out on hundreds of occasions. A client will come to see me, or we’ll consult by phone or Skype and I’ll hear a familiar story that goes something like this, “Dave, several years ago I went on holiday and fell ill. My symptoms went away after a week or so but I just haven’t felt the same since.” Alternative stories might involve a camping trip or bad restaurant experience, but the concept is the same: a nasty bad bug caused some kind of acute illness that subsided, only to be replaced by lower-level, ongoing symptoms. Emma is a classic example.

\textbf{Ten years earlier, Emma had been holidaying in Greece. She was having a great time but suddenly came down with a nasty bout of food poisoning. The symptoms were very unpleasant and included cramping, a high fever, diarrhea, nausea and vomiting. She was completely knocked out. On returning to the U.K., Emma’s doctor ordered a stool test, which detected \textit{Blastocystis hominis}. The doctor prescribed a strong course of antibiotics to treat the parasite, but did not re-test to check eradication. Emma’s acute symptoms went away, but she began experiencing symptoms relating to her mood, energy levels and menstrual cycle. When I consulted with Emma a decade later, I suggested the parasite might still be there. We ran a stool test through a private lab and sure enough, \textit{Blastocystis} was detected. It had not been eradicated by the antibiotics and had been causing disruption in Emma’s digestive system for a decade. I explained to Emma how chronic}
bad bug infestations often create seemingly unrelated symptoms such as low energy, mood and sleep problems and everything made perfect sense to her. After diligently following a specific nutrition, lifestyle and supplement programme to rebalance her digestive bugs and support her hormone system and energy production, Emma's symptoms improved dramatically and she was able to begin functioning with a much greater quality of life. When we re-tested, Emma had successfully eradicated the *Blastocystis* parasite.

**Introducing Dr. Amin**

Dr. Omar Amin, Ph.D. is a professor of parasitology and runs a parasite testing facility in Scottsdale, Arizona. He is a nationally and internationally recognised authority in the field of parasitology and has published more than 200 major articles or books. His work has covered North Africa, North America, Peru, Persian Gulf, Kenya, Czech Republic, Russia, China, Thailand, Taiwan and Vietnam.

Dr. Amin has spent his entire career studying, testing and working with parasites. As such, he's in a unique position to provide education on the prevalence of parasites and most certainly has a significantly higher level of knowledge and experience in this area than your average medical doctor or health care practitioner.

In 2011, Dr. Amin published a study involving nearly 3,000 patients. In the study, 5,792 stool samples from 2,896 U.S. patients were analysed. 32% were found positive for parasites. The most common parasites were *Blastocystis hominis*, *Cryptosporidium parvum*, and *Entamoeba* species. The study did not consider bacteria or fungi.

In the study's discussion, Dr. Amin pointed out that a sizable proportion of patients *without* parasites still reported digestive symptoms, including bloating, gas, diarrhoea, constipation, and abdominal cramps. In a follow-up study, 60 stool samples that turned out to be free from parasites were analysed for other bad bugs. All samples proved to be positive for at least two species of pathogenic bacteria or fungi: 4

- *Escherechia coli* (a form of *E. coli*)
- *Klebsiella*
- *Proteus vulgaris*
- *Citrobacter freundii*
- *Pseudomonas aeruginosa*
- *Candida*

Simply put, these studies tell us that a lot of people are walking round with bad bugs in their digestive systems! Approximately one third of the stool samples analysed by Dr. Amin’s team contained parasites and all the samples cross-checked for bacteria and fungi turned out to be positive. Bad bugs aren’t restricted to the tropics!
My Own Lab Testing Experiences

I have been referring clients to private laboratories for stool testing since 2007. During that time, I can state with absolute conviction that only 5-10% of those tests have failed to detect a parasite, fungal overgrowth, opportunistic or pathogenic bacterial overgrowth. Some people turn out to be carrying one bug while others may play host to several.

Furthermore, a whole range of parasite, fungal and bacteria-associated symptoms clear up and vanish when clients take prescription antibiotics or follow a herbal protocol to rebalance their gut bugs. This leaves me in no doubt that parasites are common and cause many frequently reported symptoms.

What Do Other Experts Say?

Although the medical community in general doesn’t really acknowledge the role of parasites in chronic health challenges, there are plenty of individual physicians who beg to differ. For example, Louis Parrish M.D. says,

“Based on my experience, I estimate in the New York metropolitan area that 25 percent of the population is infected. Of these, 15 percent are asymptomatic, 25 percent have ignorable symptoms, 55 percent have a compromised quality of life, and 5 percent are disabled.”

Dr. William Timmins, founder of the Biohealth Diagnostics testing laboratory and a clinician who evaluated thousands of stool samples, states:

“In 2004, the chief of the National Institutes of Health’s Laboratory for Parasitic Diseases stated that you are more likely to contract a parasitic infection in the United States than in Africa. Consider that this opinion comes from a highly credible medical source. I believe that intestinal parasites are reaching epidemic status, regardless of one’s social status or hometown.”

Leo Galland, M.D., an outspoken integrative medicine physician based in New York City, says:

“In 1990 I presented a paper before the American College of Gastroenterology which demonstrated Giardia infection in about half of a group of two hundred patients with chronic diarrhea, constipation, abdominal pain and bloating. Most of these patients had been told they had irritable bowel syndrome, which is commonly referred to as "nervous stomach". I reached two conclusions from this study: (1) Parasitic infection is a common event among patients with chronic gastrointestinal symptoms. (2) Many people are given a diagnosis of irritable bowel syndrome without a thorough evaluation.”

Chronic infection and toxicology expert Dietrich Klinghardt, M.D., Ph.D., states:

“From a medical perspective there are two kinds of illnesses... There are the illnesses – the traditional illnesses - that have a name, like diabetes or hypertension, fractures and there is appendicitis... And then there is the much larger amount of illnesses that go without a name where people have lost
their zest, they have lost their enthusiasm, they have lost their sex drive, lost their joy; they don’t dance any more, they don’t sing any more; they are still living, but they’re living sort of like a half life. Our experience with every patient that we see is in that category. The main symptom is loss of zest. It’s not that people are suicidal it’s just that they have lost the vibrancy of life, the colour, the smells, the excitement, the sensuality of it. And we see that everywhere we look – we see the same picture. So we have tried to distill down over the years what it is that has changed in illness and what is causing this strange state that we’re in, that we’re observing worldwide. And we really were able to just distill it down to a few factors... The main one being that people have increasing numbers of chronic infections. We don’t see the acute pneumonia that often or the acute Staph infection; yes, those exist and they usually end up in hospital and the hospitals are doing a good job with the acute stuff. But chronic infections are even denied by the medical system that they even exist.”

I’m sure you get the picture. Physicians who take the time to investigate why symptoms develop rather than simply prescribing medications to suppress those symptoms, are acutely aware of how parasites – both acute and chronic - can influence the human body.

The Tropical Problem

I don’t want to downplay the fact that exotic and tropical regions have very high parasite infection rates. I simply want you to realise that we have extensive scientific, medical and clinical evidence showing beyond doubt that bad bugs are also rampant in Europe, North America and Oceania.

A rather unglamorous book that sits in my library is Principles and Practice of Clinical Parasitology, edited by Stephen Gillespie and Richard Pearson. At nearly 700 pages, it’s a tough read, but the message is clear: parasites are everywhere. The book isn’t limited to an exploration of intestinal parasites. It also considers the major tropical and exotic infectious diseases I studied all those years ago at university, including malaria, sleeping sickness and river blindness.

If you examine the left and far right columns in Table 3, you’ll see an estimated global infection burden from seven selected worm parasites. Adding up the numbers in the far right column shows that some 3.47 billion people are infected by these seven worm parasites alone. This is just under half the world’s population!
The numbers in Table 3 do not include protozoan parasites. Nor do they include bacterial infections or fungal overgrowth. Malaria, which is caused by a variety of tiny parasite subtypes called *Plasmodium*, isn’t included either. Malaria alone is thought to cause around 250-600 million infections per year.

I speculate that if we consider all the known intestinal worms, microscopic protozoans, bacterial imbalances, blood parasites and fungal overgrowth, we’d discover at least one bad bug in 80% or more of people living on this planet. We’ll explore the reasons for this widespread distribution in chapter four.

**Summary - What I’d Love You To Know About Parasite Distribution**

- One bad bug alone - *H. pylori* - is found in roughly one fifth to one third of the Western population.

- We know that food-borne illness in the U.S. affects some 15-20 per cent of the population and that this number only represents acute cases that are actually reported by patients.

- We know that one of the world’s leading parasitologists, Dr. Omar Amin, observed parasites in 32 per cent of the U.S. samples he studied.

- Dr. Amin also found that stool samples from people with digestive problems that had tested negative for parasites were found to contain bad bacteria and fungi.

- Forward-thinking physicians recognise the role of bad bugs in creating chronic symptoms and illness.

- Approximately 90 per cent of the stool tests I have analysed and interpreted from clients in the U.K, Europe, North America and Australasia over the last seven or more years have revealed bad bug infestations.

- When we add the estimated vast parasite burden of the developing world, it’s easy to see that parasites truly are an “epidemic in disguise”.


Chapter Three

Why Doesn’t The Medical System Fully Acknowledge Parasites?

One of the most frequently asked questions I receive via email and during client consultations is, “Why didn’t my doctor tell me about this and wasn’t I tested for these bad bugs?” The answer is fairly straightforward and comes down to the fact that western medicine just doesn’t recognise that chronic infections cause common symptoms.

We cannot argue that western medicine has done a fantastic job of treating acute infections. The advent of antibiotics and their continued use has undoubtedly extended millions of lives around the world. But doctors and patients are now faced with a different challenge. Instead of obvious, acute symptoms, many people are experiencing chronic, ongoing symptoms for no apparent reason.

Acute infections are easy to spot because their symptoms are fairly obvious. They include fever, coughing, nausea, headaches, swollen glands, vomiting, abdominal cramps, diarrhoea and so on. A broad-spectrum antibiotic is generally prescribed and acute symptoms may disappear relatively quickly. Even if treatment is not administered, acute symptoms often run their course over a few days, a phenomenon known as “self-limiting infection”.

However, as I discovered with my Egyptian holiday food poisoning incident in 2004, the disappearance of acute symptoms does not necessarily mean the offending bug has been completely knocked-out. In some cases, obvious symptoms might disappear completely and there may be no clue that the bug is still hanging around. In other cases, mild symptoms such as gas, the occasional loose stool, tummy gurgling and vague abdominal pain may remain.

Sometimes, these symptoms are not severe enough to warrant attention – people just tend to live with them. Equally, ongoing symptoms can be uncomfortable and may significantly compromise quality of life. But because the vomiting, diarrhea and fever have gone, nobody suspects that a bad bug may be causing the ongoing symptoms.

Digestive symptoms might clear up completely following an acute infection, but energy levels and mood may deteriorate, cognitive function and memory might not be quite as sharp as they were, sleep may be compromised, aches and pains may develop and skin conditions may appear. I’ve seen these scenarios many, many times in clients.

Furthermore, you don’t necessarily have to experience obvious, acute symptoms when you acquire a bad bug. In fact, I have seen lots of cases in which clients could not recall a bout of food poisoning or gastro sickness, yet their stool test results revealed bad bugs. In these people, chronic symptoms both inside and outside the digestive system had developed somewhat mysteriously over a period of months or even years. Perhaps you have experienced a similar situation?
The point is that bad bugs can be quite stealthy and may set up home in your body without causing an obvious initial fuss. Slowly but surely, you may begin to develop symptoms such as a grumbling gut, broken sleep, chronic stiffness or pain, low energy, declining mood and memory and even chronic symptoms related to your sex life, skin, hair and nails.

**Why Don't Doctor's Know About This?**

Unfortunately, doctors are not taught about the impact of chronic, low level infections when they go through medical training. Having spoken with dozens of medical doctors, it’s clear that parasitology simply isn’t taught in med school. Instead, it is a specialised subject that is only considered by physicians who opt for specific training. There are several reasons why the western medical system pays little attention to parasites:

1. **Parasites are still generally considered to be a tropical or exotic problem.** Whilst this is an outdated attitude, it still pervades the medical system.

2. **The symptoms caused by bad bugs mimic many medically diagnosed conditions.** Classic examples include acid reflux disease and irritable bowel syndrome, which can be caused by a host of different bad bugs.

3. **Unless a patient’s symptoms are obvious and acute, doctors will generally not run testing in an attempt to detect bad bugs.** This is especially the case when several symptoms are present concomitantly in a “syndrome.”

4. **Medical tests currently used for parasite detection lack accuracy.** When doctors use them, the tests frequently fail to detect any bad bugs. This promotes a false belief among doctors that parasites are rare. Yet we find parasites in their droves when clients are referred for parasite testing with specialised, private laboratories.

Can you relate to any of these situations? Perhaps you have been tested for parasites only to be told your result was negative? Maybe your doctor has been dismissing the idea that your symptoms might be the result of bad bugs living in your body? If so, you’re certainly not alone – these are stories I hear every day from my clients.

There is one more reason why I feel parasites are not given very much attention and I don’t mind being a little controversial here as this is an important point. Eradicating bacterial overgrowth, parasites and fungal problems with a 7-14 day course of antibiotics or antifungals is not profitable for pharmaceutical companies. These companies make much more money by selling drugs that suppress the symptoms caused by bad bugs.
A classic example of this involves the group of drugs known as proton pump inhibitors, or PPIs, which are antacids prescribed for the suppression of heartburn and acid reflux. These drugs are among the most profitable in pharmaceutical history, yet do nothing to address the real reasons why heartburn and reflux develop in the first place.

As you will see in chapter five, and as I explain in *The Hompes Method* book, symptoms and ill health are nearly always the result of a simple imbalance. It’s this simple: too much bad stuff is in your body, too little good stuff is in your body. The bad stuff includes bad foods, bad bugs and bad toxins. The good stuff includes good foods, good bugs and good nutrients. If you remove the bad and replace the good, it’s very hard not to overcome nagging symptoms and even disease.

Pharmaceutical companies make very little money if you focus on removing bad foods, eating more good foods, removing bad bugs and replacing them with good ones, detoxifying your body and making sure you replenish your nutrient levels. This is why bad bugs are largely ignored in medical training, along with nutrition - my doctor friends tell me they only receive 1-2 days of nutrition training, yet I find that helping my clients optimise their food intake and eating habits is the number one most effective therapeutic tool in the Hompes Method Toolkit.

The situation is nobody’s fault - it’s just the way it is. The pharmaceutical giants are publicly listed companies and they have an obligation maximise their profits for their shareholders. Unfortunately, the drive for increased profits often leaves patients with many unanswered questions and a body full of symptoms. Melanie’s case provides a wonderful example.

41 year-old Melanie, from Oregon in the U.S. was struggling with a whole range of unpleasant symptoms, including indigestion & upper abdominal discomfort, bloating, constipation, diarrhea, belching after meals, gas, lack of “robust” energy, scalp and facial acne, difficulty concentrating and focusing on tasks and aching joints. She was also missing periods, had a very low sex drive and had been diagnosed with a thyroid condition and a hormone imbalance called oestrogen dominance, which we see a lot in both our female and male clients when we run hormone testing. Her morning temperature and pulse were 96.7 degrees Fahrenheit and 63 beats per minute, respectively (we like people to be at 97.8 and 75-80 as this indicates optimal energy production in the body; a low temperature and pulse indicates under active thyroid and compromised energy production, which can lead to virtually any symptom in the body). Her bodyweight was 148 pounds. Melanie’s stool test revealed that she had *Candida* overgrowth, as well as bacterial overgrowth (*Enterococcus*), as well as white blood cells in her stool, which indicated that her immune system was actively fighting something in the gut. Melanie worked with Hompes Method practitioner Jack Walton for 120 days. Following specific protocols to remove bad bugs whilst optimising digestion, reducing gut inflammation and supporting immune function, Melanie’s indigestion and upper abdominal discomfort completely disappeared to a point where she wasn’t even aware of a problem in that area of her body. Her alternating constipation and diarrhea resolved completely, as did her bloating, belching and gas.
Remarkably, after 60-days, Melanie's periods returned, without any breast tenderness or cramping, which had previously been problematic. Her cycles were still slightly irregular but her mood stable, with no anxiety, low feelings or irritability. Her skin condition also improved markedly. Melanie's temperature and pulse increased to 97.4 degrees and 78 beats per minute, respectively and she lost 9 pounds of stubborn body fat. The improvement in these measurements was matched by a significant elevation in her energy levels and she was able to work 5-6 days per week instead of just 3. Melanie's sex drive came up slightly, and she felt some improvement in her arthritic symptoms, too. All in all, she was delighted with the results, and continues to maintain her new, healthy lifestyle.

Here's what Melanie had to say: "Jack, I want you (and Dave) to know how much I appreciate your program and all you have done for me. One year ago, I had the opportunity to buy the business I now own, but I was too weak and ill to be able to do that. Now, with your help and guidance and some hard work, I was able to trust my gut (I had to heal my gut to be able to trust it!) and jump when the opportunity came around again. I don’t know where I would be if I hadn’t found your program online. I had come across much of the information in various places on the Internet, but couldn’t make sense or practical use of it. But your system laid it all out in such an organised, cohesive manner, that it made implementation easy and of course, having personal guidance made all the difference. I’m glad the initial program was for a few months as it gave me time to make sustainable changes, instead of just a passing protocol. Now these methods are a part of my life, they are my foundation for health. You not only helped me to find health again, but you helped give me the power to be in control of my health again. All the doctors I had worked with seemed to like to keep me in the dark and act as though only they could hold the keys to my health, but you shined the light on everything. I find it amusing that I had to get in touch with someone halfway across the world to help me...yay for modern technology! Because without it I would be stuck with the backwards way of “practicing medicine” in my rural area. You have done more for me from thousands of miles away than any of the practitioners that I have seen in person. Jack, you were my rock. Thank you for getting me through this. For everything you have done for me and my health, I am truly, truly thankful."

Summary – What I’d Love You to Know About Medics and Parasites

- Parasites are generally not considered by mainstream medicine unless nasty, acute symptoms are present.

- They are still considered to be “exotic” or “tropical” problems.

- Symptoms mimic medical “labels” that doctors are taught to diagnose at medical school, including acid reflux and irritable bowel syndrome.

- Non-digestive symptoms relating to energy, mood, sleep, reproduction and skin are rarely, if ever, linked with bad bugs.
• Medical tests are not as accurate as you might think, leading to a false assumption that bad bugs aren't present when folk struggle with the above symptoms.

• Testing and treating parasites is not profitable for pharmaceutical companies and their shareholders, but selling drugs to suppress bad bug-related symptoms is.
**Chapter Four**

**How On Earth Do You Acquire Parasites?**

A common question asked by clients over the years has been, “How on earth did this thing – or these things – get into my body?” This is a fair question and there is no simple or straightforward answer. Several factors can determine whether bad bugs set up home in your body.

Parasites can enter your body in a variety of ways, which we’ll explore shortly. Many of the people I’ve consulted assumed they were innocent victims: a parasite had rudely and unscrupulously invaded in an event that was completely out of their control. However I’ve come to understand through research, study and experience that it’s very important to understand the role we, ourselves, may play in creating our own misfortune when it comes to bad bugs.

For more than a century the medical system has taken a stance that parasites, bacteria, fungi and viruses comprise an enemy to be stomped on and eradicated at all costs. The public has followed suit by effectively playing a “victim role”, meaning that in general, we are detached from the role we play in allowing parasites to take advantage of our body. It takes two to tango when it comes to the human/bad bug dynamic.

Parasites don’t necessarily want to invade everybody. They want to settle in a body that’s hospitable to them. A run down body, low in vitality and with a depleted immune system is a perfect place for bad bugs to set up their home. Dietary habits, stress levels and other lifestyle factors can all influence our vitality, immune function and susceptibility to the acquisition of bad bugs.

That said, I do believe some people are genuinely unfortunate and may acquire a nasty, aggressive parasite irrespective of their own vitality level. I was in pretty good shape when I went to Egypt in 2004, yet I was struck down by *H. pylori*. So it’s certainly possible to have a little bad luck. Nonetheless, the majority of people I consult tend to have developed chronic bad bug infestations because of reduced vitality in the first place.

**Parasite Transmission and Entry Routes**

There is little doubt that food and water are the main sources of parasite-based illness. Both vegetable and animal-based foods can harbour bacteria and parasites. Furthermore, tap water in many regions has been shown to contain parasitic organisms.
**Entry By Food!**

The Centers for Disease Control and Prevention cites food as the reason behind 80 percent of all pathogenic outbreaks in the U.S. The FDA Bad Bug Book, which I cited earlier, suggests that close to 50 million cases of food-borne illness are reported each year, representing one in six people. Bad bugs found in contaminated or spoiled food cause most of these illnesses.

Bugs such as *H. pylori, Campylobacter, Salmonella* and *E. coli*, all of which are bacteria rather than parasites, are frequent offenders in the food contamination game. I’ve seen several cases of chronic *Campylobacter, Salmonella* and *E. coli* over the years, where clients experienced a wide variety of ongoing symptoms that doctors had not associated with possible bacterial overgrowth. Some of these people had experienced obvious acute symptoms, but others had not.

In addition to the bad bacteria, common food-borne parasites that may or may not cause acute digestive illnesses include *Giardia, Cryptosporidium, Blastocystis hominis* and *Entamoeba histolytica*. Some parasitic worm cysts and larvae can also be transmitted in food. Tapeworm is probably the best known of these.

According to natural health expert Anne-Louise Gittleman, when parasites and bacteria are in food, they are almost always transmitted because of improper cooking practices – either too little cooking, or none at all. In some cases, foods such as salad items may not be adequately washed.¹

Food-borne infections can come from animal-based foods such as pork, beef, lamb, fish and seafood. Vegetables can also be hazardous. Foods such as lettuce, watercress, celery, bamboo shoots and water chestnuts can be contaminated. Irrigation water contaminated with animal poop, through poor hygiene from food handlers, warm temperatures and other factors can all contribute to the risk of acquiring bad bugs from food.

**Not So Funky Fish**

The consumption of raw fish in the form of ceviche, sushi, sashimi and so on is a risky business. I’ve seen plenty of online videos showing live worms in fish. I’ve seen one myself in a restaurant and once in fish purchased from the market. Partially cooked, pickled, smoked and undercooked fish can all be contaminated.

In Finland, where the consumption of smoked fish is very popular, fish tapeworm infection is common and can lead to a range of health challenges by creating vitamin B₁₂ deficiency. Pike, perch, trout, grayling, turbot and orange roughy can also contain tapeworm. Pacific salmon, red snapper, herring and cod can contain Anisake worm larvae.
The Perils of Pork
Undercooked pork or meat jerky can lead to the transmission of a worm called *Trichinella spiralis*. If you’re unlucky enough to eat infected pork or any other infected meat that contains worm cysts, they can hatch in your intestine and migrate to your muscles where they encyst themselves. Figure 2 shows a *Trichinella* cyst inside muscle tissue.

![Figure 2. Trichinella spiralis in muscle tissue. The worm measures 1mm in length.](image)

Trichinosis, the name given to *Trichinella* infection, can cause flu-like symptoms and muscle aches/pains that can be quite severe. The symptoms mimic many other diseases. As discussed in the previous chapter, these symptoms are more likely to be given a medical label like fibromyalgia than be investigated for *Trichinella*. The worm can also be acquired from eating wild boar, rabbit, fox and even polar bear (important given the vast amounts of polar bear I’m sure you've eaten recently!)

Pork can also harbor tapeworm cysts, which again can hatch in the intestine. If these cysts or larvae penetrate the intestinal wall, which is rare, they can travel around the body - even to the brain - and cause dementia, epilepsy and possibly even death. But more often than not, an intestinal tapeworm infection will cause vague digestive symptoms and nutrient deficiencies by stealing nutrients. Figure 3 shows an adult pork tapeworm.

![Figure 3: Adult pork tapeworm.](image)

The Bad Side of Beef
Undercooked beef in the form of rare steaks, burgers, steak tartare and carpaccio, can lead to beef tapeworm infection. Beef tapeworm doesn’t tend to be quite as nasty as its pork-infesting cousin, but it can still steal your nutrients. Undercooked pork and beef, as well as lamb, may also harbor the microscopic parasite *Toxoplasma gondii*, which can cause flu-like symptoms. *Toxoplasma* can cause also cause problems for the developing foetus, as it is capable of crossing the placenta if mum is infected.

![Image of tapeworm](image)
Chicken & Eggs
Chicken can play host to a number of different bad bugs, including *Campylobacter* and *Salmonella*. The latter can be found on eggshells and even in the egg itself. Tainted chicken can be the source of some really nasty bacteria. It can also be a source of *Toxoplasma gondii*.

Other Foods
Salad, vegetable or fruit items washed in contaminated water, or infected by food handlers, can lead to parasite transmission. I've worked with clients who acquired food poisoning while they were on holiday, having eaten at fast food or low-quality restaurants, and while they were camping. I recall a very nasty case of *Salmonella* that a lady acquired while she was on a camping trip. The *Salmonella* caused severe food poisoning symptoms, was not eradicated by antibiotics and ended up causing significant ongoing discomfort.

Entry By Water!
In some cases, it can be quite hard to pinpoint whether a bad bug has been acquired from contaminated water or spoiled food. If food is washed in contaminated water, is the food or water to blame? I guess it's both! We know for sure that dirty water can contaminate food. But we also know that municipal water supplies, even in Western countries, can cause parasite outbreaks.

The Milwaukee “Crypto” Outbreak
In 1993 the inhabitants of Milwaukee, Wisconsin, were subjected to an enormous outbreak of the tiny *Cryptosporidium* parasite. A water purification plant became contaminated with faecal matter, sending parasite-laden water into people's homes.

The root cause of this outbreak was never officially identified; initially, cattle poop was blamed for contaminating water running off from pastures. It was also thought that perhaps melting ice, carrying *Cryptosporidium*, might have entered the water treatment plant through Lake Michigan.

Over the course of two weeks 403,000 of around 1.6 million residents became ill with fever, cramps, diarrhea and dehydration. The Milwaukee incident remains the largest waterborne disease outbreak in U.S. history, claiming some 104 lives, mainly in elderly people with weaker immune function.

The Milwaukee outbreak was discussed on episodes one and two of a U.K. TV series called *Monsters Inside Me*, which I highly recommend you watch if you can get hold of the re-runs. It's a fascinating series and will provide some great educational value for you.

There are countless other examples of smaller scale “Crypto” outbreaks in the U.K., North America, Australia and other “developed” countries. I subscribe to a service called Google Alerts, which you may have heard of. Each day, I receive emails with the latest information on a whole range of health-related topics.
Among them are parasites such as *Giardia, Cryptosporidium, Blastocystis*, and *Entamoeba histolytica*, which are the four most frequently detected microscopic bugs in stool samples. On 21st September 2014, I received a story carrying the headline, “Iowa reports big increases in *Cryptosporidium, Shigella, Lyme disease and syphilis* in 2013.” The story read:

“In 2013, Iowa reported 1,505 cases of *Cryptosporidiosis*, an increase of 314 percent over the previous 3-year average. Another gastrointestinal disease, *shigellosis*, saw an over 500% increase in 2013 over the 3-year-average.”

On October 1st, 2014, I received a story with the headline, “State Settles With Victims and Outbreaks.” The story read:

“New York state has agreed to pay $5 million to settle with victims of a 2005 *Cryptosporidium* outbreak at a Waterloo spray park. Over 4,000 people were sickened at the Seneca Lake State Park recreational water facility in August and September 2005.”

An article at the Daily Mail website (a U.K. national newspaper) discussed problems associated with the *Giardia* parasite. I’m a little biased towards this article because it features one of my videos! It states:

“At least 52,000 people contract giardia in the UK every year — more than *Salmonella* or the *Cryptosporidium* parasite — according to a long-term nationwide study published by the Food Standards Agency in 2011. A 2004 study of nearly 200 patients infected in the UK found an association between *giardiasis* and swallowing water by swimming, contact with fresh water through outdoor activities, drinking tap water and eating lettuce.”

*Giardia* had previously made the headlines when TV celebrity, actor and comedian David Walliams contracted the parasite while he was doing a charity swim along the length of the River Thames.

In 2004 there was a *Giardia* outbreak in the town of Bergen in Norway. More than 1,250 cases were diagnosed during the outbreak. Interestingly, follow-up studies revealed that people who had been diagnosed with *Giardia* during the outbreak were more likely to be struggling with recurring digestive symptoms and chronic fatigue.

I don’t want to leave my friends in Australia and New Zealand out of this discussion, so it’s worth mentioning the 1998 Sydney water crisis. *Giardia* and *Cryptosporidium* were detected in the water supplying a large proportion of Australia's largest city. A similar situation again developed in 2007.

In addition to city and municipal water supplies, there are hundreds of smaller outbreaks each year involving recreational water and swimming pool contamination. People staying at holiday complexes or campsites can become infected, as can people hiking in wilderness areas.
Furthermore, we’ve only discussed outbreaks in developed countries. Lord only knows how many people acquire bad bugs each year in exotic holiday destinations such as Egypt, Kenya, Thailand, Vietnam, Mexico, Costa Rica and the Caribbean when they come into contact with tainted food and water.

Where Is Sewage Going?

Unfortunately, human and animal waste has to go somewhere once you’ve been to the toilet or put your trash in the bin. Where does it go? Some of it ends up in waterways, which flow into reservoirs. Drinking the water direct from these sources, or using it for recreational purposes can lead to infection.

Where is the Wild Animal Poop Going?

Human sewage is not the only means by which waterways can be contaminated. Wild animals and livestock defecate on the ground. When it rains, their faecal matter is washed into streams that flow into rivers, lakes and reservoirs. If you drink or bathe in “wild water”, you put yourself at risk of contracting a parasite. No wonder David Walliams acquired Giardia during his charity swim! Giardia itself is strongly associated with beaver excrement in North American waterways, giving rise to the colloquial name for Giardia infection, “beaver fever.”

A study conducted near Paris, France, looked at 162 water samples from the Seine and Marne Rivers over 30 months. Researchers assessed for Cryptosporidium and Giardia cysts. Crypto and Giardia cysts were found, in 45.7 percent and 93.8 percent of the samples, respectively.  

During a study conducted in Spain, a total of 284 drinking and recreational water samples were analysed:

- Cryptosporidium cysts were found in 63 percent of river samples, 33 percent of reservoir samples, around 20 percent of raw water samples from water treatment facilities, percent of treated water from small treatment facilities, and whopping 27 percent of tap water from municipalities with chlorination treatment only.

- Giardia cysts were found in 92 percent of river samples, 55 percent of reservoir samples, 26 percent and 45 percent of raw water samples from conventional and small water treatment facilities, 19 percent of treated water from small treatment facilities, and 26 percent of tap water from municipalities with chlorination treatment only.

Finally, in 1983, the CDC reported that New York police and fire department divers had four times the incidence of gastrointestinal illness as their non-diving counterparts, with Giardia and Entameba histolytica implicated as the likely culprits. An editorial comment read:
“More than 188,000,000 gallons of raw sewage are discharged daily into the Hudson and East Rivers of New York City. Swimming is limited by the Department of Health to beaches monitored regularly for fecal contamination; thus, swimming in New York City’s coastal waters has never been considered an important risk factor for illness.”

I don’t present these studies and stories to alarm you – all I want to do is open your mind to the fact parasites are not just an exotic problem! Even the best water processing plants can fail to completely filter out bugs like Giardia and Cryptosporidium, particularly as the parasite cysts are resistant to chlorine.

**Entry By Skin**

Think long and hard – have you ever experienced an unexplained rash on your hand, arm, foot or leg? Can you remember if the rash moved at all – very slowly over the course of several hours? Might you have developed symptoms in your lungs or digestive system during the weeks following the rash? If so, you may have picked up a parasite through skin contact.

Some years ago, I was working with a client whose stool test returned a positive result for a tiny worm called Strongyloides, otherwise called threadworm. “Strongy” lives in the upper intestine and causes symptoms similar to H. pylori and ulcers: heartburn, bloating and sometimes constipation or loose stools. It can be a very unpleasant parasite indeed.

My client was a little horrified to discover she had this worm living in her intestine, and asked the perfectly legitimate question, “How did this thing get into my body?” I explained the lifecycle of this parasite, in which larvae bury through skin on the feet, hand, buttocks or thighs leaving a rash called “cutaneous larva migrans”, as shown in figure 4.

![Figure 4: Example of cutaneous larva migrans](image)

My client recalled having such a creeping rash. She had been on holiday in Kenya some fifteen years earlier and her digestive symptoms began a few weeks later. The lifecycle of the parasite detected in her stool test matched the pattern of her symptoms. She was able to eradicate the parasite and resolve her symptoms.
Hookworm larvae can also cause cutaneous larva migrans. Once they have penetrated the skin, worm larvae migrate to the lungs where they mature into tiny adult worms. The worms cause irritation in the lungs and trigger coughing, which allows them to travel up to the mouth where they are swallowed. Adult worms mature in the intestine and can remain there for a very long time.

These worm infections are common in areas where people walk around barefoot. If skin comes into contact with sand or soil where animals have defecated, there is an opportunity for worm larvae to creep in through the cracks on your skin. Hookworm infections are very common in warm and hot climates, infecting literally hundreds of millions of people.

The Vector Factor

It is worth remembering that some of the most common parasitic diseases enter the human body via insect bites. Plasmodium (malaria), Trypanosoma (sleeping sickness) and Leishmania all enter the body via insect bites, with mosquitos, tsetse flies and sand flies being the respective vectors.

Brugia malayi, Brugia timori and Wucheraria bancrofti are filarial worms that have the ability to cause elephantiasis. They are transmitted via mosquito bites. Like malaria, these parasites are common in the developing regions of the world, but westerners can acquire the parasites whilst traveling or on holiday.

Other filarial worms can enter the body via skin when humans bathe in larvae-infested water. Schistosoma larvae live in water snails. When they break out of their snail hosts, they swim freely in water and don’t need a second invitation to enter people’s bodies when they are bathing or frolicking in the water.

Worms and other exotic parasites are not the only bad bugs that can enter your body through skin. Lyme disease, the incidence of which has been increasing dramatically in recent decades, is a condition caused by the Borrelia bacterium. Co-infections in Lyme disease include another bacterium called Bartonella and a parasite called Babesia. These organisms enter the body via tick bites. We’ll cover Lyme disease in a little more detail later in the book.

Zoonosis

The term zoonosis refers to the transmission of parasites from animals to humans. We know that some bugs can be acquired from farm animals, pets and the like. Recently, my Dad’s cat, Bertie, passed a 15-inch tapeworm on the lawn. It’s not the first worm he’s passed, but it’s certainly the longest. The back lawn of our family home leads into allotments and then fields, which are heavily populated by rodents. Over the years our cats have had a field day catching their own food! Whilst on the one hand this keeps them much healthier than they would be eating commercial pet food, it also exposes them to a heck of a lot of parasites, especially worms.
During the winter of 2013-14, I lived 50 metres from the beach in Barcelona, Spain. In summer, the authorities don't allow dogs on the beach because it's very busy, but in winter dogs are free to roam around wherever they want. As with many places, it's local custom to collect and dispose of the poop when dogs foul on the beach, or in a park. Unfortunately, I frequently saw people ignoring this rule. It made me wonder how many parasites people might acquire each year by coming into contact with animal excrement. Could parasite eggs and cysts be hanging around on the beach, or on the ground in parks and so on, ready to penetrate people's skin? Probably.

It is important to understand that when they’re out and about, pets interact with wild animals, and excrement! Cats kill and eat rodents; dogs eat poop! I remember one of our dogs frequently sneaking off and eating horse dirt and other dog dirt when we were not looking. Is this charming and romantic information? No. Is it reality? Yes.

Cats and dogs lick their own behinds, and sometimes the behinds of other cats and dogs. They then lick their legs and paws, with which they then wash their heads and faces. Worm eggs, parasite cysts and bacteria can all be spread onto virtually any part of a pet’s body. You run the risk of acquiring parasites if you allow your pet lick you on the hands, face and mouth and if you don’t practice optimal hygiene habits.

In addition to pet owners, farmers are prone to acquiring parasites via zoonosis because of their frequent contact with cattle, pigs, sheep and so on. In fact, I have worked with a number of farmers, all of whom had one or more parasites. Cryptosporidium, in particular, is associated with livestock. Parasites that we know for sure can be acquired via zoonosis include:

- Various worms
- Giardia (several animals, including dogs and beavers)
- Cryptosporidium (farm animals)
- Toxoplasma gondii (cats)
- H. pylori (possible, but not proven)

**Did My Spouse Really Give Me This Thing?**

Some of the parasites and bacteria discussed in this book can definitely be passed from person-to-person during kissing, sexual contact and even through sharing utensils. “Grounds for divorce” I hear you cry! Joking aside, it’s important to realise that parasite transmission takes place between humans.

In 2008, I worked with a family in Wales. I ran a stool test for the mother because she was struggling with digestive symptoms. Her test was positive for H. pylori and Blastocystis hominis. The daughter also had symptoms, but the husband did not. I recommended the daughter be tested, and sure enough, her results also showed H. pylori and Blastocystis. Seeing the daughter’s results, dad also decided he’d better have a test and despite not really having any obvious symptoms, he too had H. pylori and Blastocystis.
I won’t mislead you and suggest that all couples or families carry the same bugs, but having seen more than 2,000 stool test results I can tell you with certainty that more often than not, multiple family members carry the same bad bugs. It can be a little confusing because two people in the same household can have a bad bug, but only one person may develop symptoms as a result.

One of the world’s leading authorities on *H. pylori*, Anil Minocha M.D. insists that *H. pylori* can be passed from person-to-person via the oral-oral route, namely through kissing. There is no doubt that *H. pylori* can live in the oral cavity so theoretically, if you exchange saliva with someone who is infected, you can also exchange *H. pylori*.

**Hospital & Day Care Settings**

It is well known that hospital and day-care workers are at a heightened risk of acquiring bacterial and parasitic infections. Anyone who has to clear up sputum, vomit and faeces is going to have an increased risk of acquiring bad bugs. In a day-care centre, a child infected with a bad bug can easily infect others. Some U.S. statistics from the 1990s suggest that 30-40% children in day-care settings may be infected with *Giardia*.

**Sexual Contact**

The sexual revolution of the 1960s and 1970s saw people having sex with multiple partners, with an increase in the variety of sexual practices. I hadn’t been born, which is a shame! Classic sexually transmitted infections such as syphilis and gonorrhoea increased in frequency, but these are not the only bugs that are capable of being transmitted via sexual practices.

The increasing acceptance of anal and oral sex over the years has increased the transmission of parasites such as *Trichomonas vaginalis, Giardia, Entamoeba histolytica* and even some worm species. These infections can be spread from vagina or anus to hands and mouths very easily when the sexual urge takes over!

**Military Activity and War Veterans**

I realise that for some people this may be a difficult topic, but I feel duty-bound to share what I have learned about infections and illnesses in war veterans. We know that between 1963 and 1975, U.S. troops returning from Asia were suffering from all manner of parasite-induced diseases that affected their digestive systems, lungs, liver and nervous systems.

In the 1990s, troops returning from Operation Desert Storm were told not to donate blood because of the incidence of parasitic diseases such as leishmaniasis, which is transmitted by sand flies. In the second edition of her excellent book, *Guess What Came To Dinner: Parasites and Your Health*, Ann Louise Gittleman states, “Unexplained illness with fever may be a sign of a new species of leishmaniasis found in the Gulf veterans.”
Chronic infections in war veterans appear to be important. Professor Garth Nicolson has done an awful lot of work with Gulf War veterans over the years. In fact, he has been awarded honorary Navy SEAL status because of his dedicated service to this group of patients. His research findings are very interesting indeed. Let’s first define the condition known as Gulf War Syndrome (GWS):

“A chronic multi-symptom disorder affecting returning military veterans and civilian workers of the Gulf War. A wide range of acute and chronic symptoms have been linked to it, including fatigue, muscle pain, cognitive problems, rashes and diarrhea. Approximately 250,000 of the 697,000 U.S. veterans who served in the 1991 Gulf War are afflicted with enduring chronic multi-symptom illness, a condition with serious consequences. From 1995 to 2005, the health of combat veterans worsened in comparison with non-deployed veterans, with the onset of more new chronic diseases, functional impairment, repeated clinic visits and hospitalisations, chronic fatigue syndrome-like illness, posttraumatic stress disorder, and greater persistence of adverse health incidents. According to a report by the Afghanistan Veterans of America, veterans of Iraq and Afghanistan may also suffer from the syndrome.”

Much of the information I have read on this topic suggests that GWS likely results from a combination of the following factors:

- High volume vaccinations
- Ingestion and inhalation of fine sand and chemical pollutants
- Exposure to radiation
- Psychological stress

Prof. Nicolson agrees, but during his extensive work, he has observed something interesting, namely that family members can become unwell when military staff return from combat zones. In Professor Nicolson’s studies, the signs and symptoms experienced by family members, which include fatigue and neurological problems, resemble those experienced by the returning military personnel themselves.

Prof. Nicolson’s work at the Institute for Molecular Medicine in Huntington Beach, California, indicates that veterans are often infected with a bacterium called *Mycoplasma*. Other infections may be involved, but *Mycoplasma* appears to be one of the major bugs causing problems in this cohort. Prof. Nicolson has postulated that veterans returning from the field pass these bad bugs to family members. If you are concerned about a friend or family member who has been unwell since returning from combat, I highly recommend Prof. Nicolson’s website: [www.immed.org](http://www.immed.org).

**The Role of Western Medicine In Parasite Transmission**

Parasites are opportunistic invaders and tend to cause problems when they are given an opportunity to do so. The concept of opportunism and its importance is discussed in the next chapter, but for now let’s consider the role of certain medical treatments in *encouraging* the proliferation of bad bugs in the body.
Antibiotics can help people survive serious infections and they can help prevent simple infections from becoming complicated and serious. As an example, my martial arts teacher, Nicolas went to sleep one evening in the summer of 2013 with a mild allergic reaction to an insect bite on his arm. He woke the next morning in extreme pain, with an arm twice its normal size! The bite had become infected with a bacterium called *Staphylococcus aureus*, a bug that frequently causes skin and, digestive and urinary infections.

Nic’s immune reaction to the infection was so severe that he was quickly admitted to hospital; his arm had to be constantly drained due to the enormous amount of fluid and pus that was being produced. He was pumped full of antibiotics via an intravenous feed yet doctors still feared he may lose his arm. Fortunately, the infection was successfully treated and after two weeks in hospital, Nic was discharged. Had he not had access to antibiotics and emergency care, he would have lost his arm and possibly even his life.

Antibiotics save lives in acute situations but they can also have downsides. The overuse of antibiotics is breeding some highly resistant bacterial strains. For example, you may have heard the term “MRSA”, which stands for *methicillin resistant Staphylococcus aureus*. MRSA is a drug resistant bacterial strain that’s very difficult to treat. Similarly, certain *H. pylori* strains around the world have become so resistant to specific antibiotics that treatments are only working 50-70 percent of the time.

Setting drug-resistance issues aside, antibiotics can cause a host of other problems. It is fairly well known among naturopathic and functional medicine doctors that antibiotics can trigger a “rebound” fungal overgrowth in which the normally benign organism *Candida albicans* proliferates and causes symptoms.

Just like unwanted weeds in a garden, *Candida* and other fungal organisms can spread wildly when conditions favour their growth. They are usually kept in check by friendly bacteria in the digestive and vaginal tracts. But the use of antibiotics can deplete the friendly bugs, leaving space for the highly opportunistic fungal organisms to proliferate.

Steroid drugs are frequently used in the treatment of conditions where the immune system is overactive. Such conditions include inflammatory disorders like arthritis, colitis and Crohn’s disease, as well as asthma and allergies. Steroid drugs suppress the immune system by design, which can allow bad bugs to proliferate.
Summary – What I’d Love You To Know About Parasite Transmission

- International travel and emigration/immigration means that parasites are everywhere.
- You can acquire parasites from eating tainted food or drinking contaminated water.
- It’s possible to collect parasites from pets and farm animals in a process known as zoonosis.
- Animals soil the ground, leading to the possible acquisition of parasites through skin.
- People in day care settings and medical centres are prone to acquiring bad bugs.
- Sexual practices – even “basic” ones such as kissing - can result in parasites transmission.
- Troops returning from combat zones carry bad bugs and may pass them to family members.
- Antibiotics and immune suppressing drugs can trigger conditions within the body that allow parasites to thrive.
- Ultimately, it doesn’t matter who you are or where you are - you are never immune to acquiring parasites!
Chapter Five

How Your Overall State Of Health Attracts Parasites

When I first started helping people detect and eradicate parasites, I was of the mindset that the bad bugs were to blame and that they had to be exterminated at all costs. My attitude has changed as I, along with my Hompes Method practitioners and students, have gained experience working with an ever-greater number of cases.

I still believe that parasites need to be eradicated once they have taken a foothold, but I also realise how important it is to help my clients improve their general vitality once the bad bugs have been removed. The majority of our clients feel better when they eradicate bad bugs, which is logical. But from this alone, they rarely resolve all their symptoms. Indeed, some folk may only feel marginally better despite eliminating all their bad bugs.

My friend and colleague, Kim Jobst M.D. always tells me, “You know, Dave, meanings matter. Meanings really matter.” Dr. Jobst is right. When dealing with bad bugs, it’s prudent to determine what it means to have the infestation: Why are the bad bugs there? What does it mean to have them living inside your body? Why might they be causing symptoms in you and not other people?

In honesty, it’s a bit of a “chicken or egg?” question. Let’s imagine you were to run a stool test, blood test or urine test and let’s assume you found some parasites. Imagine you found you had a bacterial infection such as H. pylori, a parasite like Blastocystis hominis and a Candida overgrowth. Keep that scenario in mind.

Now, imagine you were concomitantly experiencing a number of unpleasant symptoms – low energy, disrupted sleep, feeling anxious for no apparent reason, a grumbling and bloated digestive system, an angry spouse because of the aromas you leave in the bathroom, and to top it all off, some unexplained aches and pains in your body.

The question is: “Did the bad bugs force their way in and begin causing all the symptoms (are they the chicken so to speak?), or did the symptoms develop first due to other areas of dysfunction in your body, allowing the bugs to get in and escalate the situation (are they the egg?)” From experience, I can tell you that the answer differs on a person-by-person basis. My practitioners, students and I have observed that:

- Some people feel fantastic when they eliminate their bad bugs
- Some folk experience minor to moderate improvements
- Some people feel very little difference
- Some people can even feel worse when they eliminate bad bugs
We can’t know with absolute certainty the degree to which a bad bug is causing a person’s symptoms. I have worked with plenty of people whose symptoms did not respond when they removed their bad bug burden. Idelle’s case is a perfect example.

Idelle, a lovely young woman in her early twenties, contacted us because she was experiencing a range of unpleasant symptoms. She reported heartburn and felt nauseous, leading to a very low appetite. She was very tired and lethargic and was not sleeping well. Idelle recalled swimming in creeks near her home in Canada and felt she must have acquired some parasites from the creek water. We ran a comprehensive stool test, which detected *H. pylori, Blastocystis hominis* and a very strong *Candida* overgrowth. After a three-month nutrition, lifestyle and parasite-removal programme, we re-tested Idelle’s digestive system and all the bad bugs had gone. But there was a problem: Idelle’s symptoms were worsening virtually every day. We ran another test that assessed her nutrient status and whether her liver and detoxification system was overloaded. Sure enough, the liver markers were off the chart. She also had very low vitamin levels, especially *B6* and *B12*. I suspected something else in Idelle’s environment might be causing problems and discussed this with the family. Her parents sought professional advice regarding the air quality of their family home. Sure enough, the surveyors detected formaldehyde gassing-off from insulation in Idelle’s bedroom. Because Idelle’s condition was deteriorating, I referred the family to a detoxification clinic in Florida, run by Dr. Rick Sponaugle. Following a range of in-house detoxification, immune and nutrient support therapies, Idelle was completely cured. I followed up with the family a year later and Idelle was still doing great. As you can imagine, we were all thrilled with the outcome.

The reason I share this case with you is simply to emphasise that removing bad bugs isn’t going to create miraculous improvements in everyone, and that other factors can combine with the bad bugs to create symptoms. In Idelle’s case, the bad bugs represented a secondary factor – they were able to settle in her body because of the immune stress she was experiencing as a result of daily toxin exposure. Put simply, Idelle’s immune system had been suppressed, allowing the bad bugs to thrive.

**The Hompes Method Seven Areas of Health**

Over the years, the vast majority of people contacting and requesting my help have been struggling with symptoms in one or more of what I call the Seven Areas of Health. These are:

- Digestion
- Reproductive & sexual function
- Energy
- Aches and pains
- Mood
- Sleep
- Skin, hair and nails
There have been some exceptions to this, with folk wanting to gain or lose weight, or improve specific medical conditions, but in general it’s a combination of symptoms in the seven areas.

When I was feeling under the weather between 2004 and 2007, I had symptoms in six of the seven areas. I experienced heartburn, bloating and loose stools, I lost my sex drive, felt tired and anxious, had a hard time sleeping and developed dandruff (and all while I was supposed to be a fit, healthy personal trainer!) It’s very common for people to have symptoms in several or even all the seven areas.

The Vitality Scale

In Western medicine, you’re either judged to be healthy, or you’re labeled (diagnosed) with a specific medical condition, disease or disorder. In some cases, your symptoms will be a precise fit for a given medical label, but in others, your symptoms won’t fit into a specific medical category. When symptoms don’t fit a given medical category or label, it’s very tough for a doctor to prescribe treatment, as the treatments work on a “name it, blame it, tame it” basis. Doctors can’t treat something they can’t diagnose. Have you ever heard people say something like:

- “I’m just not feeling myself.”
- “I feel tired, achy and anxious all the time.”
- “How come I have this bloating and abdominal pain most days?”
- “My skin is really dry and my hair is falling out.”
- “I’ve lost that spark and zest for life.”
- “I don’t know why, but I can’t seem to concentrate very well and my memory is fading.”
- “I can’t seem to remember things as clearly as I once did.”
- “I feel awful around my period – it never used to be like this but I feel moody, my breasts are sore and I have period pains.”
- “The foods I used to enjoy seem to make me feel unwell.”
- “I didn’t used to have any allergies, but now I seem to have problems around perfumes, cats and petrol fumes.”
- “I love my partner dearly but my sex drive is on the floor.”
- “I’d give my right arm to get a solid night’s sleep and wake up feeling energised and ready to go.”
- “Life isn’t fun any more – it’s lost its joy and its colour; the vibrancy has gone and everything feels flat.”

If you mix and match the above symptoms, you get the archetypal person who contacts my office for help. Perhaps you fall into this category yourself? Whilst we love helping in these cases, your doctor might have a hard time being of assistance. Why is this? It’s not because we’re in any way better than your doctor. It’s simply that when your digestion is a mess, you’re not sleeping well, you’re feeling low on energy, you’re grumpy, irritable or anxious, and so forth, there is no medical label for you!
Because there isn’t a specific diagnosis to explain how you feel, your doctor can’t prescribe a specific treatment. In order to blame it and tame it, a doctor first has to name it. But how can a doctor simultaneously prescribe treatments for fatigue, low sex drive, digestive problems, aches and pains, moodiness, aches and pains, sleep and skin symptoms?

Unfortunately, western medicine has no solution for these situations because the symptoms are not “black and white”. Yet millions and millions of people are walking round with these weird and wonderful symptom combinations. It’s a crazy situation. So how might you end up with such a mish-mash of symptoms? Well, unless there is a specific trigger such as an acute infection, stressful event or physical trauma, symptoms usually develop on a gradual basis over time.

I’m sure you will agree that we don’t tend to fall asleep on a Monday night and get up the following morning with a collage of weird and wonderful symptoms. Likewise, we don’t tend to fall asleep on Tuesday night and wake on Wednesday morning with serious medical conditions such as diabetes, heart disease or cancer. Symptoms and diseases tend to progress on a gradual, step-by-step basis (again, unless there is a specific trigger).

It’s critically important to understand that wellness and illness are not black and white, independent states of being, with the presence of one meaning the absence of the other. Rather, wellness and illness lie on a continuum that I call Vitality Scale, as shown in figure 5.

![Figure 5: The Hompes Method Vitality Scale, illustrating the concept that wellness and illness are not independent states of being and that health lies on a continuum.](image)

Allow me to explain this arbitrary scale. You’re not likely to experience many symptoms if you’re sitting at a ten, nine or eight on the Vitality Scale. But you may begin to notice symptoms at a seven. Mild symptoms may include lower than ideal energy levels, mild skin problems, disrupted sleep, heartburn, burping or gas, headaches and others.

Patients and doctors alike often ignore these mild symptoms because they tend to be viewed as a “normal” state of being. I frequently hear clients say things like,
“I thought it was normal to feel this way – my doctor told me there was nothing wrong, some of my friends have these symptoms and my blood test was “normal”.

The trouble is that mild symptoms are early warning signs – they are gently alerting you to the fact that something’s wrong. If you ignore these early warning signs, they may go away. But equally, they may change form and worsen. If you descend the scale to a six or five, you’ll experience annoying and aggravating symptoms. At this point a medical diagnosis might be given and you may take pharmaceuticals to control or suppress your symptoms. Examples include more severe heartburn and acid reflux, “IBS”, anxiety and depression, heart palpitations, muscle cramps, headaches, skin problems, arthritic pain and insomnia.

Furthermore, your blood sugar, blood pressure, inflammation levels and other medical markers may begin to creep up, and you might find your thyroid, adrenal and sex hormones are out of balance on a blood test. These symptoms won’t stop you in your tracks, but you’ll feel generally unwell on a consistent basis and you may need several medications to control your symptoms. If you’re at a six or five on the scale, it’s a serious warning sign for you to stop and think about how you’re living your life.

Significant symptoms will be present by the time you slip to a three or four on the scale. A doctor’s diagnosis will almost certainly have been given. You’ll have a medically recognised chronic disease – possibly type II diabetes, arthritis, chronic fatigue syndrome, or an autoimmune disorder such as thyroiditis, lupus or fibromyalgia. Cancer, heart disease, severe neurological disorders and serious autoimmune conditions such as multiple sclerosis are found at a three or below.

How Parasites Fit In

Please look at the Vitality Scale again and note that by the time you’re sitting at a six or five, there is a very high chance you will be hosting bad bugs. I would even suggest that dropping to a seven on the scale puts you at risk for attracting unwanted invaders. So let’s again pose the question:

“Are bad bugs the chicken or the egg? Are they cause or effect? Do you descend the Vitality Scale first and then pick up the bad bugs, or do the bad bugs get in first and cause you to drop down the scale?”

Truth be told, it’s different for each individual. In most cases, I’ve come to understand that vitality drops first, allowing bad bugs to get a foothold and cause problems. As vitality drops from, say, an eight, to a seven, to a six and possibly lower, your immune system loses its ability to do its job. Bad bugs that would normally be zapped by immune soldiers find it much easier to enter your body. At the same time, some of the good bugs might sense an opportunity to proliferate and effectively become “bad”.
Most people descend the Vitality Scale because of less than optimal lifestyle choices. Immune system function, nutrient status and your body’s ability to function at full throttle dips when you're under stress, when you're not eating a healthy diet or when you’re burning the candle at both ends. The great thing is that you can climb the vitality scale by carefully evaluating your lifestyle and making a decision to make some changes.

Of course, in some cases, a nasty, acute infection in an otherwise healthy person may be the catalyst for a slide down the Vitality Scale. In this situation, you may be sitting comfortably at an eight or nine only to pick up a bug on holiday and have a hard time recovering. This process certainly plays out in some folk. It happened to me and it also happened to one of my mentors in functional medicine, Dr. Dan Kalish. Dan picked up a nasty case of Entameba histolytica in Thailand and until he returned to the U.S. and took antibiotics, he experienced a number of chronic symptoms.

A Lesson From AIDS

It is well known that people with AIDS and other serious diseases are more prone to acquiring infections. This makes sense because AIDS is a disease of the immune system. Candida, Cryptosporidium and other parasites can cause major problems and even be the cause of death for AIDS patients. According to the world famous Mayo Clinic:

"HIV infection weakens your immune system, making you highly susceptible to numerous infections and certain types of cancer."1

Infections cited by the Mayo Clinic include Cryptosporidium, Salmonella, tuberculosis, Cryptococcal meningitis, Cytomegalovirus, Toxoplasmosis and Candida. Once HIV – a bad bug itself - has weakened a person’s immune system, it’s easier for other bad bugs to enter and/or spread.

Please look at the vitality scale again. A person with full-blown AIDS would sit at three or below on the scale – their immune system would be shot to pieces. But a person at a four or five wouldn’t have a perfect immune system either. Even someone sitting at a six or seven would have some degree of immune imbalance.

The point I’m making is that being HIV-negative, as most of us are, doesn’t automatically translate to having a perfectly healthy immune system! We don’t have to have AIDS, cancer and other immune diseases to have a dysfunctional immune system. Immune strength lies on a continuum – a vitality scale - all of its own and we are all prone to declining immune function if we don’t look after ourselves.
Are You Being Recycled?

Paul Chek, one of my early mentors and a man of great wisdom, has a nice way of explaining the role played by parasites in human health. Paul tells it like it is, so please don't be offended by this explanation! He says that bad bugs such as fungi, bacteria and parasites are Mother Nature’s garbage collectors. What Paul means is that if you let your vitality drop too low, these organisms will get a foothold in your body and begin recycling you, because that’s their job in nature.

Think about an AIDS patient - an individual with very low vitality and an immune system that cannot fend off opportunistic parasites, bacteria and fungi. Why do the bugs cause problems? Because they are allowed to - they are simply doing their job. They’re not the bad guys. They’re playing out their role in nature, which is to recycle unhealthy organisms. Think about other individuals who are highly susceptible to acquiring infections:

- Babies, infants and young children whose immune systems are not properly developed
- The elderly whose general vitality level has declined over time
- Trauma and post-operative patients

These cohorts all have one thing in common: an undeveloped, under-par or suppressed immune system! Plants and animals in the wild that have under-par immune systems simply get recycled! They die as a result of an infectious disease, or end up being consumed by a predator. When they die, a bunch of bacteria and fungi decompose and recycle the dead animal tissues back into the soil to keep the land fertile and maintain the cycle of life.

As you’ll recall, death is represented by being at a number one on the Vitality Scale; at a two or three people have serious diseases such as cancer and AIDS, and then we have levels four, five, six and above. Well, you don’t have a perfect immune system when you’re at a four, five and six on the vitality scale! Even at a six or seven on the scale, if you’re not careful, it won’t be too long before Mother Nature’s recyclers begin their work in earnest.

It is hugely important, therefore, to consider the role you play in creating a situation in which bad bugs begin proliferating and causing problems. Instead of viewing bad bugs as enemies to be killed off at all costs, might it not be a better idea to see them as teachers that educate us about our own general state of health and vitality?

The Hompes Method Seesaw

Once you understand the Vitality Scale concept, it’s prudent to gain an understanding of the reasons why you might descend the scale, and subsequently develop symptoms in the Seven Areas of Health. The explanation is very simple:
First, modern lifestyles lead to a situation in which you end up with too much “bad stuff” in your body. This bad stuff blocks your body’s ability to function properly and triggers processes in your body like inflammation that ultimately cause symptoms.

Second, modern lifestyles lead to a situation in which you end up with too little “good stuff” in your body. Inadequate levels of the core ingredients your body needs to work properly inevitably results in system malfunction.

On the most basic of levels, the “bad stuff” includes bad foods, bad bugs and bad toxins. The “good stuff” includes good foods, good bugs and good nutrients. This simple concept is represented in figure 6.

You’re going to learn how bad bugs create symptoms in the next chapter. But before then, it’s important to acknowledge that bad foods and bad toxins also cause symptoms. Depletion of your good bug population, nutrient deficiencies and low hormone levels can also slide you down the Vitality Scale, the end result being symptoms in the Seven Areas of Health.

If you don’t cut down on bad foods and remove bad toxins, whilst replacing missing good bugs and nutrients, you could eradicate all your parasites and still feel lousy. If your body is run down because of the way you’re living your life, it’s prudent not to blame the parasites for all your symptoms!

Heather, a lovely 56-year old lady came to us seeking help because she was experiencing some very bothersome symptoms. Her major complaints were halitosis (bad breath), body odor, low energy, sleepiness following meals, feeling shaky if she didn’t eat on time, bloating, Constipation and compact, hard stools, gas, belching following meals, abdominal pain and stomach gurgles. Heather’s bad breath and body odor were her most worrisome and embarrassing symptoms. Jack encouraged her to run a home stool test, which yielded some very basic, yet highly significant results. Heather was loaded with a fungal overgrowth in her digestive system. She had a parasite. All credit to Heather, for she went about changing her diet and lifestyle according to our recommendations very quickly. She removed high sugar
foods, began eating smaller meals more frequently and added high quality protein and fat to her daily regimen. Heather also worked through an herbal supplement protocol to deal with her fungal overgrowth and parasite infestation, using specific herbal products a very precise dosage for two months. Her results were impressive, to say the least, and it was great to see her begin to thrive after such a long period of time struggling with her symptoms. Her halitosis improved enormously, as did her body odour. Her energy levels increased and she felt much more energised after meals. Her shakiness and weak feelings all but disappeared on her new eating regimen and her bloating, belching, constipation and gas disappeared. All in all, it was a tremendous improvement, yet unsurprising when we consider the role of digestion in overall health. A gut that's very slow and constipated can’t rid itself of waste products (poop!) Undigested food that's not being eliminated builds-up, ferments and putrefies, causing changes in microbes and encouraging bad bugs to take over. Fungi thrive, causing bloating and gas, and because all that crap (literally) isn’t exiting the body, everything can begin to smell. This is how many folk – including Heather – develop bad breath and body odour, as well as uncomfortable digestive symptoms. Thankfully, the solution is at hand: consider nutrition and lifestyle, then run a home stool test to see what's going on and deal with the results as they come. Remove bad bugs and restore proper digestive function. The symptoms melt away.

Creating Imbalances with Medical Drugs

Always remember that by design, your body is loaded with microbes. They are on your skin, in your mouth, your sinuses, your stomach, your intestine and your genitourinary tract. You are not yourself – you are a composite of trillions of human, bacterial, viral, fungal and parasitic cells. You have ten times more microbial DNA than human DNA in your body and you are what is known to scientists as a “super-organism”.

Antibiotics attack all bacteria and parasites, not just the bad ones. I’ve worked with dozens of people who began experiencing symptoms after antibiotic treatment for an infection. The scientific and medical literature is full of studies showing how certain bad bugs can begin causing problems because of disturbances to the good bug population during or following antibiotic treatment. Post-antibiotic Candida overgrowth is a relatively common phenomenon and other nasty bugs like Clostridium difficile infection can result from antibiotics, especially in the hospital setting.

During my research on the broad area of H. pylori treatment I even came across research indicating that taking prescription antacid medications such as proton pump inhibitors can trigger the overgrowth of bad bugs. One study showed that Candida began overgrowing in people’s stomachs within 36-48 hours of suppressing stomach acid.²

We also know that steroid medications prescribed for people with inflammatory diseases such as arthritis and colitis can significantly reduce immune function. This potentially leads to an increased susceptibility for bad bug acquisition, or for allowing good bugs to proliferate and take over.
Finally, there is a good deal of evidence showing that women who take the contraceptive pill are more prone to bug problems in the genitourinary tract because these chemical contraceptives create imbalances in vaginal hormone levels that favour the overgrowth of certain organisms. I suspect that contraceptive pills also influence gut bacteria, having worked with plenty of women who developed digestive symptoms when they began using chemical contraceptives.

Whether its antibiotics, antacids, immune-suppressing drugs or the contraceptive pill, we can’t blame the opportunistic bad bugs for causing problems! It’s our behaviour that leads to situations in which these bugs can thrive. Remember, the bad bugs are just doing the jobs assigned to them by the big boss, Mother Nature.

Summary - What I’d Love You To Know About “Host Factors” and Parasites

- “Meanings matter” – it’s prudent to step back and consider why you have parasites rather than simply blaming them for how you feel.
- Most bad bugs tend to enter your body because you slide down the vitality scale first.
- Some unlucky people may drop down the vitality scale after picking up a really nasty infection – Dr. Dan Kalish and I are good examples of this.
- Left untreated, the bad bugs often contribute to a further slide down the scale, causing an ever more diverse array of symptoms.
- Consider the Hompes Method Seesaw - bad food and bad toxins combined with low levels of good food, good bugs and good nutrients reduce your vitality and open the door for bad bugs.
- Medical treatments such as antibiotics, antacids and steroids alter your internal environment and can lead to the proliferation of undesirable organisms in your body.
- Don’t blame the bugs for everything and don’t expect all your symptoms to disappear if you eradicate all the bad bugs. Idelle’s case was a perfect example of how supposedly bad bugs can be innocent bystanders in the presence of more important disease-causing factors.
- Take responsibility for your symptoms and realise your role in creating them. As my good friend Dr. Jobst would say, “meanings matter.”
Chapter Six

What Symptoms Can Parasites Cause?

Let’s begin this chapter by revisiting the question I originally posed in the book’s introduction, namely by asking whether you are experiencing any of the following symptoms:

- Heartburn or acid reflux?
- Stomach pain?
- Excessive belching and burping?
- Bad breath?
- Bloating?
- Abdominal pain?
- Excess wind/gas?
- Constipation?
- Loose stools and diarrhoea?

These common, chronic digestive symptoms are experienced on a daily or frequent basis by millions – perhaps billions - of people. The symptoms can be mild or they can cause a lot of discomfort. In some cases, symptoms can be severe and result in significantly reduced quality of life. If you’re experiencing any of these symptoms, it’s likely that bad bugs living in your digestive tract are playing a causative or contributory role.

Unbeknownst to many, gut-based parasites can also make significant contributions to symptoms that appear to be completely unrelated to digestion. Are you experiencing any of the following on a frequent basis?:

- Low energy levels?
- Uneven moods?
- Frequent headaches?
- Unexplained aches and pains – perhaps in muscles and joints?
- Menstrual or sex-related symptoms?
- Frequent urinary tract infections?
- Sleep disturbances?
- Skin rashes, dandruff or ridged, brittle nails?
- Fungal nails or athlete’s foot?
- Dry or oily hair, or even hair falling out?
- Grinding teeth at night?
- Other oral problems such as gingivitis or a white-coated tongue?
- Sinus problems?

If so, there is a chance that bad bugs are in some way contributing to your symptoms. When you have bad bugs in your body there is virtually no limit to the symptoms, disorders and diseases to which they might contribute. Technological advances in scientific enquiry are now revealing strong associations and even cause and effect relationships between the presence of bad bugs and a host of seemingly unrelated health challenges.
I’m not suggesting that parasites cause every single symptom or disease. I am merely opening your mind to the fact that they can and do cause significant disruption to general physiological function. Remember, when I had H. pylori I was struggling with digestive complaints, mood, energy, sleep, sex drive and dandruff – symptoms in six of the Seven Areas of Health. My situation wasn’t so different from Marcelino’s:

Marcelino, an ex-professional cyclist from Barcelona in Spain (or Catalunya, to be precise) contacted us because for the last eight years he’d been struggling with heartburn and acid reflux, nausea, bloating and gas, belching after meals, alternating diarrhea and constipation, weakness and low energy levels, poor quality sleep, anxiety and depression and sweet cravings. He was also having a hard time gaining muscle mass. He said: “I had visited every doctor in my city and they just told me that I had some “genetic” tendency to have acid reflux and problems related, which to me was really lacking of sense. “It all started because I was racing cycling at a professional level, and with the losing weight goal in mind, I started to care less about my nutrition. So I lost a lot of weight without any professional help or balanced diet. I just did it reducing the calories that I was putting into my body. Very bad decision. So with the extreme effort in my racing days and the poor diet that I was following I think I got really weak and I started to get all kinds of illness that I’ve never had before. And I think that I was so weak that I even got the H. Pylori with some food poisoning traveling to Latin America. I went to a great seafood restaurant, and I got food poisoned. After that I never really recovered. My body was so weak that the bugs stayed inside and everything went worst since that day. That was the moment that I looked for help and I was very lucky to find Dave Hompes and his team.”

Fortunately, with his diligence and willingness to take control of his health, Marcelino was able to overcome all these symptoms. Because Marcelino hadn’t been able to find anyone to actually take the time to test why he may not be feeling well, he took the plunge and ordered a comprehensive stool test from us, which revealed he had H. pylori, a Candida overgrowth and a pinworm infestation (Enterobius vermicularis). Another important finding from Marcelino’s stool test was an elevated level of lactoferrin, which happens because of intestinal inflammation. Finally, Marcelino was not digesting his dietary fat properly, indicating that his pancreas and gallbladder needed support. On receiving these results, Marcelino began working with Jack, one of my Hompes Method Master Practitioners. As a team, they worked on removing bad foods from his diet and consuming more good foods, in the right proportions for his individual needs. He added herbal cleanses to fight the H. pylori and Candida overgrowth, and used antibiotics from his doctor to kill the pinworm. Marcelino says: “I followed everything that Jack told me to do. Doing a small change every week. I started to cook my own food and stop eating a lot of junk food that I used to eat a lot in the street before. I now understand the importance of the food that we put into our system. Jack was very supportive all the time and had a lot of patience with me, which I tremendously appreciate. I was informing every problem or situation that I had and how I was feeling and he used to respond me very fast to see what was the best thing that we could do in order to keep achieving our goals. I started to feel with more energy & I recovered my natural sleep cycle. I think that from that moment I started to see most important changes in my health overall status. Overall I feel much more healthy, with more energy, and
I pretty much have a normal life now. There is no magic pill. Is a important change that we have to make to our eating habits and approach to diseases. And poor diet is the root of most of the diseases right now. We have empty nutrient, vitamin and mineral bodies trying to fight disease but without any strength. I think this is the future of the medicine. This is modern medicine.”

As natural health care practitioners, it frustrates us that patients – perhaps folk just like you – are sent from pillar to post in the medical system without getting answers. Proper testing is rarely done, and hardly any doctors teach you how to eat for optimum health, yet these are the two most important pieces in the jigsaw for helping you get and stay well! Marcelino had felt unwell for some 8 years; I waited 4 years before I took the plunge and ran a stool test for myself. It’s crazy to wait that long when the testing technology is at your fingertips and you don’t even need to leave the privacy of your own home to do it.

By the time you have finished reading this chapter, I’d like you to have a firm understanding of how and why bad bugs are capable of causing such a diverse array of symptoms. To do this as efficiently as possible, I’d like to break the chapter down into bite-sized chunks and look at:

- Acute symptoms in the digestive system.
- Chronic symptoms in the digestive system.
- Specific symptoms related to two main bugs: *H. pylori* and *Candida*.
- How symptoms develop outside your digestive system as a result of having bad bugs living in your gut.
- Symptoms caused by bugs that live in your blood, on skin and in your genitourinary tract.

**Acute Symptoms of the Digestive System**

As I mentioned in chapter four, the western medical system acknowledges acute digestive infections. Food poisoning, gastroenteritis, stomach flu, traveler’s diarrhea, dysentery, Delhi belly (or Bali belly as it’s often called in Australia and New Zealand) and Montezuma’s revenge are all names used to describe the somewhat “explosive” symptoms that accompany acute digestive infections.

My good friend, Simon, had a bout of dysentery while he was working at the Gleneagles golf resort in Scotland. He awoke in the night having experienced a loss of digestive control at both ends. The description he gave was unique and contained words I can’t repeat here without offending you. Joking aside, I think we all know about these nasty acute symptoms:

- Diarrhoea (different colours, textures, aromas and velocities!)
- Nausea
- Vomiting
- Stomach cramps
- Fever
- Shivering / chills
- Fatigue
- Headaches
- Joint aches and pains
Temporary skin rashes
Weight loss due to dehydration and lack of appetite

These acute symptoms are debilitating. What's more, they can actually be dangerous. For example, amoebic dysentery, or “Montezuma’s revenge” is caused by the parasite *Entameba histolytica*. The condition can be fatal and claims the lives of hundreds of thousands of people in the developing world each year.

The FDA’s Bad Bug Book contains excellent information concerning classic, acute symptoms caused by a wide range of bad bugs, notably bacteria and amebic parasites. Here are just a few examples: 

- **Salmonella:**
  - **Onset of symptoms:** 6 to 72 hours after exposure.
  - **Symptoms:** Nausea, vomiting, abdominal cramps, diarrhea, fever, headache.
  - **Duration:** Symptoms generally last 4 to 7 days, with acute symptoms usually lasting 1 to 2 days or longer, depending on host factors, the dose ingested, and strain characteristics.

- **Campylobacter jejuni:**
  - **Onset of symptoms:** The incubation period, from time of exposure to onset of symptoms, generally is 2-5 days.
  - **Symptoms:** Fever, diarrhea, abdominal cramps, and vomiting are the major symptoms - the stool may be watery or sticky and may contain blood - other symptoms often present include abdominal pain, nausea, headache, and muscle pain.
  - **Duration:** Most cases are self-limiting and typically last from 2-10 days.

- **Norovirus:**
  - **Onset:** A mild, brief illness usually develops between 24 and 48 hours after contaminated food or water is consumed (median in outbreaks: 33 to 36 hours), but onset times within 12 hours of exposure have been reported.
  - **Symptoms:** Symptoms usually present as acute-onset vomiting (often explosive); watery, non-bloody diarrhea with abdominal cramps; and nausea. Explosive, projectile vomiting usually is the first sign of illness and is often used to characterise the illness. Headache, low-grade fever, chills, and muscle aches may also occur.
  - **Duration:** Symptoms generally persist for 12 to 60 hours, with a mean period of 24 to 48 hours. Most people report feeling better within 1 to 2 days. However, for hospitalised patients, immunocompromised people, and the elderly, vomiting and diarrhea generally resolve within 72 to 96 hours, while the non-specific symptoms, such as headache, thirst, and vertigo, could persist up to 19 days.
• **Rotavirus:**
  - **Onset:** The incubation period for rotavirus is estimated to be less than 48 hours.
  - **Symptoms:** Symptoms ranging from self-limiting, mild, watery diarrhea, with complete recovery, to severe disease characterised by vomiting, watery diarrhea, and fever, which can lead to dehydration, shock, and, in severe cases, death. Symptoms often start with a fever and vomiting, followed by diarrhea. Association with other enteric pathogens may also play a role in the severity of the disease.
  - **Duration:** Diarrhoea generally lasts 3 to 7 days.

• **Giardia lamblia:**
  - **Onset of symptoms:** Usually 1 to 2 weeks after ingestion of cysts.
  - **Symptoms:** Smelly diarrhea, malaise, abdominal cramps, flatulence, and weight loss.
  - **Duration:** Generally 2 to 6 weeks, unless the illness becomes chronic, in which case it may last for months or years and may become difficult to treat.

• **Cryptosporidium:**
  - **Onset of illness** follows an incubation period of 7 to 10 days
  - **Symptoms:** Profuse, watery diarrhoea, with nausea, vomiting, and cramping - fever can also accompany - severity and duration of diarrhea usually is increased in immune-deficient people.
  - **Duration:** Two to 14 days in otherwise “healthy” people; often prolonged or chronic in immune-compromised people; excretion of oocysts can last for up to several months after diarrhea has resolved.

• **Entamoeba histolytica:**
  - **Onset:** Invasive intestinal disease may occur days to years after initial infection; symptoms will generally manifest 2-4 weeks after first exposure.
  - **Symptoms:** Mild diarrhea to a severe, dysentery-like illness with mucus and blood in the diarrhea and abdominal distention/bloating - chronic infection often leads to weight loss and fatigue - amebic liver abscess is characterised by fever, pain in the upper right abdomen, nausea, unintentional weight loss, and liver tenderness.
  - **Duration:** May reside in the intestine for years without causing symptoms. Invasion of the intestine will cause symptoms that can last from a few days to several weeks.

The major symptoms caused by these acute episodes don’t vary very much from bug-to-bug. It doesn’t matter whether we're talking about bacteria like *Salmonella*, microscopic parasites such as *Giardia*, or viruses like *Norovirus* – they tend to create similar symptoms.
It is interesting to note that non-digestive symptoms crop up even in acute infections. Skin rashes, headaches, reactive arthritis, vertigo and fatigue are all mentioned in the examples above. Symptoms are not limited to the digestive system even though the gut is the source of infection.

Doctors and patients alike know that bad bugs cause unpleasant acute symptoms. In acute situations, the symptoms are obvious enough to assign a direct cause and effect relationship between a given bad bug and the symptoms it is causing. It is the less obvious, vague and more diffuse ongoing symptoms experienced for months or even years by some people that are not sufficiently dealt with in the medical setting.

**Digestive Bugs - Chronic Symptoms**

It is my experience that heartburn, acid reflux, stomach pain, bad breath, belching, bloating, excessive gas, foul-smelling stools, constipation and diarrhea experienced on a chronic, ongoing basis, are often caused by bad bugs. A wide assortment of parasites, bacteria and fungi can create these ongoing problems.

Unfortunately, as I have repeatedly stated throughout this book, only in a few cases do medical doctors consider chronic infections when patients report ongoing digestive symptoms. Bad bugs are not deemed to be important unless folk are experiencing vomiting, having diarrhoea or reporting blood in their stools.

Let’s go back to my own situation in 2004. I had severe heartburn, nausea, vomiting and diarrhea. The symptoms slowly dissipated, only to rear their heads again three years later when I again experienced heartburn, along with bloating, loose stools, anxiety, poor energy levels, disrupted sleep, dandruff and a low sex drive.

The second time round, my symptoms were not severe enough for me to seek medical treatment, but they were obviously reducing my quality and enjoyment of life. This is the situation most of my clients have reported over the years – a general reduction in quality of life that isn’t life threatening, but is unpleasant and somewhat debilitating.

By analysing hundreds of client case histories, I’ve concluded that there are four main ways in which bad bugs end up creating chronic symptoms in the digestive system. Can you relate to one of these scenarios?

- **Scenario 1:** You experience food poisoning or an acute digestive infection incident; you are treated with antibiotics, which resolve the acute symptoms, but a few bad bugs remain in your digestive system and create a chronic problem for you.
• **Scenario 2**: You experience food poisoning or an acute digestive infection incident; you are not treated and the symptoms run their course; your immune system deals with the bad bugs, but it doesn’t completely eliminate them. A few bad bugs remain in your digestive system and create a chronic problem for you.

• **Scenario 3**: You acquire an acute infection, but it only causes minor or moderate symptoms; you do not seek attention and the symptoms run their course; but the bugs hang around and either create an ongoing problem for you, or become “active” after a period of stress.

• **Scenario 4**: You are generally a healthy person, but over time you notice digestive symptoms creeping up on you – they may develop very gently and gradually, or they may be a little more abrupt following a period of stress, after a physical trauma or a separate illness.

The typical chronic, ongoing or day-to-day digestive symptoms experienced by people with chronic bad bug infestations include a combination of the following:

- Heartburn
- Acid reflux
- Belching and burping
- Bad breath
- Bloating and abdominal distention
- A grumbling “washing machine” stomach
- Abdominal pain – either sharp or vague and achy
- Foul-smelling gas and bowel movements
- Loose stools
- Constipation
- Undigested food in the stool
- Possible blood and mucus in the stool

**How Parasites Cause Digestive Symptoms**

In my humble opinion, it is very important to understand why bad bugs cause symptoms. It takes a shift in thinking to do this. Here’s why: it’s not the bugs that make you feel unwell. Rather, it is your immune response to the bugs that causes the symptoms you experience! I can’t emphasise just how important it is to understand that your immune system creates the symptoms, not the bugs!

When you acquire a common cold or flu-like illness, you tend to experience symptoms such as an elevated temperature or fever, a stuffy nose, a cough, sneezing and streaming eyes. You may also have a headache, swollen glands, and a sore throat and perhaps even a rash on your skin.

When you acquire a digestive bug like *H. pylori* or *Giardia*, you might well vomit and have diarrhoea. At the same time, you might feel very tired and you’ll likely experience pain, whether it’s swollen lymph glands, digestive pain, muscle and joint pain or headaches.
These symptoms are the result of intelligent and highly orchestrated immune responses governed by something called your *neuroendocrine system*:

- Your temperature elevates to flush out the bad bugs.
- Your stuffy nose is caused by mucus production, which is a mechanism that’s activated when your body wants to get rid of things.
- Coughing, sneezing, runny noses and streaming eyes are excretions to get rid of things.
- Vomiting and diarrhea are no different – they are mechanisms to forcefully rid the body of bad stuff.
- Swollen lymph glands are signs that your immune system is working in overdrive to clear bad stuff from your body.
- Pain is an intelligent response that’s caused by inflammation, which itself is reflective of your immune system doing its job.
- You feel tired because your body is sending extra energy and resources to fighting whatever bad bug needs to be eliminated.

When you experience symptoms, your body is exquisitely adapting its mode of function in response to an internal or external stimulus, which in this case is a bad bug or bugs. Symptoms tell you that your body is intelligently attempting to return to optimal balance, or homeostasis.

You might even consider symptoms and “dis-ease” as neatly wrapped gifts. If symptoms didn’t exist, you’d have nothing to alert you to the fact that something was wrong. Wouldn’t you agree that, when viewed in this way, symptoms are actually magnificently orchestrated messages to inform your conscious mind that something is out of balance? They are not merely nuisances and distractions to be ignored or suppressed by pharmaceutical medications.

**Inflammation Is The Key Factor**

When your body senses an unwanted bad bug roaming around in your digestive system, or anywhere else in your body for that matter, your immune system kicks in. The specific interaction between your unique immune system and the bad bug is dependent on many factors. In response to the *same* bug, some people develop no symptoms whatsoever, some develop mild symptoms and some experience a full-blown infection. This variety of outcomes confuses patients and doctors alike.

Figure 7 illustrates how interactions between your immune system, good bugs in your digestive system, your nutrient status, bad bugs and even the specific strain of a given bad bug can influence whether or not you develop symptoms, and how strong those symptoms might be.
Figure 7 – A simple illustration of how “host factors” combine with “bad bug factors” to determine whether symptoms develop and how severe they might be.

Allow me to cite some examples of how these interactions can vary:

- Two specific H. pylori strains seem to be highly problematic. They are called CagA and VacA and are strongly associated with serious outcomes from H. pylori infection such as stomach cancer and heart disease. Other strains are not associated with these diseases.²

- E. coli is an important good bug when it is present in the gut in optimal ratios, but certain strains known as enterotoxigenic, enteropathogenic, enteroinvasive and enterohaemorrhagic E. coli can cause significant problems.³

- Several Giardia strains have been isolated; different people infected with the same strain can experience different symptoms.⁴,⁵

- Of several Blastocystis hominis strains, only one or two are believed to cause symptoms in humans.⁶

If your immune system is particularly sensitive to a substance produced by a given bad bug, you might experience a whole array of symptoms. But your best friend might carry exactly the same bug without developing any symptoms at all if his or her immune system is not sensitive to the substances produced by that bug.

Chronic Symptoms and Ongoing Immune Stimulation

An intense immune reaction mounted against a digestive invader results in the classic, hallmark symptoms of an acute “gastro event”. This is where the immune system goes mad and mounts an all-out attack against the invader in a “no holds barred” assault. A lower level of immune activity is seen in chronic symptoms, leading to lower level, ongoing symptoms.
Here, your immune system is content to keep the bugs under control. It doesn’t really want them there, but equally they’re not life threatening. Chronic “irritable bowel” symptoms tend to result in this situation, characterised by bloating, gas, pain, constipation or loose stools. Symptoms in the upper portion of the digestive system such as heartburn, reflux, stomach and chest pain, and halitosis can also develop.

**My Clinical Experience in Helping People Overcome These Symptoms**

It’s important to note that bad bugs are not the only cause of chronic digestive symptoms. Other factors are discussed later in this chapter and include bad food, bad toxins, insufficient stomach acid, inadequate digestive enzyme levels, and poor pancreatic, liver and gallbladder function. Nevertheless, I have developed absolute certainty that parasites, fungi and bacteria are either wholly or partly responsible for ongoing symptoms in many people. My certainty grew after witnessing the following scenario play out time after time:

1. Client completes initial paperwork – health history, family history, current symptoms and food diary.
2. We hold our Skype, phone or face-to-face initial consultation.
3. Client runs a comprehensive stool test (and possibly an organic acids urine test).
4. In the meantime, client follows some basic nutrition recommendations.
5. Nutrition recommendations relieve symptoms a) completely, b) somewhat, or c) not at all.
6. Stool test results are returned indicating the presence of a bad bug, or several bad bugs.
7. Client either obtains a prescription from the doctor, or embarks on a botanical / herbal digestive cleanse.
8. Symptoms improve rapidly – sometimes in just a few days - or gradually over a period of weeks.
9. If client chooses to retest, the bugs are either vastly reduced in number, or have been eradicated altogether.
10. We conclude that the bad bugs must have been contributing to symptoms.

When I began practicing functional medicine, I saw this sequence of events so frequently that I came to a simple conclusion: if folk test positive for a host of bad bugs and feel better after using specific pharmaceutical or botanical interventions to deal with those bad bugs, surely the bad bugs must be provoking or contributing to the symptoms.

Around the world, natural and integrative physicians, nutritionists and other holistic healthcare practitioners see the same results. The consistent observations of experts such as Dr. Omar Amin, Dr. William Timmins, Dr. Dan Kalish, Dr. Leo Galland, Paul Chek and others simply cannot be coincidence. If you’re experiencing chronic digestive symptoms of any kind, you may be thinking along these lines right now:

- First, you’ll be forgiven for thinking something like, “Oh my gosh – what on earth might be living down there in my gut and how much damage might have been done?”
• Second, you might well be thinking, “Wow, why haven’t I been told about this before and how the heck do I get to know what’s in my gut (and maybe my family’s)...and how to get rid of it so I can feel better?”

Don’t worry because it’s easier than you might think to get yourself tested and figure out once and for all why you are not feeling like yourself. Before I discuss all the testing and assessment options available to you, I feel it’s important to look at evidence to support the notion that bad bugs can cause chronic symptoms both inside and outside your digestive system.

For each organism discussed in the FDA Bad Bug Book, there is a section titled “Diseases and Complications”. These sections outline some of the symptoms and health challenges caused by parasites, bacteria and so on over and above the usual vomiting, fever and diarrhea symptoms. Let’s quickly look at some examples:

• **Salmonella**: Dehydration and electrolyte imbalance may occur as a result of diarrhea and vomiting. This can lead to death in the very young, the elderly, and the immune-compromised. In 2% of cases, reactive arthritis may follow 3 to 4 weeks after the onset of acute symptoms. Indications of reactive arthritis may include, for example, joint inflammation, urethritis (urinary tract), uveitis, and/or conjunctivitis (eyes). Salmonella can sometimes escape from the gastrointestinal tract into the body and cause blood poisoning (septicemia) or infect the blood, internal organs, and/or joints (bacteremia).7

• **Campylobacter**: A small percentage of patients develop complications that may be severe, including bacteremia and infection of various organ systems, such as meningitis, hepatitis, cholecystitis (gallbladder), and pancreatitis. Infections also may lead, although rarely, to miscarriage or neonatal sepsis. Autoimmune disorders are another potential long-term complication associated with Campylobacter; for example, Guillain-Barré syndrome (GBS). Various studies have shown that up to 40% of GBS patients first had Campylobacter infection. Reactive arthritis is another potential long-term autoimmune complication. It can be triggered by various kinds of infections and occurs in about 2% Campylobacter cases.8

• **Giardia**: Malabsorption of vitamins, protein, and iron all are possible with chronic infections, and it has been suggested that, in children, this can result in stunted growth and development. Chronicity of infection is correlated with an absence of secretory IgA (immune complexes) in the intestine. About 40% of those who are diagnosed with giardiasis develop disaccharide intolerance during infection and up to six months after resolution of infection. Lactose (milk sugar) intolerance is frequently observed. In some immune-deficient individuals, Giardia may contribute to a shortening of the life span.9
- **Cryptosporidium**: Some infected people are asymptomatic; in others, symptoms may range from mild to profuse diarrhea, with passage of 3 to 6 liters of watery stool per day. In some outbreaks involving day-care centers, diarrhea has lasted from a week to a month. In people with AIDS and in other immunocompromised people, infections are notorious for their severe symptoms. Extra-intestinal forms of cryptosporidiosis exist, with biliary (liver/gallbladder) cryptosporidiosis being the most common type. Other forms involve the lungs and middle ear.

So you can see that official information cited by government agencies alludes to chronic complications and symptoms both inside and outside the digestive system - up to a point, anyway. To tell the truth, there is paucity in the research literature regarding associations between bad bugs and chronic symptoms. The small volume of studies that does exist reports *associations* between certain bad bugs and ongoing symptoms, but there is little evidence proving cause and effect.

In actual fact, it’s hard to prove cause and effect in these situations. Imagine you’re a research scientist wanting to prove that a particular bad bug causes digestive symptoms in people. To achieve this you would have taken a reasonably large bunch of healthy people and divide them into two groups. You’d have to purposely infect one group with the bad bug, and leave the other group of people alone.

You’d observe each group for a given period of time and assess their symptoms. You’d then run statistical analysis on the outcomes and determine whether the infected group had more symptoms than the control group. This is a laborious process in itself and is not a particularly ethical way to run studies because infecting people with bad bugs isn’t really something you’d get away with.

You’d need to treat the infected group with medically approved antibiotics. Following treatment you’d need to run testing to check which patients had achieved successful eradication. You’d then need to subjectively assess their symptoms and run the responses through statistical analysis software to evaluate the relationship between successful eradication and changes in symptoms.

Despite taking all these painstaking steps, I can tell you right now that some skeptical medics would *still* not accept cause and effect. You would probably need to re-infect and treat the study population to see whether symptoms returned upon reinfection and disappeared again after treatment. Again, this is not a particularly ethical way to perform studies – you’d have to purposefully put people in harm’s way in order to draw your conclusions.

Studies would be complicated by the fact that other factors such as food, other illness and stress, could contribute to the development or alleviation of symptoms in each group. The rigmarole of conducting such a scientifically robust study would not be insignificant, and nor would it be cheap. You’d probably be looking at millions of pounds or dollars in required investment.
In 2005, Dr. Barry Marshall was awarded the Nobel Prize in Physiology and Medicine for proving that *H. pylori* causes stomach ulcers. Having tried to convince the medical world of *H. pylori*'s involvement in ulcers for twenty years, Dr. Marshall resorted to infecting himself to prove his theory. It's ironic that after two decades of being ignored and even ridiculed, he was then awarded the prestigious Nobel Prize. Quite a turnaround!

Because of Dr. Marshall's excellent and selfless work, *H. pylori* is now reasonably well recognised in medicine as a primary contributing factor to heartburn, acid reflux, gastritis, ulcers and other digestive symptoms. Unfortunately, it's pretty much only bad gut bug to receive an appropriate level of attention and even then, some doctors still consider *H. pylori* to be harmless. I have spoken with hundreds of people around the world who had become frustrated and angry with doctors who dismissed *H. pylori* as a possible cause of their symptoms.

As frustrating as it is, it's prudent to be realistic. We're probably not going to see many studies done on bad bugs in the near future, leaving doctors in a position where they can justifiably say, "There's no evidence to support this bug as a cause of your symptoms, so I am not going to run a test for you." In fact, the kind of research we need may not be done in our lifetime, so I feel it's prudent to fall back on common sense and clinical observation when considering parasites:

- Would you agree that common sense tells us that a gut full of bad bugs increases the likelihood that you are going to feel unwell?

- Would you also agree that when symptoms improve or clear up after people have taken treatment to fight bugs, it suggests that the bad bugs were causing problems in the first place?

If you have answered yes to both questions, as I hope you have, we are most certainly reading from the same hymn sheet! There is absolutely no doubt in my mind that bad bugs cause chronic symptoms and we don't need a raft of double blind, placebo controlled studies to help folk feel better.

**Summary – What I’d Love You To Know About Bad Bugs & Chronic Symptoms**

- Bad bugs living in your digestive system can and do cause chronic, every day digestive symptoms.

- These symptoms can be very mild or they can be debilitating (and anywhere in between).

- Acute symptoms are obvious and include vomiting, diarrhea, cramping and fever.

- Bad bugs can remain in your gut after an acute incident such as food poisoning, whether you receive treatment or not.
• Bad bugs do not always cause obvious, acute symptoms – they can slip under the radar and result in a gradual development of symptoms.

• Dormant bad bug colonies can begin causing problems after a “trigger” event such as another infection (e.g. a cold, flu or throat infection), a course of antibiotics or a stressful event.

• It is your immune system’s response to the bugs that creates symptoms, not the bug itself.

• Different strains of a single bug can result in different symptoms, or no symptoms at all, in different people.

• Your unique immune system may be sensitive to a particular bug or the chemicals it produces even if other people are not.

• Plenty of studies show associations between bad bugs and chronic digestive symptoms, but cause and effect is hard to prove.

• Common sense and clinical experience tell us that parasites are problematic because symptoms often improve when people find bad bugs and take the relevant steps to remove them.

**Chronic Digestive Bugs – Symptoms in the other Six Areas of Health**

Parasites can lead to symptoms in virtually any part of your body. I realise this may seem a little far-fetched, but once you have read this section you’ll see precisely how and why the likes of your liver, blood vessels, nervous system, muscles and other body parts, can be affected.

Let’s begin by listing some of the non-digestive symptoms that may reflect parasite infestation. I highly recommend you carefully and honestly note any symptoms you are currently experiencing, or that you may see in your children. The following list contains symptoms cited by several leading experts in the field of parasitology and holistic healthcare, including Emma Lane N.D., Dan Kalish, D.C. Alex Vasquez D.C., Paul Chek, Anne Louise Gittleman, Joe Burrascano, M.D. and Leo Galland M.D.

**Sex and Reproductive Symptoms:**

• Chronic urinary tract irritation and infections
• Prostatitis
• Vaginitis
• Menstrual stress
  • PMS – period pain, sore breasts, mood swings, headaches, fatigue, sleeplessness, water retention and other symptoms
• Decreased sex drive and sexual performance, including erectile dysfunction
• Infertility
Energy:
- Fatigue that is uncharacteristic of your normal state
- Overall chronic fatigue
- Fluctuating energy levels during the day
- Anemia (leads to fatigue due to iron or B₁₂ deficiency)

Aches & Pains:
- Headaches
- Muscle cramps
- Joint pains
- Popping joints and joint instability
- Period pains
- Feeling something moving in your body that isn’t characteristic to the feeling of your own skin, joints or organs – can be painful in some cases

Mood & Cognition:
- Irritability/nervousness/mood swings
- Depression
- Emotional unrest
- Agitated thoughts
- Brain fog
- Poor memory, focus and concentration
- Behavioural symptoms such ADD and ADHD

Sleep:
- Disturbed sleep (night sweats, fretful)
- Bruxism (grinding your teeth while asleep)
- Nightmares

Skin, Hair & Nails:
- Persistent skin problems – rashes, skin flaking off, pimples, hives, rosacea
- Jaundice and other skin discolouration
- Nasal itching/picking
- Anal itching
- Coin size blotches on face
- Skin eruptions/markings
- Granulomas (tumour-like parasite encasements)
- Sores on eyelids, anus, vagina or in the mouth
- Athlete’s foot
- Dandruff
- Jock itch
- Nail abnormality: thickening, brittle, crumbly or ragged, flaking, and tiny white spots on the underside fingernails and toenails
- Hair loss: often in coin sized blotches or larger that often result from itching the scalp
What Your Doctor May Not Tell You About Parasites

Miscellaneous:
- Unexplained weight loss or gain
- Bluish specs in whites of eyes
- Increased ear wax production
- Post nasal drip
- A chronic dry cough
- Lung congestion
- Allergies/intolerances (many of the symptoms listed above arise from allergic-type responses)
- Chemical sensitivity (e.g. petrol fumes, perfumes, nail varnish)

You might look at this symptom list and think, “You must be kidding, Dave Hompes! How can parasites in my gut cause all these symptoms?” Well, I can guarantee you they do, but at the same time I want to reiterate that the symptoms have other causes and I am in no way blaming parasites for absolutely everything.

Andy's story is very interesting. Several years before contacting us, he'd been sprayed with raw sewerage at work. Usually an extremely active guy, Andy's energy levels, motivation and sleep had been in steady decline following the incident and his digestive system was screaming for help. When we ran an initial stool test, we found a whole range of bad bugs. Andy's test revealed an opportunistic bacterium called *Aeromonas*, which on its own can cause loose stools and diarrhea. The test also revealed a yeast overgrowth, *Blastocystis hominis*, pinworm and a flat worm commonly known as the Chinese liver fluke (see figure 8).

![Figure 8 - Clonorchis sinensis (Chinese liver fluke) under a microscope.](image)

Andy changed his diet and lifestyle habits according to my recommendations and began a structured programme for ridding himself of the bad bugs. Andy took prescription antibiotics for his worm infestations, and followed an individualised protocol to fight the other bugs. He also supported his digestion and immune system with specific supplements. We kept in touch frequently during the process and then re-tested. Andy's retest showed that the *Aeromonas, Clonorchis*, pinworm and fungal overgrowth had been eradicated. The *Blastocystis* was still present, but Andy was not too disappointed because his sleep and energy had improved, along with his mood and cognitive symptoms.
The Olympic Rings Health Analogy

One of Hompes Method’s core concepts is the understanding that all your body systems are linked together. For example, if you have a problem in your digestive system, other systems in your body are eventually going to struggle. This concept is illustrated by the Hompes Method Olympic Rings, as seen in figure 9.

![Figure 9. Hompes Method Olympic Rings Health Analogy.](image)

Here are some examples of how these key body systems are inexorably linked:

- All blood leaving your digestive system drains into the portal vein, which goes right to your liver; your liver is the workhorse of your detoxification system and may become overwhelmed when the gut is full of bad bugs.
- After detoxifying your blood, the resulting waste products are sent from your liver back into your intestine via the gallbladder.
- Up to 70 percent of your immune system is housed in your digestive system.
- Your digestive system is controlled by your neurological and hormone systems.
- Toxins leaking from your digestive system can significantly disrupt your hormone system.
- Your digestive system has its own nervous system – the enteric nervous system, or “second brain” – that is believed to have more nerves than your spinal cord.

As you know, in western medicine the body systems are largely considered to be separate structures and entities. As a result, medics tend to focus their testing and treatment on the area where you’re feeling your symptoms, without looking for the cause in other areas of your body. For example, if you have arthritis, they look at the inflamed joints, not at your digestive, detoxification or immune systems. Yet the scientific literature clearly demonstrates how several digestive bugs and a range of toxins can trigger joint pain.

Having seen people’s energy levels skyrocket, their moods lift or calm down, their clarity of thought rapidly improve, aches and pains dissipate in weeks, skin complaints disappear rapidly, menstrual symptoms melt away and sex drive go through the roof, I can state with absolute certainty that your digestive system influences other functions in your body. Let’s take a look at how and why this is.
Leaky Gut Syndrome

“Leaky gut” has become a buzzword in natural healthcare, but what does it mean exactly? In medical circles this phenomenon is called increased intestinal permeability and refers to a situation in which your stomach and intestine sustains damage that results in the development of tiny gaps between its usually tightly packed cells.

The situation is analogous to having holes in the bottom of a boat, which results a leaky boat, or holes in your roof resulting in a leaky roof! When your stomach and intestinal lining springs leaks, things from your digestive system are able to leak through into your bloodstream where they can begin to cause trouble.

When unwanted parasites, fungi and bacteria proliferate and hang around in your digestive system they invoke a response from your immune system. The response involves a process called inflammation, which is a perfectly natural response and is aimed at getting rid of whatever irritant has been detected by your immune system. The trouble is that stomach and intestinal inflammation creates damage to the delicate lining of your digestive tract, causing leakiness.

When your digestive system is working at optimal capacity, food is digested and processed in a very specific way before it is allowed to pass from your digestive tract into your blood. The basics of this critically important step-by-step process are as follows:

1. You put food in your mouth and chew it, ideally a minimum of 20-30 times.
2. Enzymes in your saliva mix with the food and begin digesting carbohydrates and fats.
3. When you swallow, smooth muscles in your esophagus squeeze the food down and into your stomach via a process called peristalsis.
4. Specialised cells in your stomach lining secrete hormones, stomach acid and special enzymes to help break down your food, especially proteins.
5. Cells also produce a substance called intrinsic factor, which is necessary for the proper digestion and absorption of vitamin B12.
6. If stomach acid levels are low – a condition called hypochlorrrhydia - you will not digest your food effectively and nor will you kill bugs that enter with the food or water you consume.
7. Your stomach muscles contract and churn the food to make sure it is thoroughly mixed with your digestive juices.
8. Your stomach slowly releases food into your small intestine, which has three sections from top to bottom – duodenum, jejunum and ileum.
9. Linked to your duodenum are two tubes, one from your pancreas - the pancreatic duct - and the other from your gallbladder – the common bile duct.
10. The pancreatic duct transports digestive enzymes and bicarbonate into your small intestine to help optimise pH and continue the digestion of food.
11. The pancreatic enzyme milieu contains enzymes that digest protein, fat and carbohydrate.
12. The gallbladder squirts bile into your intestine; bile contains many toxin remnants that are subsequently pooped out, but in the meantime, bile salts help you complete the digestion of dietary fats and oils.

13. When nutrients are properly released from your food as a result of the above processes, they are absorbed into your body via a number of different mechanisms.

14. Gut bacteria act on and process food as it transits through your intestine, producing certain B vitamins and vitamin K, along with chemicals called short chain fatty acids to feed your colon cells.

15. Anything your body does not deem beneficial, or doesn't require, continues down into your large intestine – your caecum and colon.

16. You subsequently poop out the waste.

Although this is a grossly simplified version of your beautifully organised and orchestrated digestive process, it sets the scene for understanding leaky gut syndrome and how problems in your digestive system can result in symptoms elsewhere in your body.

Undigested Food

When your stomach and intestine are damaged, particles of food that have not been properly digested can leak through your digestive barriers and enter your blood. Once in your blood, these particles are transported to your liver for processing. If your liver is overloaded, undernourished, or both, the food particles may not be processed properly.

Large numbers of unprocessed food particles floating around in your blood may identified and tagged by your immune system as foreign bodies, leading to an all-out immune response. The immune response isn’t localised to any particular tissue or organ, rather it is “global”, and can happen anywhere in your body and cause a multitude of symptoms.\(^{11}\)

If you read about the possible symptoms of food sensitivity in a textbook, you’ll see listed phenomena such as fatigue, mood symptoms such as depression, anxiety and irritability, brain fog, skin complaints, insomnia, headaches, muscle and joint pain, mouth ulcers, sinus trouble, frequent colds and flu and so forth, in addition to digestive complaints.

Remember, the food sensitivities themselves may only develop because of a damaged gut secondary to irritation and inflammation that has been caused by bacteria, fungi and parasites.

I have run a lot of food sensitivity tests over the years. One of my favourite tests is something called an IgG4 food sensitivity test. If my client has a lot of positive IgG4 markers – for example cow’s milk, eggs, wheat, soy, beef, chicken, corn – I immediately suspect he or she has a leaky gut. Why? Because the higher the number of IgG4 positive foods on the test, the leakier the gut tends to be. The treatment is simple: avoid the offending foods for 90-days to six months while bad bugs are removed and some high quality gut repair work has been done.
It is also worth noting that specific laboratory tests are available to assess whether you have a leaky gut. These can be extremely useful in determining the appropriate course of action needed to help you rejuvenate your digestive function, as well as providing initial data against which we can chart your progress in subsequent tests.

**Bacterial, Fungal and Parasite Chemicals**

All organisms need to poop! Even a single celled organism like an amoeba or bacterium has to get rid of metabolic byproducts in order to survive. They may not poop in the same way we do, but bugs are constantly producing waste. Some of the chemicals produced by bad bugs can be extremely irritating to your digestive lining.

These microbial byproducts can leak through your stomach and intestinal lining and flood into your liver. They can then enter general circulation if your liver is overloaded or undernourished. Once in general circulation, your immune system may mount a response to these microbial compounds in the same way it does for with food compounds.\(^\text{11}\)

The microbial compounds themselves can also be very toxic to your cells. *Lipopolysaccharides*, also known as *endotoxin* or LPS, can be extremely toxic to cells. They are produced by gram-negative bacteria in the gut and enter general circulation when the gut is damaged. Thousands of studies are publicly available at PubMed illustrating the health effects of excessive LPS levels.\(^\text{12}\)

According to parasite expert Dr. Hazel Parcells, worms and their waste products can be incredibly toxic to the human body.\(^\text{13}\) Worms, like other parasites, can cause inflammation and oxidative stress; they can compromise energy production and hormone function. Resulting symptoms can include low energy, mood and memory changes, muscle twitches and cramps along with skin complaints, chronic joint and muscle pain and sleep disruption.

**What is This Thing Called “Inflammation”?**

In 2011, the Institute Of Functional Medicine held a three-day symposium on the subject of chronic infections. Many of the presentations focused on the digestive system's influence on general health. It became clear that current research indicates that our digestive systems are in a chronic state of low-level *inflammation*.

Inflammation is a natural response that is necessary for survival. It is initiated by the immune system in response to stressful stimuli such as bad bugs, bad foods, bad toxins, physical injury, social stress and even a lack of sleep. You have definitely experienced inflammation at some stage in your life. Here are some simple examples of this process in action:

- A sore throat
- A stomach ache
- A sprained ankle
• A sore finger or thumb after trapping it in a door or hitting it with a hammer
• Muscle pain and soreness after exercise

All medically diagnosed conditions ending in “itis” are inflammatory disorders, including:
• Gastritis – inflammation of the stomach
• Gastroenteritis - inflammation of the stomach and intestines
• Tendonitis - inflammation of the tendons
• Arthritis – inflammation of the joints
• Hepatitis – inflammation of the liver
• Colitis – inflammation of the colon
• Gingivitis – inflammation of the gums
• Sinusitis – inflammation of the sinuses

Inflammation is instigated and regulated by your immune system. Your nose, sinuses, mouth, throat, lungs, stomach, intestines and genitourinary tract contain a lot of immune activity because they are the entry and exit portals to your body and must be protected at all costs.

These body parts are prone to increased levels of inflammation because there is so much responsibility on their shoulders to protect your entry and exit portals. Inflammation levels escalate when your immune system detects something “bad”. Invasive bacteria, fungi and parasites can all stimulate your immune and inflammatory cascade.

Swelling, redness, pus, heat and pain are familiar sensations to those who have experienced inflammation from an injury and the same thing happens internally. When you have inflammation in your mouth, sinuses, throat and digestive system, and so on, you get redness, swelling, heat, pus and, of course, pain. Heartburn, stomachache, abdominal cramping, bloating and even diarrhoea are signs of inflammation in your digestive system.

The inflammatory process is quite complicated and a detailed explanation is beyond the scope of this book. It involves pro-inflammatory chemicals with fancy names like cytokines and interleukins. These chemicals swarm to areas where bad bugs might be irritating the lining of your digestive system, throat, sinuses, lungs and genitourinary tract.

An inflammatory response in your intestine, for example, can spread into other areas of your body and become a “global” inflammatory response. Pro-inflammatory chemicals from your gut enter your blood where they circulate round your body and trigger inflammation elsewhere, giving rise to symptoms that may seem worlds away from your digestive system. It’s akin to a house fire that begins in the kitchen and before you know it, engulfs the entire building.
Nutrient Deficiencies
Over time, parasite infestations can and do cause nutrient deficiencies. Remember, a parasite is defined as an organism that takes without giving back. Unless there are very special circumstances, a parasite host is always at a negative energy balance with the parasite: they are taking from you and they are giving you the finger when you want something back!

If you have sustained stomach or intestinal damage as a result of chronic bacterial imbalances, fungal overgrowth or parasite infestation, there is no way you can possibly digest your food and absorb nutrients at full capacity. Indeed, the bad bugs can disrupt your digestive processes in several ways.

First, there is a very powerful correlation between the presence of bad bugs in your digestive system and decreased levels of stomach acid, pancreatic enzymes and bile that get squirted out from your stomach lining, pancreas, liver and gallbladder.

Private laboratories assess and report pancreatic enzyme levels, undigested food, markers of protein and vegetable matter, fat absorption, and so on. It is very common to see evidence of compromised digestion using these lab tests. Some of my clients self-diagnose a lack of digestive capacity simply by observing undigested food in their stools.

If you’re playing host to one or more of the larger worms, they will literally steal your nutrients when you eat your meals! If you have a tapeworm or some roundworms living in your digestive system, you can be sure that these critters are stealing nutrients from your food. Here are some examples of how bad bugs might cause nutrient deficiencies:

- As their name suggest, hookworms literally attach to your intestinal lining with their hook-like teeth. They can cause mild bleeding that is enough to create an iron-deficiency.
- Research has categorically shown that H. pylori can cause both iron and vitamin B₁₂ deficiencies by suppressing stomach acid production.
- Certain H. pylori strains are associated with low vitamin C, vitamin E and folic acid levels.
- Giardia can promote intestinal protein loss and is associated with low vitamin A, beta-carotene, folic acid and vitamin B₁₂ levels; it also prevents the absorption of dietary fatty acids.
- Cryptosporidium infestations are associated with carbohydrate, protein and vitamin malabsorption.
- Vitamin A levels are frequently lower in children infected with the roundworm Ascaris.
- Isospora infections can lead to poor absorption of fat, protein, sugar and vitamin B₁₂.
- Tapeworms steal vitamin B₁₂ and can cause pernicious anemia.
I’d like to comment on two of these nutrients to show how powerfully bad bug-induced nutrient deficiencies can impact your health. Look at the list of symptoms associated with iron and vitamin B$_{12}$ deficiency, as listed by the England and Wales NHS: 14, 15

Iron deficiency:
- Tiredness and lethargy (lack of energy)
- Shortness of breath
- Heart palpitations / noticeable heartbeat
- Pale complexion
- Headache
- Tinnitus (hearing sounds coming from inside the body, rather than from an outside source)
- Altered sense of taste
- Feeling itchy
- Sore or abnormally smooth tongue
- Hair loss
- Desire to eat non-food items, such as ice, paper or clay (a condition known as pica)
- Difficulty swallowing
- Painful ulcers (open sores) on the corners of the mouth
- Spoon-shaped nails

Vitamin B$_{12}$ deficiency:
- Pale yellow tinge to your skin
- Sore and red tongue (glossitis)
- Mouth ulcers
- Pins and needles (numbness and tingling in hands and feet)
- Changes in the way that you walk and move around
- Disturbed vision
- Irritability
- Depression
- Changes in the way you think, feel and behave
- Decline in mental abilities, e.g. memory, understanding and judgment

The purpose of presenting these lists is not to frighten you; it’s simply to show you how two key nutrient deficiencies can lead to a huge variety of symptoms. In western medicine, you would be treated with iron or B$_{12}$ supplements should you be diagnosed with deficiencies. This is okay, but it does not address the underlying cause of the deficiency, which may be poor nutrition and eating habits and poor digestive function caused by bad bugs.

It is clear to me that chronic bad gut bug infestations can cause many different health challenges. I have seen with my eyes and heard with my ears dramatic changes in energy levels, chronic pain, skin, sleep and allergic symptoms when clients embarked on protocols to remove these bad bugs.
Whilst bad bugs are definitely not the only reasons for these far-reaching symptoms, it is my hope that I have convinced you how they can and do contribute to a decline in overall health in addition to creating ongoing digestive symptoms.

- Can you now see how parasites might indirectly lead to symptoms elsewhere in your body?

- Can you see how your stomach and intestine might sustain damage, allowing particles such as undigested food, microbial substances and even the bugs themselves, to leak into your blood where they are free to trigger immune, inflammatory or allergic responses?

- Can you see how a local inflammatory response might spread round your body to create “global” effects, much like a chip-pan fire could spread round a house?

- And can you see how the presence of bad bugs in your digestive system might create nutrient deficiencies that result in all manner of symptoms that might seem completely unrelated to your digestive system?

**What Is An “Asymptomatic” Infection?**

The term asymptomatic means “no symptoms”. In the context of this book it pertains to situations where you might play host to a so-called bad bug without experiencing obvious symptoms. Let’s say you are “infected” with *H. pylori*, yet you don’t have nausea, heartburn, acid reflux, stomach pain, bloating or other common *H. pylori* symptoms. This would be considered an asymptomatic infection.

Many people carry parasites around in their digestive systems without experiencing digestive symptoms. But I am going to challenge the meaning of asymptomatic. Over the years I have worked with many people who tested positive for parasites, yet reported no obvious digestive symptoms. Yet when they eradicated the bugs, these people experienced improvements in energy, mood, sleep and other areas of health.

This begs the question, “What is an asymptomatic infection?” If symptoms outside the digestive system clear up when digestive bugs are dealt with, the absence of digestive symptoms doesn’t necessarily mean the infection is asymptomatic. Non-digestive symptoms can manifest in the absence of digestive symptoms. You can feel tired, low and achy as a result of digestive bugs without having obvious digestive symptoms.

Leo Galland M.D. is one of few medically trained individuals to speak out about the role of intestinal parasites and clearly understands how the bugs create “global” symptoms in the absence of obvious digestive maladies. He states:
“The association between intestinal protozoa and chronic fatigue in patients without prominent digestive complaints may not be limited to giardiasis. In an, unpublished presentation, Galland reported that 80% of patients with a diagnosis of chronic fatigue who were infected with the protozoan Blastocystis hominis showed significant improvement of fatigue associated with treatment that cleared the protozoa from stool specimens.”

In a paper titled *Reducing Pain and Inflammation Naturally: Nutritional and Botanical Treatments Against “Silent Infections” and Gastrointestinal Dysbiosis, Commonly Overlooked Causes of Neuromusculoskeletal Inflammation and Chronic Health Problems*, Alex Vasquez, D.C., N.D. states that 56-70 percent of patients with chronic inflammatory arthritis are carriers of ‘silent infections’:

“Non-infectious microbiological causes of musculoskeletal pain are commonly overlooked, and many doctors are unfamiliar with appropriate assessments and treatments for these conditions. Many patients have musculoskeletal pain and systemic inflammation as a result of “occult infections”, “silent infections”, or “dysbiosis”—including several subcategories of harmful relationships between the human host and his/her microbial guests or neighbors.”

Clearly, bad bugs have the ability to create “global” body symptoms without causing digestive issues. So ask this question of yourself, “What if I am walking round with chronic symptoms that are actually being caused by gut bugs, even though I don’t have symptoms in my digestive system?”

I feel it’s important to redefine “asymptomatic” in the context of digestive bugs. Symptoms in the far-flung reaches of your body can definitely have their roots in gut damage, inflammation and nutritional deficiencies caused by bad bugs. These symptoms can plague you even in the absence of obvious digestive symptoms.

**Long Term Disease Risk Factors Associated With Parasites**

As previously stated, the interaction between your immune system and the specific bugs you’re hosting ultimately determines how you feel. Four basic situations arise:

- You have obvious digestive symptoms and you detect one or more bad bugs in a laboratory test (you’d likely want to treat and eradicate the bugs).
- You have very minor digestive symptoms that only occur once in a while and you detect one or more bad bugs in a laboratory test (you may or may not want to treat the bugs).
- You have no digestive symptoms whatsoever and you detect one or more bad bugs in a laboratory test (you may not want to treat and eradicate the bugs).
- You have mild or no digestive symptoms, yet you have symptoms in the several of the other six areas of health (you’d likely want to treat and eradicate the bugs).
These scenarios play out day after day in my practice and it can be tough to decide whether to take treatment or assume that the bad bugs aren't really so bad in your individual case. How do you decide whether you actually need to get rid of the bad bugs based on your symptoms, and are there any other factors to consider when making your decision?

I feel it’s important to look at some of the possible long-term outcomes of carrying parasites around in your body. We’ll discuss this in a little more detail during the “treatment” section of the book in chapter 8, but let’s use one example to highlight the importance of looking into the future as well as simply considering the present.

*H. pylori* is a common stomach bug that causes a lot of heartburn, acid reflux, stomach pain, bloating and other digestive symptoms. It creates these symptoms by invoking an inflammatory response in the stomach and small intestine - redness, swelling, soreness and so forth.

The inflammation caused by *H. pylori* is known as *gastritis* when it is located in the stomach, or *duodenitis*, when in the small intestine. If the inflammation is severe enough, the damage can worsen and result in an ulcer. In fact, *H. pylori* is believed to cause around 80 percent of all stomach ulcers and more than 90 percent of duodenal ulcers. If an ulcer perforates and bleeds, you have a medical emergency on your hands and the outcome can be fatal.

Ulcers aside, we also know that *H. pylori* infections are strongly associated with certain types of cancer and you can find *H. pylori* nestled in the list of known cancer-causing agents at Wikipedia. The World Health Organisation classifies the bacterium as a “class I carcinogen”. This means that *H. pylori* infections are to stomach cancer what cigarette smoking and asbestos are to lung cancer. According to Anil Minocha M.D., “Most gastric adenocarcinomas and MALT lymphomas are accompanied or preceded by *H. pylori.*”\(^{18}\)

To confuse matters, *H. pylori* can cause “silent” inflammation without creating obvious symptoms. The take home point is that a little bit of heartburn, or perhaps even no obvious symptoms at all, could lead to ulcers or even cancer five, ten or twenty years down the line. Only a fraction of people infected with *H. pylori* – under one percent, in fact – go on to develop cancer, but I share this with you because I’ve heard from dozens of people over the years who actually did have stomach cancer as an apparent result of *H. pylori*.

Stomach cancer is not the only disease associated with *H. pylori*. You may be aware that I wrote a book titled *H. Pylori: From Heartburn To Heart Attacks*, in which I brought to readers’ attention a significant body of evidence linking *H. pylori* with heart disease and its risk factors.\(^{19}\) It turns out that certain *H. pylori* strains - especially one Cag-A - have the ability to trigger responses in the body that:

- Alter blood cholesterol levels
- Increase blood pressure
- Increase insulin resistance

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- Increase general inflammation markers such as C-reactive protein and fibrinogen
- Increase homocysteine
- Increase oxidative stress
- Decrease antioxidant levels
- Increase the severity and speed of progression of atherosclerosis
- Increase the risk of developing angina
- Increase the risk of having a heart attack
- Increase the risk having a stroke

I encourage you to read the book if you are interested in reducing your risk of developing heart disease. In addition to *H. pylori*, I found around two dozen other risk factors that you can easily control by altering your lifestyle. Presented in the book is a simple programme for reducing your risk, including nutrition and lifestyle advice and specific nutritional supplement protocols.

There isn’t a huge amount of evidence associating other digestive bugs with long term, serious health complications. Chronic infections in other areas of the body, on the other hand, are associated with some nasty outcomes. In an interesting presentation from the 2011 Institute for Functional Medicine Symposium, Paul Ewald, Ph.D., of Louisville University, quotes a passage of medical text from a 1979 edition of *The Cecil Textbook of Medicine*:

> “To date, there is no unambiguous evidence that any class of human cancers is regularly caused by a virus. Some cancers have been shown to be associated with elevated levels of antibody to certain viruses or viral components... However, no direct evidence exists that viruses and the cancers are causally linked.”

He then presents data on cancers that in 2011 were widely accepted as having caused infectious origins. He emphasises how we have gone from zero infectious cancers in 1979 to estimating in 2011 that 20 percent of all cancers are of infectious origin. The cancers themselves haven’t changed, but research methods and technology have improved. Thus, scientists are now able to identify the causative factors/agents.

![Figure 10 – Slide taken from Ewald’s presentation.](image-url)
I would like to add the following parasites to the above list of infectious agents associated with cancer, having conducted some additional research of my own by examining group 1, 2A, 2B and 3 carcinogens, as identified by the International Agency for Research on Cancer (IARC). You can find lists for each group at Wikipedia. Here are some of the parasites listed, and the specific cancers they cause:

- *Opisthorchis viverrini* (Southeast Asian liver fluke) – gallbladder cancer
- *Schistosoma haematobium* (blood fluke) – urinary bladder cancer
- *Clonorchis sinensis* (Chinese liver fluke) – cancer of the liver and bile duct
- *Trichomonas vaginalis* (protozoan parasite) – cervical cancer

I’m sure you will agree that, given rapid technological development and man’s desire to seek answers, it’s worth contemplating what another 25-30 years of research might reveal. Might we find that more and more of our serious diseases have an infectious origin? Over and above cancer, here are some other associations and cause-effect relationships that are already reasonably well established:

- *Chlamydia pneumoniae* (bacterium) – heart disease
- *Cytomegalovirus* (virus) – heart disease
- *Escherichia coli* (bacterium) – heart disease
- *Streptococcus* spp (bacterium) – heart disease
- *Porphyromonas gingivalis* (bacteria responsible for gum disease) – heart disease
- *Haemophilus influenza* type B (virus) – heart disease
- *Herpes simplex* (virus) – heart disease
- *Cocksackie virus* B3 (virus) – heart disease
- *Mycoplasma* spp. (bacteria) – chronic fatigue syndrome / neurological diseases
- Lyme disease (various organisms) – neurological disease, insulin resistance, heart disease

It’s clear that bad bugs can either cause or predispose people to significant illnesses. This is one reason why I am so keen to help you understand how to test and treat these pesky bugs!

**Symptoms Have Other Causes – It’s Not Just The Bad Bugs**

In this chapter I’ve discussed a whole gamut of signs, symptoms and illnesses that might be associated with digestive parasites, yet there is one thing I want to clarify: I am not suggesting that all the symptoms listed in the previous twenty five pages are always caused by parasites. They are not.

Let’s return to the Hompes Method Seesaw and consider the fact that symptoms in all Seven Areas of Health can be caused by any of the factors represented by the seesaw.
“Bad bugs” represent just one category that may be weighing down the “bad” side of your seesaw. You may also be consuming bad foods, whilst carrying a burden of bad toxins in your body. Similarly, you may be lacking in certain good nutrients and your good bug levels may be low.

Specific bad foods that can cause the same or similar symptoms include gluten, processed cow’s milk, soy, and the excessive intake of vegetable oils and sugar. These foods cause problems for lots of people. Additionally, we all tend towards individual food sensitivities that may include foods that are generally considered to be excellent choices. For example, I have seen foods as innocent as almonds, sunflower seeds, eggs, broccoli, kale and bananas cause major symptoms in certain clients. Any food can cause a problem if you as an individual have a specific allergy or sensitivity to it.

Bad toxins are all around us. They are in our water and food supply, our air and in products we put on our skin:
- Processed foods contain chemical additives and many commercially grown crops are loaded with pesticides.
- Certain species of fish and seafood are known to contain high levels of mercury and other toxic metals.
- Drinking water contains chlorine and, in some areas, may contain fluoride, lead, arsenic and drug residues.
- Dentists routinely place mercury amalgam fillings in our mouths.
- We breathe in solvents and other volatile chemicals on a daily basis from both indoor and outdoor air.

This cocktail of toxins can and does contribute to symptoms in the Seven Areas of Health by disrupting neurological, immune, hormonal and energetic functions. 21, 22, 23

Lack of good food and insufficient good nutrients are fairly obvious contributing factors to symptoms. When you eat too much bad food, it’s hard to eat adequate amounts of good food, and the more bad food you eat, the worse your nutritional
status will generally be. Furthermore, you will use up and deplete nutrients trying to fight bad bugs and detoxify bad toxins.

A lack of, or imbalance in, you good bugs can have profound consequences on health and vitality. Virtually all the digestive symptoms listed in this chapter, as well as other Symptoms in the Seven Areas of Health, can result from a paucity of good bugs in your digestive system. Remember that you are more bug than human. If your friendly bugs are disturbed or depleted, you literally lose some of your life force.

**Can Parasites be Good?**

How can a parasite be good or beneficial? After all, the classical definition of a parasite is an organism that takes but gives nothing in return. But it’s prudent to note that some parasites can bring benefit. As mentioned in chapter 1, certain worm species have been shown to benefit patients struggling with inflammatory bowel diseases such as ulcerative colitis and Crohn’s disease.

In a presentation titled *Immune System Tolerance, Autoimmune Disease and Helminth Therapy*, Joel Weinstock, Ph.D., of the Tufts Medical Centre, presents several studies in which the pig whipworm, *Trichuris suis*, showed promise in down-regulating the intestinal inflammatory responses seen in Crohn’s disease and ulcerative colitis.24

The pork whipworm has shown so much therapeutic promise that drug companies have developed ways in which whipworm eggs can be made into medication. The drugs are being studied for their impact on allergic rhinitis, multiple sclerosis, food allergy, asthma, Crohn’s and ulcerative colitis and even autism. What is the drug? Well, it’s simply comprised of worm eggs in a capsule!

A handful of studies conducted on *H. pylori* have revealed a protective effect against asthma, certain allergies and even esophageal cancer. It appears that the risk of having these conditions may increase when *H. pylori* bacteria are eradicated. Like all bugs, *H. pylori* has to be taken in context: in some people it appears to be harmless and may even be protective, but in others it can be a major problem.

So what is going on when we see these apparent protective and even healing effects from parasites and supposedly “bad” bacteria? Well, knowledge about our immune system gives the answers. It appears that organisms such as worms and certain bacteria are able to modulate our immune and inflammatory responses in a way that benefits us.

Without going into enormous technical detail, it appears that worms have the ability to dampen certain type of immune responses in our gut, thereby reducing the expression of inflammatory diseases. Technically speaking, they have the ability to induce T-regulator cells, which stunt the intestinal inflammatory response by suppressing the production of pro-inflammatory chemicals such as interferon gamma and interleukin-17.
In an interesting hypothesis, Dr. Weinstock and his colleagues propose that the dramatic increase in inflammatory bowel diseases seen in the western world over the last century may have happened due to over-sanitisation, or “too much hygiene”. He suggests that by practicing overly strict hygiene, we have limited childhood exposure to worms and possibly other parasites that would otherwise help our immune systems develop resistance against inflammatory bowel disorders.

Dr. Weinstock’s hypothesis takes us back to a concept I introduced earlier, namely the fact that the human body – especially the digestive system and other entry/exit points – is absolutely loaded with microbes! It’s the balance of microbes and their interaction with human cells that results in either health or disease. He states:

“You are more than your genetic self. You are a community of interactive organisms. Removing key players can unbalance the system”

Anything that imbalances your good bug population has the potential to disrupt your body’s function. Without wanting to be repetitive, good bugs and immune function can be disrupted by food, antibiotics, chemicals, stress and other lifestyle factors. But in Weinstock’s model, it’s the absence of childhood exposure to certain organisms that appears to create the imbalance.

The Candida and Mercury Hypothesis

Another example in which so-called bad bugs may actually be of benefit may be seen in the context of mercury toxicity. Candida albicans frequently overgrows in the oral cavity, gut and genitourinary tract. It has the ability to switch between yeast and fungal forms and has been the scourge of many of my clients’ lives.

Although they have been demonised, Candida organisms are always present in the gut and are supposed to be there. Candida will usually do no harm as long as it is kept in check by your army of good bugs. However it is highly opportunistic and can spread like wild fire when it spots an opening. Some environmental factors that enable Candida to overgrow include:

- A diet high in sugar and processed food
- Excessive alcohol consumption
- Low stomach acid and pancreatic enzyme levels
- The use of antacid medications
- Antibiotics
- Nutrient deficiencies
- Stress, which can compromise immune function
- Immune dysfunction
- Mercury toxicity (our focus here)

Plenty of unwelcome symptoms can develop when Candida overgrows. The symptoms are not dissimilar to those caused by bacterial overgrowth and parasites. In fact, it can be hard to determine whether you have parasites or fungal overgrowth, such is the symptom overlap. Common Candida symptoms include:
• A white or yellow coating on your tongue – oral thrush
• Burning mouth syndrome
• Gum disease
• Bloating and gas
• Indigestion
• Constipation
• Loose stools and diarrhea
• Abdominal pain
• Skin rashes, jock itch, athlete’s foot and dandruff
• Fungal toenails
• Skin itchiness
• Vaginal thrush (fungal vaginitis – itching, burning, white discharge, etc.)
• Fatigue
• Foggy thinking and poor concentration
• Allergies
• Chemical sensitivity

Like other fungi, Candida organisms produce chemicals called mycotoxins, which can down-regulate immune function. Essentially, these toxins cause confusion in your immune system, leading to a dysfunctional immune response. Mycotoxins can be directly irritate your digestive system, and can leak through into the blood where they may irritate and imbalance nerve and hormone function, as well as disrupting cellular energy production.

Most people view Candida overgrowth as “bad”. But remember, Candida is only able to proliferate because environmental factors within your body enable it to do so. For example, you immediately make your intestinal environment more favourable for Candida if your immune system is suppressed, your microbial population imbalanced, or if you eat a high-sugar diet. If you have Candida, it’s not Candida’s fault! You did something to facilitate its proliferation and it said, “Thanks very much – don’t mind if I do!”

I mentioned mercury toxicity in the list of environmental factors that can contribute to Candida overgrowth, and with good reason. Elemental mercury comprises around half the materials in metal amalgam fillings. More and more dental professionals, naturopaths and other healthcare providers are realising that chronic mercury toxicity can cause body-wide symptoms. This is not the place to discuss the direct toxic effects of mercury. Suffice to say that the likes of mercury, lead, arsenic and cadmium can have profoundly detrimental impacts on your body. For further information on mercury and other “heavy metals”, please see www.hompes-method.com.

I personally found that I had high quantities of lead and arsenic in my body when I ran testing, and some of the clients I’ve assessed have been shocked at “off the chart” levels when they have been tested. Including my own case, I haven’t had a single client tell me they did not feel better when steps were taken to detoxify these toxic metals.
I've studied mercury and toxic metals in quite a lot of detail, learning from experts such as Dr. Dietrich Klinghardt, Dr. Walter J. Crinnion, Dr. Hal Huggins and Dr. Andrew Cutler. I can tell you that many forward-thinking scientists and physicians are deeply concerned about the role of toxic metals are playing in chronic disease. Studies have demonstrated that mercury vapour gasses-off from amalgam fillings in the oral cavity, with greater quantities being released when with chewing, tooth brushing and drinking hot fluids.

According to Hal Huggins D.D.S., multiple bacteria immediately surround mercury when mercury arrives in the digestive tract. The mercury kills some bacteria, and causes others to mutate. In the process, this can create irritable bowel type symptoms. Some of the bacteria that are left over, or have mutated, have the ability to alter mercury's chemical form, converting elemental mercury into a chemical called methyl mercury.25

Methyl mercury is approximately one hundred times more damaging to body tissues. Here is where Candida comes in: it demethylates mercury. Demethylation is the process of taking the methyl group away from methyl mercury and converting it back into its less dangerous form, elemental or inorganic mercury.

The inorganic form is not safe by any means, but it is only 1/100th as damaging as the organic form. Candida's job is to keep mercury demethylated. If you could wave a magic wand and suddenly rid your body of all Candida, Huggins proposes that methyl mercury could cause much more serious problems. In this situation, higher levels of Candida may actually protect against mercury toxicity.

Clinically, Dr. Huggins and other “holistic” dentists have noted that when mercury amalgams are removed and a proper mercury detoxification protocol is followed, Candida levels drop back into an optimal population zone. He states that patients' Candida problems usually resolve themselves in over 90 percent of cases, stating:

"It is certainly evident that it is nearly impossible to control the excessive presence of Candida as long as even one dental amalgam filling is in place in the mouth." 26

Bob's story highlights the association between mercury and Candida. Bob had not been feeling himself for twelve years or so. He was low on energy, felt lethargic and experienced daily digestive symptoms. He also had tinnitus (ringing in his ears) and a furry, white-coated tongue that indicated oral Candida overgrowth. Bob's stool test revealed three bad bugs: H. pylori, Blastocystis hominis and a very strong Candida overgrowth. His stool test also indicated a high level of gluten sensitivity. I worked with Bob for 90-days and he made reasonable progress. His energy and general feelings of wellbeing improved on a gluten-free diet. However, we couldn't make any headway with his digestive symptoms and tinnitus, and he was still waking each morning with the sensation of having a furry tongue. I asked Bob how many metal dental fillings he had and he replied there were four. I informed Bob about the association between mercury and Candida and he agreed to have his metal fillings removed and replaced with composites. What
What Your Doctor May Not Tell You About Parasites

What happened next was remarkable. Bob's digestive symptoms improved within days, the intensity of his tinnitus decreased and the coating on his tongue virtually disappeared. Whilst his symptoms did not clear up completely, the results were truly inspiring and reinforced to me the importance of considering bad bugs in a more holistic way. Bob's bad bugs, or the *Candida* at least, was an outcome rather than being a core problem in and of itself. Bob continues to well as we work step-by-step through a comprehensive detoxification programme.

The mercury-*Candida* connection is a further example of a situation in which bugs that are demonised and given a “bad” label may actually be playing a beneficial role. It seems to me that in its wisdom, the human body allows *Candida* to proliferate in order to reduce the toxicity of its mercury burden. Furthermore, people who respond poorly to an anti-*Candida* programme may do so because of increased mercury toxicity.

**Summary - What I’d Love You To Know About “Global” Parasite Symptoms**

- Parasites living in your gut can contribute to seemingly unrelated symptoms in other areas of your body.

- Parasites can contribute to symptoms in all seven areas of health – digestion, sex and reproduction, energy, aches and pains, mood, sleep and skin.

- This makes perfect sense because all you body systems are connected and your digestive system influences all the other systems.

- Damage caused by bad bugs can result in your stomach springing leaks, a condition known as “increased intestinal permeability” or “leaky gut syndrome”.

- Undigested food particles as well as bacterial, fungal and parasite byproducts can leak into your blood and flow round your body.

- Toxic bug chemicals include endotoxin (LPS), mycotoxins (from fungi) and poop from worms!

- These substances can trigger immune (allergic) responses and inflammation as well as being toxic to your cells.

- Damage caused by bad bugs can reduce your digestive efficiency and lead to nutrient deficiencies that create a plethora of symptoms in their own right.

- Through these mechanisms, bad bugs in your digestive system have the potential to contribute to virtually any and every symptom imaginable.
• The presence of certain bad bugs may contribute to, or directly cause, serious illnesses including heart disease and various cancers.

• Early exposure to parasites appears to help kids’ immune systems develop properly.

• Parasites may not always bad: some research indicates they may actually help to reduce certain immune-related symptoms.

• Parasites may thrive in your body because of other, underlying factors such as the accumulation of toxins.

Complete The Parasite Questionnaire

Now you know that parasites can cause symptoms pretty much anywhere in your body, I recommend you quickly complete the parasite questionnaire designed by world-renowned parasitologist Omar Amin, Ph.D.

It will give you an idea of whether you are harbouring a parasite or two. Dr. Amin has kindly permitted me to reproduce the questionnaire and include it for you here. Please take 5-10 minutes to complete the questionnaire and consider a specific laboratory evaluation should your questionnaire score warrant one. The next chapter explains in detail how you can test for bad bugs and digestive function.

In the table on the next page is a list of common symptoms. For each of the 36 symptom, tick the appropriate box against based on the frequency of occurrence for you, using the scale below:

<table>
<thead>
<tr>
<th>A - Symptom never occurs</th>
<th>B - Symptom occurs occasionally</th>
</tr>
</thead>
<tbody>
<tr>
<td>C - Symptom occurs often</td>
<td>D - Symptom occurs most of the time</td>
</tr>
</tbody>
</table>

When you have completed the 36 questions, add up the number of ticks in each category, and use the scores in the columns alongside to create your total score. Then use the scoring index below to assess the likelihood of parasites being present.

Scoring Index:

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-19</td>
<td>Parasitic presence not obvious</td>
</tr>
<tr>
<td>20-29</td>
<td>Begin to suspect parasitic infection</td>
</tr>
<tr>
<td>30-39</td>
<td>Strong Possibility, further testing needed</td>
</tr>
<tr>
<td>40+</td>
<td>Odds are strong that parasites are present</td>
</tr>
<tr>
<td>Question</td>
<td>A</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>1. Chronic Fatigue for no apparent reason</td>
<td>0</td>
</tr>
<tr>
<td>2. Swollen or achy joints</td>
<td>0</td>
</tr>
<tr>
<td>3. Increased appetite, hungry after meals</td>
<td>0</td>
</tr>
<tr>
<td>4. Eat out at restaurants</td>
<td>0</td>
</tr>
<tr>
<td>5. Nervous or irritable</td>
<td>0</td>
</tr>
<tr>
<td>6. Restless sleep/ teeth grinding while asleep</td>
<td>0</td>
</tr>
<tr>
<td>7. Night sweats</td>
<td>0</td>
</tr>
<tr>
<td>8. Blurry, unclear vision</td>
<td>0</td>
</tr>
<tr>
<td>9. Fevers of unknown origin</td>
<td>0</td>
</tr>
<tr>
<td>10. Frequent colds, flu, sore throats</td>
<td>0</td>
</tr>
<tr>
<td>11. Recurrent feelings of unwellness</td>
<td>0</td>
</tr>
<tr>
<td>12. Constipation</td>
<td>0</td>
</tr>
<tr>
<td>13. Diarrhea alternating with constipation</td>
<td>0</td>
</tr>
<tr>
<td>14. Thinning or hair loss</td>
<td>0</td>
</tr>
<tr>
<td>15. Allergies, food sensitivities</td>
<td>0</td>
</tr>
<tr>
<td>16. Irritable bowel, irregular bowel</td>
<td>0</td>
</tr>
<tr>
<td>17. Rectal, anal itching</td>
<td>0</td>
</tr>
<tr>
<td>18. Bloating or gas</td>
<td>0</td>
</tr>
<tr>
<td>19. Abdominal or liver pain/cramps</td>
<td>0</td>
</tr>
<tr>
<td>20. Mucus in nose that is moist or encrusted</td>
<td>0</td>
</tr>
<tr>
<td>21. Dark circle under the eyes</td>
<td>0</td>
</tr>
<tr>
<td>22. Bowel urgency</td>
<td>0</td>
</tr>
<tr>
<td>23. Skin problems, rashes, hives, itchy skin</td>
<td>0</td>
</tr>
<tr>
<td>24. Vertical wrinkles around the mouth</td>
<td>0</td>
</tr>
<tr>
<td>25. Kiss pets, allow pets to lick your face</td>
<td>0</td>
</tr>
<tr>
<td>26. Go barefoot outside the home</td>
<td>0</td>
</tr>
<tr>
<td>27. Travel in 3rd world countries</td>
<td>0</td>
</tr>
<tr>
<td>28. Eat lightly cooked pork/ salmon products</td>
<td>0</td>
</tr>
<tr>
<td>29. Eat sushi, sashimi</td>
<td>0</td>
</tr>
<tr>
<td>30. Swim in creeks, rivers, lakes</td>
<td>0</td>
</tr>
<tr>
<td>31. History of parasitic infection</td>
<td>0</td>
</tr>
<tr>
<td>32. Loose stools or diarrhea</td>
<td>0</td>
</tr>
<tr>
<td>33. Pale, anaemic or yellowish skin</td>
<td>0</td>
</tr>
<tr>
<td>34. Foul-smelling stools</td>
<td>0</td>
</tr>
<tr>
<td>35. Low back or kidney pain</td>
<td>0</td>
</tr>
<tr>
<td>36. Indigestion, malabsorption</td>
<td>0</td>
</tr>
</tbody>
</table>

TOTAL (add together columns B, C & D) + + =

97
Chapter Seven

How To Test For Bad Bugs

Probably the biggest problem I have been able to solve for people over the years is simply to educate them about why they might not be feeling well and I am hoping this book is helping you understand your symptoms a little better. You’re now acutely aware that bad bugs have the potential to make you feel unwell, whether it’s through digestive symptoms such as heartburn, bloating, abdominal cramps and diarrhoea, or through “global” symptoms such as fatigue, mood swings, poor memory and concentrations, chronic pain, skin or sleep problems.

Understanding the role of these bad bugs in causing uncomfortable symptoms is one thing, but how do you know which ones you’re harbouring? After all, I’ve seen more than forty different ones show up in client laboratory tests. Well, the second major problem I have been able solve for my clients over the years is to help them access the right testing to uncover which bad bugs they’re hosting.

Stop for a moment and imagine how you might feel if, without having to leave the comfort of your home, you could access accurate and relatively inexpensive laboratory tests to detect bad bugs in your digestive system, genitourinary tract, and possibly even in your mouth, blood or on your skin. It would be pretty cool, right, especially if your doctor was not willing to run appropriate testing for you.

A small handful of highly specialised laboratories are waiting to help you in this regard. They have developed specific expertise in “bug detection” and they use technology that has not yet been integrated into general medical practice. It is through referral to these laboratories that my colleagues and I have been able to help determine why folk feel unwell. These laboratories offer tests that detect bad bugs, provide information on digestive function, hormone levels, nutrient status, toxin levels, liver function and more. Barbara – who once worked within the medical system – was surprised at how effective these tests can be.

A former nurse in the U.K. National Health Service, Barbara contacted us because she was getting frustrated with the healthcare system. Now in her late seventies she’d experienced a plethora of health challenges over the years, including nausea, gas and belching, pain and discomfort in her digestive system, severe tummy bloating, mouth ulcers, food sensitivities, migraines, poor sleep, a burning sensation in her arms and legs, a “lazy” gall bladder, non-alcohol fatty liver disease, skin conditions and chronic cold and flu-like symptoms. We began, as we always do, by helping Barbara improve her basic nutrition and lifestyle habits. We gradually helped her optimise her food intake, meal times, blood sugar levels and other critically important factors. We then ran a stool test to check Barbara’s digestive health. The test result immediately identified some areas that required attention. She had a Candida overgrowth and, in terms of her good bugs, a very low Bifidobacter level. We could also see that Barbara had low elastase I levels, which indicate poor pancreatic enzyme production and secretion. Furthermore, elevated triglycerides, total fat and cholesterol in her stool showed she wasn’t digesting dietary fat properly. Remarkably, by working to resolve her
Candida overgrowth, improve her digestive function and optimise her foods and lifestyle, it took just 90-days of support for Barbara to reach her desired level of health. She reported much better energy levels, was able to sleep through the night without waking for the first time in 8 years, she longer had migraines, felt slimmer and less bloated, and was no longer experiencing itching sensations or the burning in her arms and legs. What's more, Barbara's friends and family were commenting on how good she looked! Armed with the knowledge she gained during her 90-day programme, she's been able to maintain her vitality long after her support programme was completed. Indeed, one year after Barbara had finished her 90-Day support package she sent the following email: “I am now in my late 70’s but feel much younger and able at last to enjoy a more energetic lifestyle and go walking regularly. Family and friends have all noted how much better I look. “After all these years of slow painful decline and concern it is so gratifying to feel back in the control seat and feel and look better. I am still progressing well with careful diet control and my energy levels are good with sleep pattern much improved. I wish you a Happy Christmas and good consulting in 2014”. I am extremely grateful to Jack, Dave and the team for their advice, help and encouragement.”

This chapter is dedicated to teaching you the ins and outs, the pros and cons and the whys and wherefores of bad bug testing. My goal is to reveal the basic steps you can take right now to discover reasons why you have symptoms. Without condescending and criticising medical practice, I am also going to teach you why your doctor may not want to run a test for you and why medical tests may not reveal what you need to know even if you are lucky enough to be granted access to one.

Please note that if you are a health care practitioner, I teach an advanced class in bad bug detection and eradication. If you would like to implement the methods taught in this book, please see www.HompesMethodTraining.com. Without further ado, let’s look at some of the problems associated with medical testing in the context of bad bugs.

Problem #1: Why Doctors Might Not Run Tests

As discussed in chapter 3, western medicine has not yet acknowledged the association between bad bugs and chronic symptoms. Unless you have severe symptoms such as vomiting, diarrhea, abdominal cramping, blood in your stool and so forth, there is a very high chance that your doctor will not want to test for the presence of bad bugs. Moreover, as the following quote from Dr. Omar Amin suggests, many conventionally trained doctors still consider parasites to be a tropical problem.

"Parasitic infections have long been considered diseases of the tropics, so physicians don’t often consider them when diagnosing common illnesses. Parasitology is seldom discussed in the mainstream medical journals, and traditionally there has been little reporting of parasite incidence. For example, Giardia has been widely tracked by the Centers For Disease Control and Prevention only since 1987."

1
The lack of desire among doctors to run parasite testing stems from a paucity of attention to the subject in medical school, where parasitology simply isn't taught. Time and financial considerations are also important - it's far easier for family doctors to give basic treatment for low-grade symptoms than it is to run tests that determine the cause. This is nobody’s fault – it’s just the way it is. Again, Dr. Amin suggests:

“When physicians receive their training, very little information is provided on parasitology in medical school and in professional journals. Given the lack of information and minimal clinical exposure, doctors don't usually consider parasites as a possible cause of illness, especially when the symptoms aren't confined to the digestive tract.”

Until parasites, fungal overgrowth and chronic bacterial problems are properly acknowledged by the medical system as a whole, patients like you and I will continue to feel frustrated by the lack of testing offered in general medical practice. As a result, the real underlying reasons behind common symptoms in the Seven Areas of Health will remain a mystery to those who do not seek answers for themselves.

**Problem #2 – Parasite Life Cycles**

Many parasites have rather complex lifecycles. As such, they may not be shed in all bowel movements, or at regular intervals. In fact, three of the major parasites – *E. histolytica*, *Giardia* and *Cyclospora* – tend to be shed at irregular intervals. The parasites may be present in bowel movements for two, three or four days per week, but not on the other days. If a stool sample is collected from a patient with one of these cyclical parasites on a day when the bug is not active, it may not show up in the sample, leading to a false-negative test result.

When using classical microscopy methods to analyse stool samples, as is the case in standard medical laboratories, it is therefore very important to run multiple samples from the same person and study them very carefully. The greater the number of samples, the more chance there is of finding the bugs.

The stool test snapshots below are from clients of mine who tested positive for *Blastocystis hominis* using stool testing from a specific private laboratory. Each stool sample, listed 1-4 on the result sheet, is taken on a different day. You can clearly see that *Blastocystis hominis* was not detected in every sample. If my clients had relied on a single stool sample, their chances of finding bad bugs would have been vastly reduced.

**Problem #3 - Emerging Pathogens**

Another problem with parasite testing is that of “emerging” bugs. These are the bugs that up until five or ten years ago weren’t considered to be problematic. Science moves quickly, but medicine does not. Scientific discovery may not lead to changes in medical policy right away. In fact, the lag can be many years or even decades. It took twenty years for Dr. Barry Marshall and colleagues to finally convince western medicine that *H. pylori* causes stomach ulcers.
Old school medical labs may be seeing organisms in stool samples fairly frequently, but the technicians may not be trained to identify and tag them as being important. Think about it: if the medical system as a whole doesn’t really recognise bad bugs as a cause of chronic health challenges, their testing methods will ultimately reflect this belief.

Moreover, when it comes to emerging pathogens, leading doctors such as Omar Amin Ph.D., and Joe Burrascano M.D., state categorically that some bacteria can exist in different forms. It's the same organisms, but it changes its modus operandi by, for example, existing in forms with or without a cell wall. These shape-shifting bugs can make diagnosis extremely difficult.

**Problem #4 – “Old Stool” Technology**

Microbe detection methods haven’t really moved forward a great deal over the last two to three decades and still rely upon basic microscope analysis of a stool sample. At the same time, technology used in the world of scientific research has progressed beyond recognition. At the time of writing, there is a significant gap between the technology used in microbiology research and that used for microbe detection in medicine.

Research into the human microbial population, known as the *microbiome*, has flourished following the advent of PCR DNA technology. Using PCR, scientists are able to analyse stool samples, tissue biopsies and other fluids for bug DNA rather than the actual whole organism. Extraordinary progress has been made as a result of this newer technology.

Like everything else, the newer tests have pros and cons, but I want you to know that the technology is available to you without the need for a doctor’s prescription. Moreover, some private laboratories combine “old stool microscopy technology” with the newer methods to give you the best of both worlds.

**Problem #5 – Human Error**

When you travel by aeroplane, you rely on the pilot’s skills fly you safely from A to B. Similarly, when you submit a stool sample for analysis you rely on the lab technician to find the bad bugs. If your stool sample is analysed by an inexperienced or unmotivated technician, you may receive a false negative report. There is no blame attached here because nobody is perfect and we all make mistakes, but human error is a factor.

As in any industry, the best technicians and microbiologists generally command the highest salaries, and the highest salaries are paid not by regular medical and hospital laboratories but by private laboratories that are seeking to advance their services and gain competitive advantage in the industry. As such, it's wise to consider the quality of service you are getting from a medical lab versus a private enterprise.
Problem #6 – Autolysis and Self Destruction!

I learned from Dietrich Klinghardt, M.D., Ph.D. that some parasites are designed to autolyse when they die. “Autolysis” simply means to self-destruct. It's like something from a Star Trek movie, but it actually makes sense. Parasites don’t want to be detected – being visible to your naked eye when you go to the toilet conveys no advantage to the bad bugs.

Think about it: if you saw a parasite floating in the toilet bowl you’d immediately seek treatment. Well, parasites don’t want to be burned and poisoned by antibiotics and herbs. They want to survive, reproduce and continue their lifecycle. It is therefore advantageous for larger parasites to die and dissolve away so that you can’t see them.

Parasites that have self-destructed are very hard to detect using standard assessment techniques. Using the more advanced DNA detection mentioned above offers significant advantage in this situation, with some labs claiming to have several thousand times greater sensitivity in worm detection than conventional methods.

Problem #7 - Transport Problems

When you have popped your stool sample in a vial and packaged it up, the package must be transported to a laboratory. But what do the labs put in their vials to keep your sample viable? How do they stop bugs in the sample from dying? How do they make sure the balance of bugs in the stool sample is accurately represented once it reaches the lab? As usual, the answer to this question is not straightforward!

Laboratories use different strategies to overcome this hurdle. Some vials contain nutrient broths that provide food for bugs. The broths sustain microbial life until samples are delivered to the laboratory. Other vials and tubes contain formalin, which quickly kills everything in the tube and provides a freeze-frame or snapshot of the sample from the point it is provided.²

Research has clearly shown that the type of fixative used in tubes or vials has a dramatic impact on the microbial community reaching the lab. A sample transported in a nutrient broth looks completely different in its microbe composition than a sample that has been transported in a formalin tube. This situation has prompted researchers to conclude that:

“To date, there is no ideal medium that preserves the viability of pathogens and flora without allowing the growth or inhibition of some species.”³

The private laboratories to which I refer my clients are, of course, biased towards their own tests and techniques: some scientists and doctors favour microscope analysis and culture based whereas others prefer DNA PCR analysis. I've analysed the information in several publications and listened to experts such
as J. Alexander Bralley Ph.D., Omar Amin, Ph.D. and Patrick Hanaway M.D. argue over the relative merits of parasite testing for more hours than I care to count. My conclusion? There isn’t a perfect test and if you wait for one, you’ll be waiting a very, very long time.

**Problem #8 - Culture Problems**

Once stool samples have reached a laboratory, the way in which they are handled is important. As well as a standard ova (egg) and parasite analysis under the microscope, labs also employ a method in which they culture a portion of the stool sample.

Culturing simply means that a smear of the stool sample is placed in a dish with some kind of nutrient “broth”. The sample is left for a specified length of time and then analysed to see what has grown. Certain bacteria, as well as fungi, are often detected using this method.

Whilst it can be an effective analysis technique, culture-based assessment has its disadvantages. Bacteria that do well in oxygenated environments will tend to thrive in a lab culture dish. Bugs that prefer non-oxygenated environments will not grow very well and, in fact, will die. This may lead to skewed test results that don’t reflect the actual balance of bugs in the original sample.

**What Are The Implications?**

What does all this mean for you? First, the vast majority of doctors are blissfully unaware of the information you just learned, which means that any time you run a test and it comes back negative, your doc will usually believe the test result without questioning it.

This leads to a lot of false-negative tests! Furthermore, when tests consistently return negative results, doctors lose the enthusiasm to run them in the first place. This is no fault of the doctor - it’s simply that the testing methods they’re using are inadequate, leading to a false belief that bad bugs aren’t there, when in fact it’s the test that isn’t sensitive enough to find them.

It is very important to point out that there isn’t a perfect test. It doesn’t matter which laboratory you use, what your doctor says or how much money you or your insurance company pays for the test. Your microbiome is ultra-complex and there are more than 1,200 microbial species in your gut alone, which is mind boggling to say the least. A multitude of factors need to be considered and no single test can be expected to find everything.

Fortunately, when as a patient you work with a practitioner who understands this complexity and has a series of different testing methods at his or her disposal, you can determine why you don’t feel well and take the appropriate steps to improve your situation. There are some truly wonderful tests that give you the best possible chance of detecting bad bugs, and that’s where we will now turn our attention.
Introducing the Private Laboratories

Private laboratories, not medical labs, are pushing the frontiers of bad bug testing. Every single naturopathic and integrative doctor with whom I’ve spoken agrees that in the majority of cases, private laboratories achieve a parasite detection rate that is substantially higher than conventional testing. According to leading chronic pain researcher, Dr. Alex Vasquez, D.C:

“Comprehensive stool analysis assesses digestion, absorption, inflammation, and comprehensive parasitology examinations assess for bacteria, yeast, and parasites. A specialty laboratory rather than a regular medical or hospital laboratory should perform these tests... I consider stool testing extremely valuable and estimate that 80 percent of parasitology examinations return with at least one clinically relevant abnormality. Testing for and treating dysbiosis is an absolutely essential consideration in patients with gas, bloating, alternating constipation/diarrhea, irritable bowel syndrome, fibromyalgia, chronic fatigue syndrome, multiple chemical sensitivity, severe allergies, arthritis, and autoimmunity.”

In a survey of 2,896 patients whose stool samples were studied at Dr. Omar Amin’s laboratory, 32 percent of patients were infected with parasites. The previous national average detection rate in the U.S. was around 20 percent, meaning that Dr. Amin’s lab boasted a detection rate some 50 percent higher than the average medical centre or hospital.

My Experience With Private Laboratories

I have a strong bias towards private laboratories for two reasons. First, a private laboratory detected my *H. pylori*, *Blastocystis hominis* and *Aspergillus* and from that point I was able to resolve my longstanding symptoms. Second, I’ve been able to help some two thousand people from around the world overcome similar symptoms by referring them to private labs.

Some of the people I’ve assisted had already been tested several times by medical laboratories, had taken *ad hoc* treatments and yet had made very little progress in overcoming their symptoms. The private tests proved to be powerful tools in helping these people rejuvenate their health. Others had become deeply frustrated by a lack of desire within the medical system to run the appropriate tests.

The case examples in this book are all success stories stemming from the private labs’ ability to detect a wide range of bad bugs. Opportunistic and pathogenic bacteria, fungi and parasites are frequently detected. Many of these forty to fifty different bugs are barely considered by western medicine, let alone assessed in labs on a regular basis.
While I genuinely believe the private laboratories are superior to standard medical testing facilities, I must acknowledge that there have been instances in which private labs failed to detect bad bugs that medical tests found. However, these instances are outweighed by the number of cases where private labs detected bugs that had been missed by medical tests.

**No Prescription Is Needed To Access Private Testing**

You do not need a prescription or doctor's authority to take advantage of the testing services offered by private laboratories. You are able to access the tests from virtually anywhere in the world based on your own decision to do so. When I was struggling with my symptoms, I was UK-based, yet I worked with a U.S. doctor by Skype and dealt directly with a U.S. laboratory.

In my own practice I've been able to help people from more than twenty different countries, including the U.S., Canada, Bahamas, Caribbean, Mexico, U.K., Ireland, Holland, France, Spain, Germany, Slovenia, Poland, Romania, Russia, Israel, Jordan, Dubai, Abu Dhabi, Hong Kong, Singapore, Thailand, Australia and New Zealand.

**Home-Based and Convenient**

One of the biggest benefits of using a private laboratory is that you can provide samples from the comfort of your own home. You are not required to travel to a clinic. Testing kits are mailed to your home and you simply provide a sample - or multiple samples - before mailing them direct to the lab for analysis.

**You Get To See The Report**

My clients tell me that one of their biggest frustrations is when they take a test or tests and the doctor just says, “Everything is ok” without actually handing a copy of the lab report to the patient. You do not have to worry about this when using a private laboratory. All private labs provide detailed test results in PDF or hard copy formats.

**Latest Technology**

You can rest assured that private laboratories use the latest, cutting-edge technology to analyse your samples. Whilst there is no perfect test, private industry is leading the way with parasite detection and the private laboratories are continually seeking to improve their testing and reporting methods.

**Single Sample PCR/DNA Analysis**

Technological advances have facilitated the development of single sample stool analysis methods that have very high sensitivity. These tests use something called *DNA PCR amplification* to check for parasite, fungal and bacterial DNA. The single sample collection is ultra-convenient. As you can imagine, having to poop
once in a collection box rather than three, four or even five times is comparative bliss!

**High Quality Lab Technicians and Analysts**

Private labs that continue to use multiple stool samples, microscopy and culture-based detection methods as opposed to molecular DNA methods are among the finest in the world and tend to be run by truly pioneering and leading microbiologists and parasitologists like Dr. Omar Amin. As previously discussed, the best microbiologists are snapped up by private enterprise because companies can afford to pay them higher salaries.

**Rapid Turnaround Time**

When labs use culture-based stool analysis, the turnaround time for results, can be quite long and drawn out. This is one disadvantage of such methods. In some cases the waiting time might be three or more weeks. This simply reflects the fact that stool samples need to be cultured for an extended period of time to see what grows in the lab dish. Most of my clients state that they would rather wait and receive an accurate report than have the analysis rushed and get inaccurate results.

Ideally, accurate results would be provided quickly to enable a course of healing therapy to begin. Labs using PCR methods boast a shorter turnaround time. Results can be made available in just 3-5 days in some cases, which is exceptionally fast. Naturally, a faster turnaround time is helpful if you are experiencing very uncomfortable symptoms. In these situations, the faster you can determine why you’re not feeling well, the faster you can begin a course of treatment.

**Private Labs Detect A Large Range of Organisms**

As mentioned earlier, our understanding of microbiology has changed significantly over the past decade. It seems like there are technological breakthroughs nearly every week. As such it can be hard to keep up, even for someone like me who tries to keep his finger on the pulse.

When doctors sanction testing, they may only ask the laboratory to look for common parasites such as *Giardia* and *Cryptosporidium*, largely because these are among the only bad bugs that are truly recognised by the medical establishment. This can lead to a situation in which the hard-working, honest lab technicians and microbiologists focus on a small handful of bugs without considering the bigger picture. In looking so hard for the “main” bugs, they may miss others. They may not even be trained to find other bugs of importance.

There’s a simple analogy for this. Imagine for a moment you’re at a social gathering along with another one hundred people in the room. I ask you to look around the room and count how many women are wearing a red dress. You diligently scan the room and make a mental note of all the red dresses. I then ask
you, “How may blue dresses did you see?” Because you were looking for all the red dresses, you have no idea how many blue dresses there are. Likewise, when a lab technician looks hard for certain bugs, he or she may miss others.

When you employ a private laboratory to look for bad bugs, they actively check for a much broader range. They don’t just look for the red dresses, so to speak; they also look for the blue, green, brown, yellow, white and black ones and every colour in between. In fact, nearly every bug I’ve read about in the scientific literature has turned up on a stool test at some point or another, including roundworm, hookworm, bacteria, fungi, protozoans, amoebas and molds.

**It’s About More Than Just The Bad Bugs**

When you provide a stool sample to a private laboratory, your sample isn’t just analysed for its bad bug burden. From the same sample, these labs can assess for many other important factors and provide a more detailed and holistic picture of what’s happening in your digestive system as a whole.

As you learned in chapter 6, bad bugs represent only one possible reason why symptoms might develop. Additional markers taken from your stool sample can provide huge clues about other factors that might be contributing to your symptoms. Additional markers assessed by private labs include:

- Good bug levels
- Antibiotic sensitivity / resistance
- Gut immune function
- Gluten sensitivity
- Inflammation
- Damage to digestive tissues
- Ability to digestive certain types of food (protein, fat, carbohydrate)
- Digestive bleeding

Let’s take a look at some of these additional markers and so you have a better understanding of why they can be helpful in providing you a more comprehensive overview of your general digestive health.

**Good Bugs**

You are more bug than human! At risk of repeating myself once more, an assessment of your entire physical being would reveal ten times more microbial DNA than human DNA and your digestive system alone is home to some 1,200 different microbial species. Of these microbial species, some are “big players” and some are probably of lesser importance.

According to information presented by J. Alexander Bralley, Ph.D., thirty to forty microbial species from only five to seven genera account for 99 percent of the microbial biomass. Some bacteria do well in oxygen and we call them *aerobic*. Some do well without oxygen and we call them *anaerobic*. Some bacteria are *gram positive* and some are *gram negative*. According to Dr. Bralley, the following are among the most important microbial types in a normal or healthy gut: ⁶
What Your Doctor May Not Tell You About Parasites

- Bifidobacteria
- Clostridia
- Eubacteria
- Bacteroides
- Fusobacteria
- Lactobacilli
- Enterococci
- Streptococci
- Staphylococci
- Enterobacteria
- Escherechia coli (a harmless and important type of E. coli)

Private laboratories have developed technology that helps you to gain insight into your good bug population. Why is this important? In some clients and patients, it’s a disturbance in the balance of good bugs rather than the presence of any obvious bad bugs that causes symptoms.

In my experience, it’s common to find low Bifidobacteria levels, far more so than low Lactobacillus levels. Yet we have the food and supplement industries pushing the use of Lactobacillus-rich products such as probiotic yoghurts in their marketing. I also frequently observe higher than normal Clostridia levels in symptomatic clients.

Over and above my own clinical experience, there is plenty of research indicating that imbalanced “good” bugs are a contributing factor to symptoms and disease. For example, patients with inflammatory bowel disorders such as ulcerative colitis and Crohn’s disease appear to have much lower levels of Bifidobacteria than healthy people.7

By assessing good bug levels, you gain further insight into why your symptoms may be occurring. This can be extremely helpful in cases where your test doesn’t find any bad bugs. Furthermore, finding imbalances in your good bug population provides information on how to go about improving and rebalancing your overall digestive flora.

If you have low Bifidobacter and good/high Lactobacillus levels, it might be counterproductive to eat yoghurt and fermented vegetables such as sauerkraut, both of which are rich in Lactobacilli. Likewise it may not pay to use probiotic supplements that are manufactured to contain high quantities of Lactobacilli. Instead, it may be more appropriate to use products containing a predominance of Bifidobacter species.

**Metabolic or “Digestive Chemistry” Markers**

Microbes in your digestive system produce lots of chemicals, including substances called short-chained fatty acids (SCFA). One type of bacteria will produce a certain chemical, and that chemical will in turn provide food for another type, and so on. Certain SCFAs are also used by your colon cells as fuel for energy production.
What Your Doctor May Not Tell You About Parasites

As long as they are in a healthy balance, SCFAs serve beneficial and essential roles in metabolism and health. Laboratories have the ability to measure several important SCFAs, including butyrate, acetate, propionate and valerate. Certain SCFAs can be produced excessively if microbial balance is disturbed. Excess SCFAs can have a detrimental impact not only on gut health but also general metabolic function.

Derrick McFabe M.D., Ph.D., is an expert in the area of autism. He teaches that the SCFA propionate can readily enter the bloodstream. *Bacteroides, Clostridia* and *Vibrio* bacteria produce relatively large amounts of propionate. When it is present in excess – possibly due to these bacteria becoming dominant in the intestine - propionate can influence nerve function and general metabolism. Furthermore, a high carbohydrate diet tends to shift the SCFA balance towards propionate and away from acetate and butyrate. Propionate is also a common additive in wheat and dairy products.8

When present in excess, propionate can cause oxidative stress, alter fatty acid balance, increase IgG antibodies (seen in chronic allergy), cause neuro-inflammation, affect genes and increase your adrenaline level. Each of these effects has the potential to cause a wide range of symptoms and possibly even disease.

Specific bacterial imbalances can also result in generally low SCFA levels, or specific deficiencies in individual SCFAs. These imbalances may also lead to adverse consequences. For example, research indicates that a low of the SCFA n-butyrate may be associated with an increased risk of developing colon cancer.

I am sure you can see how useful it is to gain insight into your SCFA balance. Dietary manipulation and specific digestive balancing protocols can quickly bring SCFA levels back into optimal ranges once you and your health care practitioner are aware of where your unique individual imbalances lie.

**Not All Bugs Are Created As Equals**

Certain laboratories are now moving into territory where they are able to identify different microbial sub-types or strains. This is important because we know that bugs of the same species are not necessarily created equal. For example, the latest *H. pylori* tests not only identify *H. pylori*, but also CagA and VacA strains, which are believed to be the most virulent and problematic of the *H. pylori* strains. CagA and VacA are associated with ulcers, cancer and cardiovascular disease.

*H. pylori* treatment success has been dwindling in recent times because of increased bacterial resistance. According to 2012 statistics presented by the European Helicobacter Study Group, standard therapy containing clarithromycin has a success rate of around 70 percent around the world.9 A new *H. pylori* test that we are having great success with is able to identify whether the specific *H.
pylori strain detected is resistant to this antibiotic, thus providing invaluable guidance for doctors, and priceless peace of mind for patients.

**Antibiotic Sensitivity Profiling**

Private laboratories frequently run antibiotic sensitivity tests when they find bad bugs. They want to inform you and your clinician which drugs or herbs will be effective in fighting your bad bugs. By reporting microbial sensitivity, the labs help clinicians recommend protocols that will be more effective in zapping the bugs. This saves time and money by helping you avoid ineffective treatments.

Antibiotic resistance is a growing and serious problem. It has been this way for many years now. You may not realise that there haven’t been any major advances in antibiotic therapy for a long time, and virtually no new antibiotics have entered the marketplace for several years. Microbes have a stunning and uncanny knack of quickly altering their surface proteins to resist drugs. This has led some eminent medical experts to issue a stark warning that an antibiotic resistance “apocalypse” may hit us in the not too distant future if we do not change the way we view and treat infections. Chief Medical Officer for England and Wales, Dame Sally Davies, states:

"If we don't take action, then we may all be back in an almost 19th Century environment where infections kill us as a result of routine operations. We won’t be able to do a lot of our cancer treatments or organ transplants...We haven’t had a new class of antibiotics since the late 80s and there are very few antibiotics in the pipeline of the big pharmaceutical companies that develop and make drugs.”

Conventional medicine has overused antibiotics. These drugs save lives around the world when they are used against serious, acute infections, but their overuse in treating infections that don’t even need to be treated has created major problems. Even the inventor of penicillin, Alexander Fleming, warned of this situation when he said:

"It is not difficult to make microbes resistant to penicillin in the laboratory by exposing them to concentrations not sufficient to kill them, and the same thing has occasionally happened in the body. The time may come when penicillin can be bought by anyone in the shops. Then there is the danger that the ignorant man may easily underdose himself and by exposing his microbes to non-lethal quantities of the drug make them resistant.”

When private laboratories detect bad bugs, they may run sensitivity testing to determine a) whether antibiotic resistant strains are present and b) which specific antibiotic classes will be effective. The labs generally provide this sensitivity and resistance testing for bacteria and fungi, but not for parasites. The technology helps to minimise your chances of treatment failure whilst also mitigating the threat of spreading antibiotic resistance.
Inflammation and Digestive Damage

You have learned in this book that it’s not the bad bugs *per se* that cause symptoms. Rather, it’s your immune system’s response to the bugs that triggers unpleasant feelings and sensations. The process of inflammation causes most of the symptoms you experience. Along with its twin process - called *oxidative stress* - inflammation underpins the development of virtually all today’s chronic diseases.

In some cases, a stool test might not detect any bad bugs, so by focusing solely on the bugs, you wouldn’t have any other clues or indicators as to why you might feel unwell. Fortunately, private labs report a range of other test markers that help determine whether your stomach or intestines are inflamed. You can tell a lot about your digestive health by looking at these inflammatory markers. Here are some of the important ones:

- **Lactoferrin** is an iron-binding protein that indicates intestinal inflammation; it is particularly helpful in early identification of inflammatory bowel disease; I have not seen a colitis patient whose lactoferrin level was not elevated.

- **Calprotectin** is a further marker of inflammation; it reflects digestive inflammation that is not necessarily connected to specific inflammatory bowel diseases.

- **White blood cells** in high numbers indicate inflammation and increased immune activity in your intestine; the usually increase in response to an irritating or aggravating agent such parasites, bacteria or fungi.

- **Mucus** is a natural secretion of your intestinal lining that protects it from things like parasites and toxins; it is secreted in proportion to the degree of intestinal aggravation; in heavy infections with parasites, mucus can completely saturate large portions of your intestinal tract, thus blocking nutrient absorption surfaces in these areas.

- **Blood & red blood cells** indicate bleeding in your digestive tract. Many factors can cause bleeding, including bacterial infections, hookworm and inflammatory bowel disease; occult or dried blood may indicate damage in the stomach (e.g. ulcers).

- **Columnar epithelial cells** line your upper intestine and they are markers of damage in that area.

- **Squamous epithelial cells** line your lower intestine; high levels in your stool indicate damage to the intestinal area from where they were shed.

- **Charcot leyden crystals** are products of eosinophil destruction, mostly by the action of parasites.
These additional markers can be priceless, for they allow you to look beyond the bad bugs and identify the extent to which your digestive system may be damaged and how much repair work may be required over and above the eradication of bad bugs.

**Digestive Capacity**

There is no doubt that bad bugs can damage your digestive system, inhibiting your ability to digest food and absorb nutrients. But at the same time, compromised digestive function caused by poor diet, stress and medications can allow the bad bugs to enter in the first place. It can be tough to know which is the chicken and which is the egg. The following testing parameters offered by private laboratories can teach you about your ability to digest food:

- **Elastase I, chymotrypsin and other digestive enzymes** – when low, these markers indicates poor pancreatic function and low digestive enzyme output; they can suggest low stomach acid levels.

- **Putrefactive short-chained fatty acids** – when elevated in the stool, the putrefactive SCFA marker indicates poor protein digestion; it can also suggest low stomach acid levels.

- **Long chained fatty acids (LCFA)** – when elevated in the stool, LCFA indicates poor fat digestion; they can suggest low stomach acid, or compromised pancreatic and liver/gallbladder function.

- **Fat, triglycerides and cholesterol** – when elevated in the stool, these markers indicate poor fat absorption; they can suggest damage to the intestine, low stomach acid, or compromised pancreatic and liver/gallbladder function.

- **Fatty acid crystals** - when elevated in the stool, these markers indicate poor fat absorption; they can suggest damage to the intestine, low stomach acid, or compromised pancreatic and liver/gallbladder function.

- **Starch granules and vegetable fibres** – when elevated, these markers indicate improper digestion of dietary carbohydrates and vegetable matter; they can suggest inadequate chewing or compromised pancreatic function.

Wouldn’t you agree that it’s incredibly helpful to know whether or not you’re digesting food and absorbing nutrients effectively, irrespective of whether or not you are playing host to bad bugs? Ultimately, if you don’t digest food very well, you’ll develop nutrient deficiencies. In turn, the nutrient deficiencies will cause you to descend the Hompes Method Vitality Scale, leading to symptoms in the Seven Areas of Health.
Imune Function

I mentioned earlier that depending on which textbook you read, or which expert you listen to, something like 60 to 80 percent of your immune system is housed in your gut. Over- or under-activity of your digestive immunity can cause problems:

- If your immune system is overactive, it’s very important to find out why. Foods such as gluten, as well as the presence of parasites, bacteria and fungi, are the most common causes of hyperactive immune function.

- If your immune system is under active, it’s a whole different ballgame. A “hypo-active” gut immune system makes you more vulnerable to acquiring chronic infections and makes you less able to ward off the proliferation of opportunistic organisms.

Laboratories are able to assess gut immunity by measuring specific antibodies called secretory immunoglobulin A or sIgA, which are secreted by cells around the entry and exit portals of your body. Remember, these areas are your:

- Eyes
- Nose
- Ears
- Respiratory tract (nasal passages and lungs)
- Digestive tract
- Genitourinary tract

The importance of sIgA cannot be understated. More sIgA is produced in the mucosal lining of your intestine than all other the other antibody types in your body combined. Your sIgA level can be evaluated either in stool or saliva samples. Stool IgA indicates the intestinal immune activity, whereas salivary IgA provides a more overall indicator of your body’s IgA level. sIgA can be broken down into type I and type II. Type I reflects immune activity in your respiratory tract, whereas type II reflects activity in your digestive system. Several factors can contribute to sIgA depletion:

- Stress
- Inflammation
- Processed food
- Overstimulation from specific foods and bugs
- Toxins
- Nutrient deficiencies

I have seen very low sIgA levels in some clients, so low in fact that I wondered how they had not become completely overrun with bad bugs! Every single person with low sIgA levels has had some kind of chronic bad bug infestation, which makes sense when you realise that sIgA’s primary role is to wards off bad bugs in the first place. These folk often struggle with chronic cold and flu like symptoms – they tend to catch every cold that’s going around.
Gluten Sensitivity

Gluten is a sticky protein-like substance found in wheat, rye, barley, spelt, kamut and other frequently consumed grains. Breakfast cereals, bread, pizzas, biscuits, crackers, cakes, candy bars, beers, lagers and a vast array of processed foods contain gluten. Entire books have been written on the detrimental health impacts of gluten, which extend throughout the body.

Gluten is incompatible with some folk - their gut immune system reacts against it fiercely. Gluten sensitivity can create the same symptoms as bad bugs, namely heartburn, bloating, abdominal cramping, diarrhea and constipation. It can also cause symptoms in the other six areas of health. You may be surprised to learn that this simple molecule, present in so many common foods, has been shown to cause at least fifty-five diseases!

Gliad in represents a portion of the gluten molecule. Laboratories have the ability to assess a marker called anti-gliadin IgA to help identify whether gluten is causing problems. Anti-gliadin IgA is a specific IgA antibody produced in large amounts when gluten-sensitive people consume gluten.

The anti-gliadin IgA marker is an invaluable addition to a stool test. Many of my clients have experienced miraculous turnarounds in their symptoms as a result of finding elevated anti-gliadin IgA and embarking on a gluten-free diet. Indeed, switching to a gluten free diet, even in the absence of a confirmatory lab test, often brings rapid symptom relief and health rejuvenation.

Chris was referred to me in 2011. A professional footballer in the English Premier league, Chris had been struggling to heal from a knee injury. His rehabilitation was taking one step forward and two steps back. In addition to the injury, Chris’ energy levels were very low and he was experiencing depression. Importantly, Chris was not experiencing any obvious digestive symptoms. Begrudgingly, Chris agreed to do a stool test, and it’s a good job he did. The results showed that Chris was carrying H. pylori, Yersinia, Blastocystis hominis and Dientamoeba fragilis, a total of four different bad bugs. Chris’ anti-gliadin IgA was also sky high – one of the highest I have ever seen. 7-days after commencing a gluten-free diet, Chris’ depression had lifted and his energy levels began to improve. A month into his gluten-free diet, and before we had even begun working on reducing his bad bug burden, Chris’ energy level had improved, in his words, by 75 per cent. 90-days later, once Chris had completed his anti-microbial protocols, he was on top form and his wife exclaimed, “He’s like a new person!” Chris’ symptoms were all coming from his gut. His gluten sensitivity was the main problem, weakening his immune system and enabling bad bugs to have a field day. Despite everything that was going on in his digestive tract, he experienced no obvious digestive symptoms. Instead, his damaged digestive system manifested as depression and low energy. It is worth noting that Chris knee injury improved rapidly once his digestive system health had improved.
**Summary: Stool Tests – What You I Would Love You To Know**

- Doctors tend not to run stool testing because they don't associate chronic symptoms with bad gut bugs.

- False negative results due to inadequate testing technology reinforce the false belief that bad bugs do not cause chronic symptoms.

- Private laboratories offer a range of excellent testing, utilising different technology.

- Their tests are more technologically advanced and assess for a wider range of bad bugs and can also evaluate your good bug balance, immune function, digestive function, inflammation, gluten sensitivity and intestinal damage.

- Stool testing is not a perfect science and there no perfect test exists.

- You can access testing via these private laboratories without needing your doctor’s permission, or a prescription.

- A stool test may well be the deal breaker in helping you understand why you feel unwell.

**Blood Test Markers and Gut Bugs**

For the majority of people, stool tests represent the most effective way to identify the presence of bad bugs living in the gut. This does not mean other tests are not helpful. The following markers in a standard medical blood test can indicate the presence of intestinal bacterial overgrowth or parasites. If these markers happen to show up in a blood test done via your doctor, I recommend you consider running a stool test:

- Elevated white blood cell count (eosinophils, basophils or monocytes)
- Elevated IgG antibodies (indicates that an infection occurred at some point in time, but does not prove a current infection)
- Elevated IgM antibodies (tend to be elevated when infections are current)
- IgE antibodies may also be elevated during infection
- Elevated homocysteine (often seen in cases of *H. pylori* infection)
- Decreased iron levels
- Low haemoglobin (Hbg)
- Low haematocrit (HCT)
- Elevated C-reactive protein (CRP - a marker of general inflammation, which may be caused by bad bugs such as *H. pylori*)
Organic Acids

One of my favourite lab analyses is something called an *organic acids* test. From a single urine sample you can assess a range of different substances called organic acids. A buildup or deficiency of specific organic acids in your urine provides helpful information relating to sugar and fat metabolism, cellular energy production, nutrient status, detoxification, oxidative stress and neurotransmitter balance.

In the context of this book, the most relevant section of the organic acids test relates to compounds of bacterial or fungal origin. A total of eleven different urinary compounds provide information about your digestion and, in particular, what is going on in your small intestine. The eleven test markers provide information about:

- Small intestinal bacterial overgrowth (SIBO)
- *Clostridia* overgrowth
- *Giardia* infestation
- *Candida* overgrowth
- Protein digestion

The organic acids test is particularly useful in cases where a stool test fails to detect bad bugs. Your intestine is more than twenty feet long, so by the time you have a bowel movement, the density of microbial material higher up your intestine, may have been depleted or even lost. An organic acids test can be a valuable piece of your digestive jigsaw puzzle. I’ve worked with several people whose stool tests looked normal enough, only to find a lot of imbalances showing up in an organic acids test.

Because I want the maximum possible amount of data from my client’s lab work, my preferred combination of tests when conducting a comprehensive digestive analysis is to run both a stool test and organic acids urine test. In cases where finances may be a limiting factor, we decide which test is most suitable during a detailed initial consultation.

Medical Tests and Your Doctor’s Support

I’d like to make an important point about the use of the aforementioned tests. I’m sure you’ll agree with me when I say that private laboratories offer a superb range of services and provide doctors and patients alike with a wonderful opportunity to uncover reasons for ongoing, mysterious symptoms.

Whilst these tests are truly excellent, they cannot be used to diagnose medical conditions such as gastritis, ulcers, ulcerative colitis, Crohn’s disease, cancer and so forth. Nor do they have the ability to detect physical blockages, obstructions and structural abnormalities in your digestive system. These conditions must be assessed and diagnosed by a licensed physician or specialist who has access to a different array of testing that includes:
Endoscopy and colonoscopy
Ultrasound
Digital rectal examinations
CT scans
MRI scans
Barium meals

If a specific condition or disease runs in your family, or if you suspect from your symptoms that you may have developed a more advanced medical condition, I recommend you seek medical attention. Specific signs and symptoms that indicate a more serious condition include, but are not limited to, the following:

- Profuse and ongoing vomiting
- Blood in vomit
- Coffee grains in vomit (indicates bleeding)
- Profuse and chronic diarrhea
- Fresh blood and mucus in the stool
- Dark, tarry like stools
- Severe chronic constipation
- Chronic pain of any kind that does not clear with diet changes and treatment for bad bugs
- Symptoms repeating at specific times of the day

Whilst the above symptoms can sometimes be caused by factors such as food intolerances and bad bugs, ruling out other potentially serious causes is important and gives you peace of mind. Never underestimate the importance of specific medical tests, for they can uncover things that stool and urine tests cannot. If you would like advice on which tests to run, I recommend you book a consultation with a Hompes Method practitioner.

Testing For Bad Bugs Outside Your Digestive System

This book is predominantly concerned with problems associated with bad bugs in your digestive system. But other areas of your body can also succumb to chronic bug infestation and it is important to learn about your testing options in these areas, just in case you have symptoms located or related to them.

Genitourinary Tract

Bad bugs can overgrow in your genitourinary tract. Parasites such as *Trichomonas vaginalis*, bacteria like *E. coli*, *Staphylococcus*, *Proteus*, *Klebsiella* and *Gardnerella* and yeast/fungi such as *Candida albicans* can all overgrow or infect the genitourinary tract. Your kidneys, bladder, urethra, vagina and even the prostate gland can be affected.

Private laboratories offer urine tests to help identify specific organisms that may be causing symptoms in your genitourinary tract. As with their stool tests, the private laboratories have the ability to detect low-grade infestations in cases where medical tests might miss them.
Private labs can test your urine for the presence of parasites, worms (Shistosoma), fungi and bacteria. If you have abnormalities in the colour and/or texture of your urine - especially after foreign travel – or if you experience any of the symptoms listed below - it is prudent to contact us and enquire about one of these tests:

- Increased urinary frequency
- Waking up at night to urinate
- Pain and burning on urination
- Vaginal itching
- Vaginal discharge (cloudy and/or foul-smelling)
- Pain on intercourse
- Blood in urine
- Blood in semen
- Inflamed prostate / prostatitis / benign prostate hypertrophy (BPH)

Trevor - a gentleman in his mid-fifties - complained of mild urinary symptoms. I'd been working with him for some time as he had originally tested positive for a range of bad bugs, including Candida, Endolimax nana, Cryptosporidium and pinworm. Having successfully dealt with his bad bugs, Trevor developed discomfort when taking a pee, as well as a slight tingling in his penis and slightly cloudy urine. His doctor ran a urine test, the results of which came back negative. I referred Trevor to a private lab and he submitted a further sample. This time, his result was positive for large numbers of abnormal mono-coccal bacteria. I referred Trevor back to his doctor, who prescribed the relevant antibiotics, and his symptoms subsided. In Trevor’s case, it was very interesting that the test he had done through his doctor did not find any bad bugs, but the test run through the private lab detected the cause of the problem. Thankfully, combined with the help of his doctor and a short course of antibiotics, Trevor’s willingness to run the additional test saved a lot of discomfort, time and worry.

Parasites In Your Blood

My university lecturer, Malcolm Greenwood, taught me about several important parasitic diseases caused by bugs that live in the blood. They cause conditions such as malaria, sleeping sickness and filariasis. Most of these diseases are synonymous with the developing world and are caused by parasites such as Plasmodium, Trypanosoma, Wuchereria, Brugia, Loa, or Onchocerca.

Some blood borne chronic infections are found a little closer to home and include Lyme disease and its coinfections. Lyme disease is caused by the Borrelia bacterium and can be accompanied by other bacterial and parasitic coinfections. Medical centres and private laboratories have the capacity to test for these bad bugs, but finding them is not easy and a thorough understanding of testing limitations is required when dealing with infections such as Borrelia and its coinfections. If you are in any doubt, please feel free to contact us for help.
Skin Problems

Skin swabs can be taken to check for bacteria and fungi on your skin. A swab is wiped over areas of skin affected by rashes, sores, acne and other skin irritations. The swab is sent away for culture and analysis. Private labs run special sensitivity and resistance profiles to check which medications will or will not be effective in fighting any bugs that are detected.

In my experience, skin symptoms are usually the result of food intolerance, digestive dysfunction and toxin overload. Thus, I tend to recommend skin swab tests in situations where dietary changes, liver support, the avoidance of toxic cosmetic and personal care products and the removal of intestinal bad bugs fails to resolve skin symptoms.

What kind of skin symptoms am I talking about? Well, here’s a partial list of the symptoms/conditions we know are associated with bad bugs, either on the skin itself, or in the gut. These symptoms can have other causes, but often relate back to digestion and detoxification:

- Dermatitis
- Eczema
- Psoriasis
- Spots / acne (especially in adults)
- Boils
- Hives / urticarial
- Rosacea
- Dry skin
- Oily skin
- Dandruff
- Athlete’s foot
- Jock itch

More “advanced” or complex skin conditions that may be related, at least in part to bad bugs on the skin or gut, include:

- Chronic ITP
- Raynaud’s phenomenon/syndrome
- Aphthous stomatitis
- Alopecia areata
- Schoenlein-Henoch purpura
- Sjögren syndrome
- Prurigo chronica multiformis
- Pruritus cutaneous

Please don’t underestimate the importance of skin symptoms, for they provide a window into your overall health. I always say that your outer skin reflects your inner skin. Your gut has a thin lining called the mucosa, which I call internal skin. When the mucosa is irritated and inflamed due to bad food, bad bugs and bad toxins, the inflammation is often reflected on your external skin in the form of rashes and so forth.
Oral Cavity and Nasal Passages

A cultured swab sample can also be used to assess bacterial and fungal overgrowth in your oral cavity and nasal passages. Both are important entry and exit points to your body and are prone to mild and even serious infections. Taking a swab and culturing the sample can provide clues as to why you might have symptoms such as:

- Postnasal drip
- Sinus pain and pressure
- Chronic stuffy and itchy nose
- Gingivitis (gum inflammation characterised by redness and soreness)
- Bleeding gums
- Sore, blotchy or painful tongue

Holistically trained dentists such as Hal Huggins, David Kennedy, Christopher Hussar, Mark Breiner and Philippe Hujoel will tell you that infections can also develop in root canals and cavitations. Detecting these “deeper” infections requires the expertise of a skilled dentist who acknowledges and understands how and why such infections develop. He or she must then know how to detect the infection, which may not be easy as the infections can run into the jawbone. Finally, an understanding of how to safely treat the bad bugs is necessary if symptoms are going to be resolved.

Drinking Water Analysis

It is possible to test your drinking water to evaluate the presence of water borne parasites as well as bacteria and fungi. The most common microscopic human parasites – protozoa such as Giardia and Cryptosporidium – can be transmitted via drinking water contaminated with fecal material from animals and infected persons.

According to Dr. Omar Amin, approximately one fifth of U.S. households supplied by surface water treatment plants carry parasites such as Cryptosporidium and Giardia. I recommend a drinking water test when several family members are experiencing symptoms, or if folk keep testing positive for the same bad bugs despite taking appropriate actions for its eradication.

Do You See Parasites In Your Stool?

We frequently receive emails – and even photos - from clients who think they’ve spotted parasites in their bowel movements. Our anxious readers have also been known to send us pretty pictures of their bowel movements and toilet bowl contents! Much of the time, what they’ve actually observed are artifacts resulting from poor digestion. The images shown in figures 12-14, taken from Dr. Omar Amin’s article on stool analysis, illustrate the types of things you might see and mistake for parasites.
If you see artifacts like these in your bowel movements, you can send them to the private laboratories for analysis. The lab will tell you what the artifacts are, or in some cases, identify a specific worm parasite.

**Figure 12:** From left to right: 1) Plant skin 2) Tomato skin 3) Undigested potato cells.

**Figure 13:** From left to right: 1) Mite egg 2) Mushroom spores 3) Citrus parts

**Figure 14:** From left to right: 1) Bean sprouts 2) Undigested plant hair 3) Mucoid tube
I realise it can be a little disconcerting to see worm-like objects floating around in the toilet bowl, but please rest easy that in most cases, you’ll be seeing artifacts, not worms. Dr. Amin writes:

“The implications of the above observations on the correct diagnosis or misdiagnosis of parasites are very important for the proper management of infections with the appropriate protocols. It is amazing to have become aware of the number of parasite infections that get under diagnosed as a result of misinterpretation or lack of familiarity with artifacts and with the many different variations within a parasite population. The understanding of the underlying pathological implications of such structures as fatty acid or Charcot-Leyden crystals, among others, is equally important in the proper management of parasitic cases.”

Testing Your Pets

Finally, you may be interested to learn that private laboratories can run stool testing for your pets. Why is this important? Well, we know that certain parasites can be passed from animals to humans via a process known as zoonosis. We also don’t want our pets to be unwell, of course.

I’ve worked with countless clients who admitted to not really following strict hygiene habits with their pets. Some folk were allowing their pets to lick their hands and face, which isn’t a good idea when you’re trying to eliminate bad bugs. In a few of these cases, parasites were not going away despite the appropriate action steps.

It’s my suspicion that in these cases, pet dogs and cats were the source of parasite infestation in the first place. Testing your pets can be helpful in these situations, or in cases where they may have chronic or recurring symptoms such as diarrhea or vomiting.

Summary - General Parasite Testing: What I’d Love You To Know

- Helping clients access private lab testing is one of the most important aspects of my work.

- Private laboratories have helped hundreds and hundreds of people uncover why they felt unwell, even when the medical system had told them nothing could be done.

- Doctors tend not to run testing and there are several reasons why:
  - They’re not taught about parasites in detail during their time in medical school.
  - They consider parasites to be a tropical and exotic problem.
  - They do not realise that bad bugs create chronic symptoms as well as acute ones.
• Even when they do run tests, for various reasons the tests may not be accurate:
  o Parasite lifecycles
  o Emerging pathogens
  o Old stool tech
  o Human error
  o Autolysis
  o Transport problems
  o Culture problems

• Private laboratories offer several advantages:
  o Can be performed in the privacy of your home
  o You get to see your report
  o The labs use advanced technology such as DNA/PCR or special preparation and staining techniques when using microscopy
  o The turnaround time is generally very fast (except in culture-based tests, where extended time can increase the accuracy of results)
  o A large range of organisms is considered and assessed
  o Strain variations can be identified
  o Antibiotic sensitivity is frequently identified

• Important and helpful additional markers are considered over and above the bad bugs; these markers add huge value and shed light on overall digestive health:
  o Good bug levels
  o Antibiotic sensitivity / resistance
  o Gut immune function
  o Gluten sensitivity
  o Inflammation
  o Damage to digestive tissues
  o Ability to digestive certain types of food (protein, fat, carbohydrate)
  o Digestive bleeding

• Some standard blood test markers, including white blood cell counts, can give clues about whether you could have parasites.

• Home based urinary organic acids testing is excellent for determining whether you have bad bugs overgrowing in your upper or small intestine.

• Home based testing can be used to discover bad bugs in the genitourinary tract in situations where doctors don’t want to test.

• Private labs offer blood testing for more exotic bugs such as Plasmodium (malaria), Trypanosoma (sleeping sickness) and filarial worms

• Skin infestations can be detected using swab samples.
• Swab samples can also be used to detect bad bugs in the oral cavity and nasal passageways

• It is possible to run tests to determine whether bad bugs are rampant in your drinking water

• Some private labs are happy to check for parasites in pets.

• It’s important to note that home based testing is not suitable for the diagnosis of medical conditions such as ulcers, cancer, polyps, blockages and inflammatory bowel disorders.
Chapter Eight

How To Overcome Parasites

When it comes to overcoming parasites, surely it’s as simple as taking antibiotics for a few days, right? Not quite. Unfortunately it’s not that simple for many people. Don’t get me wrong, some folk take a course of antibiotics, eliminate bad bugs and experience dramatic symptom improvement virtually overnight. But for others, ridding the body of parasites needs additional care and attention.

I’d love to take this opportunity to share with you what I have learned about overcoming parasites as I feel it’s incredibly important information. Knowing that parasites are common is one thing; knowing they cause lots of digestive and “global” body symptoms is another. Being able to test for them is wonderful, but knowing how to zap them, keep them away and feel better is the ultimate goal for most people, as I am sure it is for you.

I would like to go on record as stating that a basic course of antibiotics or herbs can work well for some people. I am not saying the methods and process described in this chapter are the be all and end all by any means. However I know for sure the methods described here are effective for the majority of people.

When working with clients, I am looking to help them achieve lasting results and not just a few weeks of improvement followed by a subsequent regression back to “square one”. Antibiotics and herbs can knock out bad bugs, but these treatments don’t optimise the function of your body. This provides a framework to help you eliminate the bad bugs and rejuvenate your health once they have been successfully zapped.

Here is the basic step-by-step process I use to help my clients overcome chronic bad bug problems. This is the same process I teach to healthcare practitioners in my Hompes Method Practitioner training education programmes:

- Use an appropriate test or tests to uncover what you’re up against. Otherwise you can’t possibly know which course of action to take.
- Ideally, determine your immune status and ability to digest food.
- Have a skilled practitioner assess your symptoms, health history and current diet and eating habits.
- Join the dots: consider the symptoms being experienced and correlate them with diet, lifestyle and lab test results.
- Decide whether bad bugs are likely to be causing symptoms, or whether it might be something else (e.g. bad food, bad toxins, low stomach acid, etc.)
- Implement specific dietary changes to reduce gut inflammation and symptoms whilst enhancing the efficacy of bug-killing antibiotics or herbs.
What Your Doctor May Not Tell You About Parasites

- Proceed through a “5R Gut Rejuvenation Programme.”
  1. **Remove** the bad bugs (and bad foods)
  2. **Restore** your ability to digest food effectively
  3. **Reinoculate** your good bacteria
  4. **Repair** damage to your digestive system structures
  5. **Re-test** to ensure you have removed the bad guys (optional, but strongly advised)

At first, this process may appear complex. Please don’t worry - I assure you it is not as complicated as it looks in most cases. The key elements are to know what you’re up against, understand the level at which your digestive system is functioning and then take the necessary action steps to fix everything. Let’s look at each of the above steps in a little more detail.

**Know What You’re Up Against**

Gulping down antibiotics or herbs without first being tested to see which bugs you are harbouring is a little hit and miss. An ad hoc treatment might work in some cases, there is no doubt about it, but without proper and accurate testing, you’re really throwing caution to the wind and shooting in the dark, so to speak.

Imagine, for a moment, that you’re experiencing a little heartburn, a lot of bloating, loose stools, fatigue, and skin problems. Also imagine that your partner or spouse is experiencing identical symptoms (this is a scene that plays out in some households).

You both decide to run a comprehensive stool test with a private laboratory. Your test reveals the presence of *H. pylori* and *Blastocystis hominis* – in other words a bacterial invader and a parasite. Your partner’s stool test only reveals a strong *Candida* overgrowth.

So you both have pretty much the same symptoms, but the reasons for those symptoms are completely different. One of you has a fungal overgrowth and the other a bacterial and parasite problem. Now consider these questions:

- Would a doctor prescribe the same medications for you if he/she saw your test result?
- Do you think the same herbs would be needed by the two of you should you decide to deal with your situation using a natural approach?
- Do you think the two respective healing protocols would have the same duration?
- Do you think there may be a need to alter your respective nutritional plans in light of the results?
- Could there be a need to support stomach acid levels and immune function in different ways?

Of course, I am not trying to patronise you by asking these questions; I am merely pointing out that there is a tremendous amount of crossover between symptoms caused by different bugs and it’s not ideal to assume symptoms are being caused by the same bugs in everyone. Two people can have the same
What Your Doctor May Not Tell You About Parasites

symptoms for completely different reasons. Equally, two people could experience different symptoms from having the same bugs!

Without accurate testing, it’s impossible to know what you’re up against. The repercussions of getting it wrong can be uncomfortable and even serious. For example, what might happen if you already have a Candida overgrowth and then take antibiotics? Antibiotics could obliterate your good bugs, enabling the Candida overgrowth to proliferate even more.

Likewise, if you decide to treat a Candida overgrowth because you have a white coating on your tongue, without checking to see whether you have other bad bugs lurking in your digestive system, you may inadvertently allow the other bugs to cause more problems as you remove the Candida. Bugs compete with ecological space in your gut, so removing one can encourage another to flourish.

I strongly encourage you to take advantage of the readily available testing services you learned about in the previous chapter. Yes, there is an upfront cost for running the tests, but this is more than offset by savings in time and energy you make when you uncover your individual bad bug and digestive health pattern.

When you know what you are up against, your doctor or healthcare practitioner can create laser-targeted protocols to address the specific bad bugs in your digestive system, saving time and preventing wasted expenditure on approaches that either don’t work, or may even worsen your situation.

Consider Nutrition Before Bad Bugs

Parasites and other bad bugs are not the only reasons why you might be feeling unwell. The food you’re eating, the way you eat it, whether you can digest it properly, and the balance of good bugs in your digestive system can all influence your symptoms. It’s crazy to blame bad bugs for everything.

I have worked with hundreds of people whose symptoms improved a little, a lot, or resolved completely, when they altered their food intake. Some of these people had been diagnosed with Candida, bad bacteria and/or parasites. They had taken multiple treatments only to be disappointed by a lack of progress. Yet after a consultation and a few simple dietary modifications, these people experienced rapid symptom improvement.

Bad foods are to blame more than anything else, including bad bugs. As a society, we take food for granted and have become alarmingly detached from the way food affects our bodies. Food can either be nourishing or toxic; non-inflammatory or pro-inflammatory. Eating the wrong foods can result in the same symptoms as those created by bad bugs.

Consuming poor quality food is one of the primary reasons people slide down the Vitality Scale in the first place. It’s very difficult to maintain optimal immune, digestive and general health when food is damaging your gut, or when you have
nutrient deficiencies. Bad food predisposes you to acquiring bad bugs and it also encourages the growth of certain bad bugs once they have taken a foothold.

So let’s begin with some basic recommendations on nutrition and eating habits to provide a foundation for your health rejuvenation. Changing your diet represents part of the “remove” phase of a “5R” gut rejuvenation programme because you’re removing “bad foods” from your diet. It also overlaps into all the other phases because optimal foods are:

- Easier to digest (restore phase)
- Supportive of your good bug population (reinoculate phase)
- Supportive of gut repair (repair phase)

**Your Gut Lining**

Your stomach and intestinal linings are not merely flat surfaces. Instead, they are incredibly complex structures. Your stomach is organised in folds called *rugae*, whilst your intestine has millions of tiny finger-like projections called *villi*. These folds and fingers increase the gut lining’s surface area, greatly increasing its digestive and absorptive efficiency.

Like bad bugs, certain foods can cause inflammation and damage to your gut without causing obvious symptoms. This is a major reason why I recommend dietary changes for my clients even when they don’t necessarily feel better or worse based on the foods they eat.

Probably the most obvious example of “silent” gut damage caused by food is gluten sensitivity. People with full-blown gluten sensitivity or coeliac disease as it is known, can have a raging inferno of inflammation in their intestine without noticing obvious symptoms. Other folk develop can develop profuse diarrhea and severe pain from the same sensitivity.

When intestinal inflammation is raging, the well-organised intestinal villi become damaged and, in extreme cases, may even be worn away. At the same time, little valleys that lie between the villi – known as *crypts of lieberkuhn* – can progressively deepen.
Bad bugs love to hide in the crypts, so the deeper they are, the better. The bugs often hide out in what Dr. William Timmins referred to as mucus plugs. They may also create a protective layer around themselves called a biofilm, which can be hard to break down. Biofilms can make it very tricky to eradicate certain bacteria and fungi as they act like shields against antibiotics and herbs.

If you continue to consume foods that are causing intestinal inflammation, you will likely have a harder time reaching the bad bugs with whatever killing agents you choose, be they pharmaceutical antibiotics or botanicals (herbs). Conversely, by removing bad foods, you help dampen the inflammation in your digestive system because you’re no longer throwing fuel on the fire, so to speak. Dampening intestinal inflammation can a) help you feel a heck of a lot better and b) enhance bug-killing by enabling antibiotics and herbs to gain greater contact with the bad bugs.

Each of you reading this book will have a unique tolerance threshold for any given food. Without running specific food intolerance or allergy testing, it’s impossible for me to suggest to you which foods you ought to stay away from on an individual basis. High quality and convenient laboratory testing is available to help you identify your individual food sensitivities.

Despite our uniqueness and individuality when it comes to food sensitivity, certain foods seem to cause problems across the board. I recommend you minimise or avoid these right away. Doing so will almost certainly help to reduce inflammation, enhance digestion, support your good bugs and improve your immune function:

- **Processed foods** – eat a minimally processed, whole-food diet; processed foods are nutritionally depleted and tend to contain excessive amounts of starch, sugar and toxic vegetable oils.

- **Gluten-containing foods** – all products made from gluten-containing grains (wheat, rye, barley, spelt, kamut, couscous and others) and processed foods that contain them should be minimised in my opinion; in many people, gluten needs to be avoided completely.

- **Soy** – soy-based foods can be particularly irritating to your gut; soy happens to be my arch nemesis, causing a lot of bloating and loose stools when I consume it in anything greater than the tiniest quantity.

- **Polyunsaturated oils** – golden vegetable oils except olive oil are pro-inflammatory; according to Ray Peat, Ph.D. and Mary Enig Ph.D, these oils suppress immune function, inhibit thyroid metabolism and cellular energy production when consumed in excessive quantities. Sunflower, safflower, corn, soybean, cottonseed, rapeseed (canola) and anything labeled as “vegetable oil” on a food label are major culprits.

- **Processed sugar** – some bad bugs, notably yeast and fungi, thrive on sugar; minimising its consumption can be very beneficial indeed.
**Processed cow's milk** – the intestinal damage caused by gluten and bad bugs can cause lactose intolerance, which in turn leads to digestive symptoms such as bloating, gas and loose stools; some people are also allergic to milk protein.

**Alcohol** – your body processes alcohol as if it's a toxin. Alcohol places a great deal of stress and strain on your body, can damage your stomach and intestine, imbalance your blood sugar and overburden your liver; it is best left alone while you are rebuilding your health.

I'd love to be able to provide a complete diet and nutrition solution for you right here in this book, but I don't have enough space. There is a little too much to cover and I have other important information to share. Here are some great options if you would like more detailed guidance on how to begin changing your foods and eating habits right away:

1. Click the link below to download a copy of the Hompes Method food list. You'll find three lists of foods: green, orange and red. I deem the green foods optimal choices and orange ones secondary choices. Red foods are to be minimised or, ideally, avoided. The list is available for you to download free of charge. Just click [here](#).

2. The basic eating plan outlined in my book, *The H. Pylori Diet*, contains the same food list along with some simple recipes and menu ideas. It's a great, inexpensive option to help you implement a solid nutrition strategy. Despite being called *The H. Pylori Diet*, the book contains the same basic programme I have my clients follow when they have parasites. Details can be found by clicking [here](#).

3. If you love “do it yourself” home programmes, the best way to implement my dietary recommendations is to become a member of my *Hompes Method Basics* online health rejuvenation programme. This programme takes you through a simple, step-by-step process to help you implement specific diet changes and lifestyle modifications over a period of 90-days. The programme is delivered right into your home via a secure VIP members’ only area. You receive your guidelines on a weekly basis, making the programme's implementation completely stress-free. It's like having me in your living room providing personal coaching but without the consulting fees! [Check it out here](#).

Gluten, processed sugar, soy, cow's milk and vegetable oils are the basic foods I ask my clients to avoid. They are foods that, across the population, tend to cause the most allergic or sensitivity-type reactions. While avoiding or minimising these foods has been a cornerstone in my approach, it's important to acknowledge that any food has the potential to cause problems for any person. Joyce's example is a perfect example of how innocuous foods can cause problems.
Joyce was experiencing significant digestive symptoms, including violent diarrhea and burning in her abdominal area. Her medical tests had shown nothing serious, which was a relief, so I recommended she avoid all the main foods listed above. Joyce did a great job avoiding the foods and felt better, but she would still have symptom attacks one to two times per week. I referred Joyce for a private stool test, which showed she had *H. pylori* and *Blastocystis hominis*. Working to remove these bugs led to a mild improvement in her symptoms. Her re-test showed that both bugs had been eradicated, but the symptoms were still coming and going, albeit less frequently. Then, something weird but wonderful happened. Joyce went away for a week with her family. While she was away, she had no symptoms whatsoever. On her return, the symptoms returned with a vengeance. Joyce looked at what she had eaten or not eaten on holiday, and what she had reintroduced on her return. One food stood out: the innocent banana. Joyce experimented for a month or so, observing and noting her symptoms when she either ate or avoided bananas. The association was clear. Any time she ate a banana, she had severe symptoms and when she was banana-free, the symptoms were absent.

Joyce's is not an isolated case - I have seen people’s symptoms improve or worsen based on their consumption of many seemingly innocuous foods, including beef, eggs, broccoli, kale and other leafy greens, citrus fruits and seafood. Changing your diet can be the deal breaker when it comes to rejuvenating your digestion.

The nightshade food family deserves a special mention. Nightshades include potatoes, tomatoes, aubergine (eggplant), paprika, cayenne, peppers (all kinds) and goji berries. These foods can cause subtle inflammatory reactions in some people. If you have chronic muscle and joint pain, I recommend you avoid these foods for three months to see how you fare. You may be surprised at the improvements.

Dietary changes can significantly reduce or eliminate symptoms before you even consider treating bad bugs. Isn’t that amazing? Despite all the fancy technology we have at our fingertips, the simple act of avoiding key foods can be the most important factor. The great thing is that changing your diet offers a virtually cost-free solution to your symptoms.

The list below highlights the importance of removing bad foods from your diet and stresses some of the possible scenarios resulting from interactions between food, bugs and your symptoms:

- You alter your diet and all your symptoms go away, whether or not you have run any testing for parasites, or have taken antibiotics or herbs to kill bad bugs.
- You alter your diet and all your symptoms go away, even though you know from testing that you do, indeed, have parasites.
- You alter your diet and experience minor or moderate symptom improvement – it is only when you eradicate parasites and heal your digestive tract that your symptoms fully resolve.
• You alter your diet and your symptoms don’t improve at all – it is only when you eradicate parasites and heal your digestive tract that your symptoms improve.
• You eradicate parasites, but don’t alter your diet and your symptoms show no improvement.
• You eradicate parasites, but don’t alter your diet and your symptoms improve moderately.
• You eradicate parasites, but don’t alter your diet and your symptoms go away completely.

As you can see, individual responses to food changes and bad bug eradication show great variation. This is precisely why I recommend you take no chances. In my experience it is always best to adjust your diet, modify your lifestyle and fight the bad bugs concomitantly. This approach, without question, brings the most consistent and beneficial health rejuvenation outcomes.

**Consider Good Bugs As Well As Bad Bugs**

Imbalances in your good bug population can cause a range of symptoms. When you are born, your stomach is pretty much sterile and contains virtually no bacteria. Bacteria enter as you pass through the birth canal at the moment of birth. Your mother’s breast milk also contains specific immune-supportive substances and bacteria. These compounds and organisms help to quickly populate your digestive tract with bacteria during and soon after birth. A range of environmental factors can influence your good bug population:

• **Mode of birth** – during a natural birth, the baby passes through the birth canal and is exposed to mum’s vaginal bacterial population, which is one of the very first triggers for bacterial development inside the baby; during a C-section birth this exposure does not happen, creating an early risk for the baby to develop a bacterial imbalance.

• **Early feeding** – there can be enormous differences in the quantity and composition of a baby’s bacterial population based on mum’s ability to breastfeed; in cases where she can’t breastfeed, the type of infant formula can influence the infant’s bacterial population.

• **Infections** – early infant and childhood infections can influence development of the good bug population.

• **Food** – we know for sure that what you eat can impact your good bacteria levels. Research indicates that changes in food intake can create shifts in your digestive system’s bacterial population within just a few days.

• **Stress** – Your immune system and good bug population can be adversely affected by stress; in times of stress, your nervous system diverts resources away from your gut and immune system.
• **Antibiotics** – the use of antibiotics can harm your good bugs as well as killing off bad, or “target” bugs; antibiotic can encourage the growth of several undesirable organisms, including *Clostridium difficile* and *Candida*.

When your good bug population becomes imbalanced or declines, you're more open to acquiring bad bugs. You may also find it harder to keep them away once you've taken antibiotics or herbs to remove them. Remember that your good bugs:

- Help you digest food
- Support your immune system
- Help you detoxify
- Produce chemicals (SCFAs) that feed your colon cells
- Reduce inflammation
- Keep your intestinal lining healthy
- Affect your body fat levels
- Influence your neurological function - possibly even your memory and mood

A comprehensive stool test can help you determine whether your good bug population is imbalanced or depleted - yet another reason why I’m so keen to refer my clients for specialised testing. I really want to know which areas of work are priorities in each person: is it dietary manipulation, bad bug removal, or good bug replenishment? What could the priority be in your case, I wonder?

**Consider Your Digestive Capacity**

Low stomach acid, poor pancreatic function and a sluggish gallbladder can be important factors in creating your symptoms. When digestive secretions such as stomach acid, pancreatic enzymes and bile are inadequate, the digestive process is compromised. Food is not digested effectively, potentially leading to digestive symptoms.

Low stomach acid may actually *allow* bad bugs to pass through your stomach and set up home in your intestine. Inadequate digestive enzyme and bile levels can make your intestine more hospitable to bad bugs. If that's not enough, when you don’t digest food properly due to a lack of these secretions, your undigested food becomes food for bad bugs!

Without appropriate testing, how do you know whether you need to zap bad bugs or support your own digestive process, or both? Again, I like to evaluate these factors as far as technology facilitates. A comprehensive stool test can identify pancreatic enzyme deficiencies and undigested food. A simple saliva test for a substance called VEGF can provide information about stomach acid levels, as can a home test called “Gastro-test.”

**Do All “Bad Bugs” Need To Be Treated?**

Only after a thorough assessment can you really know whether it is a good idea to remove bad bugs right away. It might be that your unique circumstances
require a different approach. For example, you may benefit from taking time to focus on modifying your diet and lifestyle for a couple of months before taking any medications or herbs to fight bad bugs.

You may derive enormous benefit from eating mindfully, in a relaxed state, and chewing your food properly. I have seen tremendous improvements in my clients’ symptoms by helping them modify their eating habits as well as their food choices. I place great weighting on teaching these basic strategies before clients spend money on fancy nutritional and herbal supplements.

Altering your food selections and eating habits costs virtually nothing and you may be very surprised at how well your symptoms respond to this almost cost-free approach. As stated previously, it is well worth adopting dietary changes before you run parasite and digestive function tests. Perhaps your symptoms have nothing to do with bugs and everything to do with bad foods that you are eating on a regular basis?

Likewise, perhaps your symptoms are the result of nutritional deficiencies, low stomach acid, digestive enzymes and other important secretions, in which case it may be more beneficial to put “good stuff” back in to your digestive system than to remove “bad stuff”. Working with a skilled practitioner who understands how to identify the likely reasons for your symptoms saves a great deal of energy and time.

Now that you are aware of the main reasons why digestive symptoms tend to develop over and above the presence of bad bugs, let’s take a look at the specific “5R” action steps you can take to help you overcome your symptoms and rejuvenate your digestive health.

**Step One – “Remove”**

**Removing Bad Bugs - Consider Your Options**

We’ve already covered the removal of bad foods, so let’s discuss the removal of bad bugs. When it comes to removing bad bugs from your digestive system, oral cavity, sinuses or genitourinary tract, you have a number of options. The most commonly used options are pharmaceutical antibiotics and herbs. Homeopathic remedies can also be used. Factors that can influence your choice include:

- The severity and duration of your symptoms
- Your general level of health and vitality
- Your doctor’s willingness to team-up with you and treat the bad bugs
- The availability of medications and herbs in your area / region
- Possible allergies to medications or herbs
- Your finances and health insurance policy
- Your personal goals

If you were to work with me, or one of my Hompes Method practitioners, we would explain the relative benefits and drawbacks of using antibiotics, herbs, or a combination of both. We would provide advice having considered the factors

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listed above and would give you a choice of which route to take, making an appropriate referral in cases where a medical doctor’s assistance might be necessary. I would expect any skilled practitioner to do the same.

Most of my clients opt for tried and tested herbal protocols because they either don’t like taking antibiotics, or are just sick and tired of taking them! Nevertheless it’s important to know that some bad bugs are better treated with antibiotics. In these situations, education is key and we always strive to ensure that clients’ decisions are based on a balanced and appropriate information.

I was able to successfully remove *H. pylori* and *Blastocystis hominis* without using antibiotics. I took a proven set of herbal protocols to safely eradicate those bugs and experienced no side effects from the herbs. I’ve seen many hundreds of people achieve the same results. At the same time, some people do just fine on antibiotics. There is nothing wrong with using antibiotics in a sensible way and in some cases they represent the most suitable option.

**Antibiotics, Antifungals and Antivirals**

As you know, conventional treatment for parasites, bacteria, viruses and fungi involves the use of pharmaceuticals. As stated earlier, there is no doubt that antibiotics save lives and improve quality of life. They tend to work relatively quickly, with treatment protocols lasting anywhere from a day to a week, or slightly longer. But they also carry significant disadvantages. The following list is adapted from the work of Wayne Anderson, N.D.³

**Advantages of Pharmaceutical Antibiotics:**
- Have been used for a long time and have a proven track record
- They can work quickly
- Different medications target specific microbes
- They have been studied in the research setting
- They have specific killing mechanisms (they kill bugs in different ways)
- The dosage of specific antibiotics can be prescribed with precision
- Protocol durations are widely established
- They represent the current standard of care
- Importantly for some people, they are very low cost when prescribed in national healthcare settings
- They are included in health insurance policies

**Disadvantages of Pharmaceutical Antibiotics:**
- Doctors don’t always want to prescribe treatment, especially if they are presented with a lab test result from a private lab
- Organisms can adapt and protect themselves from pharmaceutical compounds – they can develop antibiotic resistance very quickly
- Antibiotic resistance is a big problem, particularly with bacteria and fungi; antibiotic resistance is rapidly becoming a serious threat, with some authorities expressing concern that antibiotics may well become completely ineffective within ten to fifteen years
Side effects can be moderate or severe
- Can disrupt gut flora and create secondary problems
- May trigger fungal overgrowth
- Dosage is fixed in relation to bodyweight
- Can create allergies and toxic responses
- Docs do not have any alternative options when antibiotic treatments doesn’t work

If you’d like guidance on which pharmaceuticals should be used to treat specific parasites, you can find a copy of the 2004 Medical Letter, *Drugs For Parasitic Infections*, by clicking here.

I also recommend you bookmark the e-Medicine website as it contains information on specific treatment options for bacteria and fungi in addition to parasites: Click here, and then scroll down to the green sub-heading Infectious Diseases.

**Advantages of Botanical/Herbal Protocols**

Herbs, or *botanicals* as they are technically known, offer a very effective alternative to pharmaceuticals. They have distinct advantages, but also some disadvantages, relative to prescription medications:

- Anti-parasitic herbs have been used for thousands of years in different parts of the world and have an established safety record
- Can be used as a standalone treatment
- Can be used with antibiotics – ideally for a period of time before or after pharmaceuticals are used
- Support specific organ systems:
  - Support and modulate immune system
  - Unload/kill the bad bugs
  - Support gut healing
  - Support detoxification
  - Support elimination & waste removal
- Minimal risk of bad bugs developing resistance
- Dosages can be manipulated in response to individual tolerance
- Have been studied extensively, just not in the mainstream journals where doctors get their information
- Thousands of practitioners achieve success using herbs with their clients
- Can work against multiple “bad bugs” concomitantly
  - Some herbs have a more specific antimicrobial action
  - Some herbs have a broader reaching more general antimicrobial issue
- Have revitalising, harmonising and regulatory effects on and in the body
- Support detoxification, metabolic and homeostatic processes
- Can be used over a long period of time with minimum adverse effects
- Relatively non-toxic, relatively low side effect profile
- Can be taken in tinctures when people don’t like swallowing pills
Disadvantages of Botanical/Herbal Protocols:
- Can take longer to eradicate the bugs
- Out of pocket expense – generally can't be accessed through NHS or insurance systems (this puts a lot of people off)
- Despite non-toxicity, can still cause side effects in some people
  o Dosages can be carefully manipulated to minimise this
- People may not like taking a lot of capsules
- In powdered form they taste disgusting!

Whether a client of mine opts to take pharmaceuticals, botanicals (or both) is largely dependent on individual circumstances and personal preferences. I recommend you study the relative pros and cons of each method before making a choice. Seek counsel from your doctor or a naturally orientated health care professional who understands and is experienced in the safe and effective removal of bad bugs. Of course, my practitioners and I are here to help in any way we can.

You can find some generic botanical anti-microbial protocols in Appendix IV. These are the core protocols around which I build my clients’ rejuvenation programmes. Feel free to use these protocols, but be aware of their limitations. I would much prefer for you to be properly tested before starting a supplement protocol of any kind.

Step Two – Restore

Supporting & Restoring Digestive Function

Step two of the gut rejuvenation process is very important. Low stomach acid, poor pancreatic function and compromised liver/gallbladder function leads to a reduction in digestive secretions, namely stomach acid, pancreatic enzymes and bile. Reduced digestive secretions can cause a plethora of symptoms in their own right.

Digestive secretions serve dual purposes. First, they help you digest your food. Improperly digested food provides a breeding ground for bad bugs, and may even lead to an overgrowth of good bugs. For example, when carbohydrates are not fully digested, bacteria and fungi ferment them, potentially causing bloating, gas, pain and even diarrhea or constipation.

Second, the secretions make your digestive tract inhospitable to bad bugs. Stomach acid literally burns parasites, bacteria and fungi, preventing them from reaching your intestine. Pancreatic enzymes and bile also keep bad bugs in check, whilst at the same time ensuring adequate and proper food digestion.

One of the biggest concerns I have in the world of digestive health is the idea that heartburn and acid reflux are caused by excess stomach acid production. In fact, the majority of people develop these symptoms due to inadequate stomach acid. Bad foods and bad bugs can also cause heartburn. It is actually quite unusual for
excess stomach acid to cause heartburn, yet over the counter and medical
treatments focus on suppressing stomach acid.

Using a clever saliva test called vascular endothelial growth factor (VEGF), you’re
able to get an idea whether low stomach acid is causing problems. This test,
designed by Dr. John McLaren Howard, is inexpensive and very easy to perform.4
The gastro-test can also be used to assess stomach acid level. It’s a little tricky to
perform and is somewhat invasive. You can find details at the Nutri-Link Clinical
Education Website.5

When I did the gastro-test, I was surprised to see that my stomach acid level was
quite low and it reinforced the need to continue working on my digestive health
indefinitely. Many clients who had previously been put on acid suppressing
drugs by their doctor were shocked at discovering their stomach acid level was
actually too low. Furthermore, their antacid medications were worsening an
existing problem.

But how can low stomach acid cause heartburn and reflux? It is, after all, a
paradoxical idea. Well, heartburn is generally caused by a little bit of acid getting
into the wrong place. I first learned about this from two superb naturally
oriented physicians named Leo Galland, M.D. and Jonathan Wright, M.D. The
latter has an excellent book titled Why Stomach Acid Is Good For You6 and a great
little YouTube video on the topic that I have embedded in my website. Watch it
here.

Even a few tiny drops of stomach acid jumping back up into your oesophagus can
cause burning. This “reflux” happens because of a weak lower esophageal
sphincter, or LES. The LES acts like a trap door between your oesophagus and
stomach. When it is weak, the trap door can’t close properly and allows stomach
contents to spit back up into the oesophagus. Unlike your stomach, the
oesophagus does not possess a nice, thick mucus lining for protection, so even a
tiny amount of acid can cause significant irritation. Other possible reasons for
heartburn include:

- Inadequate chewing
- Cigarette smoking
- Alcohol
- Fizzy drinks
- Coffee
- H. pylori infection
- Candida overgrowth
- Food sensitivity
- The use of NSAID medications such as aspirin
- A hiatal hernia
- Potassium or calcium deficiency
- High stomach acid (in a minority of cases)
- Genetic disorders (an even smaller minority)
Importantly, low stomach acid has a domino effect on the rest of your digestive system. If the pH of your stomach is too high (meaning it is less acidic), hormonal signals telling your pancreas and gallbladder to release their digestive secretions become dampened.

An elevated pH in the lower portion of your stomach prevents the hormonal signal – known as secretin - being sent to your pancreas. When this happens, your pancreas doesn’t release its enzyme load into your intestine to assist with digestion. Likewise, another hormone called cholestcystokinin isn’t able to send its signal to the gallbladder. Consequently, the gallbladder doesn’t release its bile load into your intestine, which further compromises digestion.

So as you can see, low stomach acid can result in a “jamming up” of your entire digestive process. Ultimately, low stomach acid can lead to pretty much any or every digestive symptom imaginable, irrespective of whether you have parasites or not.

Outside your digestive system, an inability to digest food and absorb nutrients inevitably results in energy, mood, skin, sleep, sex and other symptoms in the Seven Areas of Health. Without proper nutrition entering your body from the food you eat, your body can’t function at full throttle.

It is not that difficult to assess digestive capacity. As stated in chapter 7, the following lab test markers can be of great assistance in helping you determine which elements of the “restore” phase are most appropriate for your individual needs:

- **Observational factors:**
  - Pale, light brown stool – indicates the inability to digest fat due to compromised pancreatic and/or liver and gallbladder function.
  - Undigested food in the stool – indicates lack of chewing and poor digestion in general.

- **Stool test markers (it is not uncommon to see several or even all of these markers show up in stool tests):**
  - Elastase I is a marker for pancreatic enzyme output (higher is better).
  - Elevated triglyceride, fat and cholesterol levels in the stool indicate poor pancreatic function and ability to absorb fat through the intestinal wall.
  - Vegetable fibres provide a good marker for subtle deficiencies in the ability to digest vegetables and other plant materials.
  - Putrefactive short-chained fatty acids provide information about protein digestion; when elevated, this marker indicates poor protein digestion due to low stomach acid and poor pancreatic function.

- **Urine tests:**
  - Elevated indicant levels in the urine may indicate poor protein digestion in some cases; this marker is part of a more comprehensive test that can also identify upper intestinal *Candida* overgrowth, small intestinal bacterial overgrowth (SIBO) and leaky gut.
• Saliva tests:
  o The salivary vascular endothelial growth factor test (VEGF) may help identify low stomach acid or hypochlorhydria, as it’s technically known.

• Manual tests:
  o It is possible to assess your stomach acid level using something called the Gastro-Test.
  o [http://www.nutri-linkltd.co.uk/articulate/gastro/player.html](http://www.nutri-linkltd.co.uk/articulate/gastro/player.html)

• Medical tests:
  o Stomach acidity can be tested with great accuracy using something called the Heidelberg capsule test. Unfortunately, this test is very rarely used. Instead, the “blind” and indiscriminate prescription of acid suppressing medications is preferred when patients have heartburn, even though these meds might actually be the opposite of what patients actually need!

A comprehensive stool test combined with the VEGF or Gastro-test is a great way to quickly assess digestive capacity. Depending on your test results, a number of strategies can help you restore your digestive secretions over time:

• Bitters compounds:
  o Bitters gently stimulate your entire digestive process, including stomach acid production, pancreatic and gallbladder activity. They encourage digestive secretions due to their bitter taste. I recommend you use Swedish bitters or bitters compounds 10-15 minutes before a meal to stimulate your digestive system.

• Betaine HCL supplements:
  o These supplements contain betaine hydrochloride, which converts into hydrochloric acid when it reaches your stomach; the supplements do not stimulate your stomach to produce more of its own acid, but they do help you digest food more effectively whilst stimulating pancreatic and gallbladder function. I recommend my clients take one capsule after five mouthfuls of a meal, then add a second capsule after a further five mouthfuls.

• Digestive enzyme supplements:
  o High quality digestive enzyme supplements can help you digest food more effectively, enabling nutrients to be absorbed more efficiently. 1-3 capsules with meals, depending on the specific product, can work wonders for relieving digestive symptoms.

• Liver and gallbladder support:
  o A range of nutrients and herbs can be taken in supplement form to support your liver and gallbladder; they include milk thistle (silymarin), dandelion extract, B-vitamins, glycine, cysteine and taurine. Using these supplements can increase bile flow into the
intestine and enhance the digestion of dietary fats, as well as gently up-regulating toxin elimination.

- Nutrients and herbs that support stomach and intestinal repair:
  - Herbs and specific nutrients can be taken to aid in the “patching up” and rejuvenation of a damaged gut lining. They include L-glutamine, zinc, licorice extract, slippery elm and aloe vera juice/extract.

As you can see, the “Restore” step of a 5R gut rejuvenation plan can be just as important as the “Remove” step. Removing bad food and bad bugs can relieve symptoms, but these actions do not necessarily optimise your ability to digest food, absorb nutrients and heal your digestive system. I have provided a general “Restore” protocol for you in Appendix IV.

**Step Three – “Reinoculate”**

**How To Optimise Your Good Bug Levels**

*Reinoculate* is a fancy word to describe the process of replacing good bugs in your digestive system. Recall that you and I are more microbe than human! We possess ten times more bacterial DNA in our bodies than human DNA. Research is continually uncovering fascinating insights into our relationships with these bugs.

I have seen some remarkable improvements in my clients’ health once they have taken steps to improve their good bug population. Some people have greater responses in during the reinoculation phase than they do during the remove or restore phases. This is not surprising given the important roles performed by our good bugs.

The consumption of highly processed foods tends to deplete good bugs, whereas eating fermented foods such as sauerkraut and kefir, as well as bacteria-rich yoghurt can help in the restoration or maintenance of good bug levels. A diet rich in high quality vegetables and natural fibre also supports your good bug population. You may also be familiar with the use of prebiotic and probiotic supplements, which are marketed and promoted very heavily by supplement companies. These supplements can be expensive, so it’s wise to understand their pros and cons before spending money on them.

**What Are Probiotics?**

In 2002, the World Health Organisation defined “probiotics” with this simple statement:

> “Live microorganisms, which when consumed in adequate amounts as part of food, confer a health benefit on the host.”


Interestingly, some people do very well on probiotic-rich foods, whereas others do not. Some people achieve wonderful results when they use probiotic supplements, yet some feel worse. If this isn’t confusing enough, some people do better when they consume pre-biotic supplements over pro-biotics. Reinoculation is a process that needs to be tailored to your individual requirements.

Some practitioners like to begin the reinoculation phase during or even before the removal phase. In fact, in certain instances, the use of probiotic-rich foods or supplements can help to squeeze out bad bugs without the need to use antibiotics or herbs. There is no one-size fits all approach that fits the specific needs of each person.

Probiotic supplements abound in the marketplace and it can be quite hard to discern which specific products to choose because:

- Products contain different bacterial strains and mixtures
- Certain yeasts, such as *Saccharomyces boulardii*, are classed as probiotics
- Products contain different quantities of the good bugs
- Products come in capsule, chewable tablet, powder or even liquid forms
- Some products need to be refrigerated in order to retain potency, whereas others don’t

Research indicates that single-strain products – those containing just one type of bacterium rather than multiple types - might be more effective than products containing multiple strains in certain circumstances. Furthermore, some specific strains appear better suited for specific purposes than others. We also know that some people do better when they take lower dose probiotic products than higher dose brands. It’s noteworthy that less is more in some cases.

Just to bamboozle you a little more, some people find they can take probiotics without any problem on an empty stomach with a glass of water, but others find it hard to tolerate these supplements unless they are taken with food. What’s more, the use of immune-modulating nutrients such as vitamins A and D can influence whether probiotics exert a positive or negative effect. In people who are deficient in vitamins A and D, for example, taking a probiotic may increase intestinal inflammation rather than suppress it.

Finally, your tolerance of probiotics can be affected by the time of day they are consumed. Neurological activity and hormone levels alter through the day, thereby influencing how probiotic supplements can affect you. I’ve worked with plenty of people who couldn’t tolerate probiotics at night, but were able to take them without recourse in the morning or early afternoon.

Of course, many folk can take probiotics without any complications whatsoever. I’m simply making you aware that whilst they can be extremely effective much of the time, probiotics don’t always bring optimal results. In some cases, they can even make you feel worse.
What Are Prebiotics?

Prebiotic supplements do not contain any bacteria. Instead, these compounds provide food for good bugs and are designed to help them thrive. Prebiotics have fancy names like oligosaccharides (OS), fructo-oligosaccharides (FOS) and galacto-oligosaccharides (GOS). Here are a couple of formal definitions:

“A prebiotic is a selectively fermented ingredient that allows specific changes, both in composition and/or activity in gastrointestinal microflora, that confers benefits upon host wellbeing and health.”

“A prebiotic is a non-viable food component that confers a health benefit on the host associated with modulation of the microbiota.”

You will see the following words on prebiotic product labels, explaining the plant based sources from which OS, FOS and GOS are derived:
- Inulin
- Larch arabinogalactan
- Beta glucan

These compounds are basically soluble forms of fibre that, according to research, serve the following important functions:
- Increase total microbial mass in the intestine
- Stimulate immune system
- Stimulate production of short chain fatty acids
- Inhibit bad bugs
- Improve mineral absorption
- Improve blood sugar and insulin regulation

Some practitioners prefer to use prebiotics over probiotics with their clients in the first instance. One reason for this is that probiotic supplements only increase good bug levels temporarily. Good bug populations proliferate during probiotic therapy, but levels drop again once the probiotic supplements are discontinued.

Prebiotics, on the other hand, provide food and growth factors for your good bugs, potentially facilitating a more natural and sustained increase in your good bug population, provided a healthy nutrition and lifestyle foundation is also put into place to underpin the efficacy of the prebiotic supplements.

Symbiotics

Symbiotic is the name given to products that contain both prebiotic and probiotic components. There are many such products in the marketplace, with individual brands varying widely in their specific prebiotic and probiotic composition.
Choosing Reinoculation Products

I realise that negotiating the minefield of the probiotic marketplace can be a little daunting. High quality probiotic supplements are not cheap, so making sure you get effective ones is important. Unfortunately, this can only really be done through trial and error. Here are some of the questions we have received about probiotics:

- At what point in my programme should I take probiotics?
- Do I need to take prebiotics as well as probiotics?
- Should I choose products in capsule, powder or liquid form?
- Which specific products should I take?
- What time of day should I take my probiotics or prebiotics?
- Should I take them with food or away from food?

As you might imagine, it’s very hard to answer these questions and provide a customised solution for you in this book. You are a special and unique individual with specific and highly individualised circumstances and needs. In an attempt to at least provide some guidelines for you, I have provided a general reinoculation protocol for you in Appendix IV. As always, it goes without saying that you are very welcome to arrange a consultation should you require individualised assistance.

Step Four – “Repair”

How To Repair Your Digestive System

Once you have removed bad bugs from your digestive system, you can enhance its healing by adding specific botanicals and nutrients that support “gut repair”. It’s important to realise that the removal of bad bugs, adding stomach acid and digestive enzyme supplements and using probiotics does not automatically heal your gut overnight.

Imagine you had a piece of glass or splinter in your finger. If you removed the offending item, would your finger heal immediately? Of course not! It takes time for your tissues to heal. Likewise, the removal of bad food, bad bugs and bad toxins from your digestive system is bound to leave some residual damage that needs time to heal.

In patients with gluten sensitivity, for example, it can take several years before the intestinal lining is fully rejuvenated. In my experience, the damage caused by bad bugs is not as serious as the damage caused by gluten. Nonetheless, it is still important to implement a repair phase in any anti-parasite and gut rejuvenation programme.

In my opinion, there is little point using fancy supplements to repair your gut if nutrition and lifestyle habits have not been addressed. Continuing to eat poor quality, pro-inflammatory foods that damage your digestive system whilst spending money on supplements to try and fix the damage is like trying to swim against a strong current.
Unfortunately, some people believe that taking supplements is more important than eating a healthy diet, getting plenty of rest and managing stress. This is not the case! My clients are often surprised when I inform them there is very little value in taking even the highest quality, most expensive supplements, if they are not prepared to alter their general lifestyle habits. Put simply, you don’t slide down the vitality scale because of a supplement deficiency; but you do slide down the scale due to poor nutrition and lifestyle choices.

Once foods have been optimised to the best of your ability and bad bug populations have been reduced or eliminated, it is prudent to consider using specific nutrients and herbs to augment a reduction in inflammation and to support the function of your digestive system’s tissues. These include:

- Zinc
- Vitamin C
- Vitamin Bs
- Foods rich in gelatin, or powdered gelatin/collagen
- L-glutamine
- N-acetyl cysteine
- Licorice root extract
- Slippery elm
- Gamma oryzanol
- Marshmallow extract
- MSM
- Aloe vera
- Ginger
- Peppermint
- Curcumin

There are many high quality products in the marketplace that fit the bill, and many lower quality products that don’t. Your individual requirements will dictate the products that are most appropriate in your case and your budget will obviously need to be considered in your decision making process. I have provided some general recommendations for the repair phase in Appendix IV.

**Step Five – “Re-Testing”**

**Is It Prudent To Re-Test After Steps 1-4?**

The fifth and final step in a sensible digestive rejuvenation programme is re-testing. In my seven years doing this work, I have been staggered by the number of clients who took treatment for *H. pylori*, parasites, *Candida* and so on, and were not informed by their doctor or practitioner about the importance of running a proper re-test to check whether their treatment had been successful.

I feel there is a little bit of arrogance in the medical system. Some doctors incorrectly assume that antibiotic or antifungal treatments are effective in every single case. But this is simply not true. Standard triple therapy treatment for *H. Pylori*, for example, is known to have a worldwide success rate of only 70 percent, meaning that three in ten people taking the antibiotics do not eradicate *H. pylori*.

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In my humble opinion it is pertinent to re-test in every case. Here’s why: Imagine, if you will, a situation in which you are diagnosed with a bad bug. Let’s just say the bug is *H. pylori*. Imagine you have 10,000 *H. pylori* bacteria in your system. In reality the numbers would be much higher, but let’s use 10,000 organisms for the purpose of this example.

You’re not sleeping well, you’re waking up with nausea and heartburn and you feel tired and grumpy all day. You take standard treatment for *H. pylori*, which involves popping two antibiotics and an antacid medication for 7-14 days. On completing your treatment, you feel as though your symptoms have improved by 80-90 percent and you’re pretty happy with that outcome.

Because your symptoms have improved so much, you and your doctor assume that the *H. pylori* must have been eradicated. But imagine this: your treatment was successful in zapping 9,000 of the 10,000 organisms. Zapping 90 percent of the bad bugs makes you feel a lot better, but you still have 1,000 bad bugs hanging around in your digestive system that might proliferate and cause problems in the future.

In this situation, if you don’t re-test using a highly sensitive *H. pylori* test and simply assume you’ve eradicated the bugs because your symptoms have improved, you run the risk of having a symptom relapse that needs testing and treating all over again further down the line. This is just one example in which a re-test done at the right time could save a lot of time and energy. It’s also important to realise that a comprehensive re-test might detect bad bugs that your initial test did not find. This can be a little confusing when it happens, but there’s a logical explanation. Recall that your intestine is much more than just a flat surface. It is extremely complex and delicate in its structure, with millions of tiny fingerlike projections called villi.

Between these villi lie troughs or valleys called *crypts*. Bad bugs can hide in these crypts, either in thick mucus plugs or biofilms. The bugs can remain hidden until intestinal inflammation is reduced through nutritional changes, optimal hydration and the removal of other bad bugs. When the intestinal lining heals, deeply buried bad bugs can suddenly be uncovered and begin causing problems. You don’t see them on the first stool test, but they show up several months later on a re-test. Cris’ story, below, highlights this perfectly:

Cris Ramis is a UK Hompes Method practitioner whose initial stool test back in 2008 revealed *H. pylori*. Cris followed my stomach cleanse protocol and sure enough, his re-test showed that *H. pylori* had been eradicated. Three months later Cris contacted me to report that he’d suddenly had a bout of stomach cramps and diarrhea. The symptoms came out of the blue and for no apparent reason. He hadn’t travelled, and his diet was impeccable. I suggested he run another stool test to check whether an “old” infection had been flushed out of his intestinal lining as it healed. The stool test found *Giardia*, a microscopic parasite, which clearly explained Cris’ sudden symptoms. Cris embarked on a general parasite cleanse, which resolved the situation once and for all. Even with a re-test, Cris still needed further work to counter the deeply buried *Giardia* infection as his intestinal lining healed.
Whether you do or do not re-test following treatment is ultimately your choice. I personally recommend re-testing because it removes guesswork and gives you peace of mind. Certain bad bugs like *H. pylori* can cause serious conditions if they are not managed appropriately and a lack of re-testing leaves you playing roulette with your health.

**Summary - What I’d Love You To Know About Re-Testing**

- Bad bug treatments are often wrongly assumed to carry a 100% success rate.
- Re-testing is not always done by doctors, which may cause problems.
- Treatment can bring symptomatic improvement, but may not completely eradicate bad bugs.
- Re-testing is important to check eradication success, especially in cases like *H. pylori* where the bugs can cause serious illnesses.
- Re-testing can help ensure you do not pass bad bugs to partners and household members.
- Re-testing can find bugs that were not present in the initial test.
- Re-testing brings peace of mind.
- You can use re-testing to check that your overall digestive health is improving during a rejuvenation programme.
- Running a re-test can save a lot of time, money and energy in the long run.
- The consequences of not re-testing include symptom relapse, additional testing and treatment required in the future, passing bad bugs to loved ones.

Please do not hesitate to contact us if you would like help with either an initial test or with your re-testing.

**Your “5R” Summary**

When dealing with digestive bugs, it is important to consider the bigger picture. What do I mean by this? I simply mean that killing the bad bugs might not be enough. It has been my experience that a combination of strategies is often needed to a) ensure proper bad bug eradication and b) to keep the bad bugs away once they have been zapped. Here is a reminder of the basic “5R” gut rejuvenation process:
1. **Remove** bad foods from your diet and zap bad bugs using herbs or pharmaceuticals.
2. **Restore** digestive function using the likes of bitters, betaine hydrochloride, digestive enzymes and liver/gallbladder support.
3. **Reinoculate** the good bugs using appropriate foods, prebiotics and/or probiotics.
4. **Repair** the gut lining using nutrients such as zinc, vitamin C and amino acids, or botanicals such as slippery elm, aloe vera and licorice root.
5. **Re-test** to ensure bad bugs have been eliminated and that your digestive function is improving.

Steps 1-4 and even the point at which you choose to re-test are not set in stone. There can be significant overlap, with each step merging with the others. For example, some doctors and practitioners use probiotics and digestive enzymes at the same time as prescribing pharmaceuticals or herbs to kill bad bugs. There isn’t really a right or wrong way to move through the process and your ideal path may differ from someone else’s. Figure 16, below, illustrates how each of the four main phases can overlap.

Figure 16 – The overlapping nature of our 4R approach to digestive rejuvenation. Step five (re-testing) can be done at any time based on your circumstances.

**Dealing With “Non-Digestive” Bugs**

Finding and ridding your body of digestive parasites is one thing, but what can you do about bad bugs living in other areas of your body? In chapter 7, I introduced some home testing options to help identify bad bugs in other areas of your body, including your blood, skin, oral cavity, sinuses and genitourinary tract.
If you take one of these tests and detect a bad bug, what steps can you take to make sure you successfully rid yourself of it? Again, your options are twofold: first, you can seek a prescription from a licensed physician. Alternatively you can work with nutrients and herbs that knock out bad bugs and strengthen your immune system. You can, of course, use both strategies.

It is very important to acknowledge and understand that chronic infections in any part of your body can cause local or global symptoms (or both):

- **Local symptoms** are experienced in the specific location where bad bugs are hiding out. For example, a fungal or bacterial skin infection will cause skin symptoms and a urinary tract infection will cause symptoms related to your kidneys, bladder, or urinary tract.

- **Global symptoms** are those showing up in seemingly unrelated areas of your body. They can be extremely vague, creating achiness, fatigue, mood, skin, sleep, cognitive and other chronic health challenges.

Tremendous crossover exists with global symptoms caused by bugs living in different body tissues and compartments. Low energy levels, low mood or anxiety, disrupted sleep, headaches and arthritic pains, for example, may be the result of bugs living in your gut, urinary tract, your blood, or even inside various cell types elsewhere in your body. This is why appropriate testing is so important!

It is not my intention to go into enormous detail on the specifics of each bad bug you might find hanging out in various body parts. Being perfectly honest, my experience in helping people with more complex symptom presentation patterns caused by oral infections, viruses and systemic bacteria is limited and is best left to licensed physicians who have access to the right assessment tools.

What I’d like to do, however, is use one specific illness/condition to illustrate just how chronic infectious diseases can be. The example I’d like to look at is Lyme disease, an illness that is rapidly increasing in its incidence and one that has the ability to create a wide range of systemic or “global” symptoms.

Joseph J. Burrascano, M.D., one of the world’s leading authorities on this topic, states that Lyme disease is fastest growing and prevalent vector-borne infections in the U.S., yet it is not well understood by western medicine and standard laboratory testing misses 50-90 percent of cases.13

The “Lyme” in Lyme disease refers to the towns of Lyme and Old Lyme, in Connecticut, where a number of cases were identified in 1975. Lyme disease can develop following a deer tick bite. You might say that the tick is nature’s “dirty needle”. The deer tick is a vector for *Borrelia burgdorferi*, the Lyme disease-causing bacterium. *Borrelia* can cause symptoms in many body systems:

- Fatigue, exercise intolerance, loss of stamina and weakness
- Cognitive dysfunction that can be severe (memory, mental tasks, etc.)
- Musculoskeletal pain
- Neurological pain
• Headaches
• Light and sound sensitivity
• Sleep disturbance
• Sexual dysfunction
• Variety of digestive disturbances
• Low-grade fevers and sweats

To highlight the importance of understanding Lyme disease, consider also the following quotes from Dietrich Klinghardt M.D., Ph.D., another renowned Lyme disease expert who has been working with the condition for more than forty years, having struggled with it himself:\(^{14}\)

“\textit{Lyme should be suspected in every child with autism and every adult with fatigue.}”

“\textit{Mothers are frequently silent carriers and will infect their unborn babies}”

“\textit{80 percent of autism is congenitally acquired Lyme with the typical co-infections and later the usual opportunistic infections.}”

“\textit{Lyme may be asymptomatic for years. Milder presentations of congenital Lyme are: ADD, learning disorders, dyslexia, pervasive developmental disorder, etc.}”

“\textit{Chronic infections overwhelm the intrinsic detox pathway and lead to secondary syndromes caused by accumulation of mercury, lead, phthalates, etc.}”

The reasons I’m teaching you this information are 1) to open up a new path of investigation should you be experiencing chronic illness and 2) to highlight the complexity of chronic infectious diseases. Pertaining to point 2, let’s make things even more complex!

I’ve had the privilege to learn from some of the world’s true experts in Lyme disease and they all say the same thing: \textit{Borrelia}, the true Lyme disease-causing organism, is almost always accompanied by coinfections. In other words, Lyme disease is rarely just Lyme disease alone. According to Dr. Burrascano:

- 66 percent of Lyme patients from Long Island, NY tested positive for the protozoan parasite \textit{Babesia}.
- In ticks collected from New Jersey, more harbour the bacterium \textit{Bartonella} than the classic Lyme bug, \textit{Borrelia}.
- Ticks collected from Connecticut were found to harbor \textit{Borrelia, Bartonella, Ehrlichia, Anaplasma}, West Nile Virus, nematode worms, and possibly XMRV (a virus).
- \textit{Candida} species, other \textit{Borrelia} species and flaviviruses have been documented.
- Patients with chronic Lyme disease are known to be co-infected with \textit{Mycoplasma}, \textit{Chlamydia}, Q-fever, \textit{Brucella} and have demonstrated activity of DNA viruses such as Epstein Barr, Human Herpes Virus-6, and Cytomegalovirus.
Although the term “Lyme disease” shelters under a single umbrella diagnosis according to western medicine, *Borrelia* and its coinfections can lead to symptom patterns with subtle differences.

**Classic Lyme (*Borrelia* bacterium):**
- Gradual onset of initial illness, no sweats, four-week cycles
- Multisystem, migratory, joint involvement, afternoon fevers
- Bb antibodies usually present, low CD-57 in tests
- Slow response to onset of antibiotics and slow relapse

**Bartonella (bacterium):**
- Gradual onset of initial illness, occasional light night sweats
- More central nervous system symptoms than skeletal symptoms
- Central nervous system irritability, digestive upset, sore soles (feet), subcutaneous nodules on arms and legs, morning fevers, swollen lymph glands
- Elevated VEGF in some people
- Rapid relapse of symptoms if treatment is ended too soon or if treatment not optimal

**Babesia (parasite):**
- Abrupt onset of initial illness, obvious sweats especially at night, cycles every few days
- Fatigue, global headaches, air hunger, cough, hyper-coagulable (responds to Heparin)
- Very severe Lyme symptoms and poor response of Lyme to otherwise appropriate treatment

**Ehrlichia/Anaplasma (both bacteria):**
- Rapid onset of initial illness, may be high fevers and a spotted rash
- Headaches (knife-like and behind eyes), sore muscles
- Low white blood cell count, elevated liver function markers

**Mycoplasma (bacteria):**
- Gradual onset, may be light sweats, symptoms are made worse with exercise
- Major fatigue and neurological dysfunction, metabolic disturbances, immune damage
- Found in the sickest and poorest-responding Lyme patients

Even a single umbrella diagnosis such as Lyme disease, which on first inspection seems simple enough, can be extremely complex. Coinfections and other idiosyncrasies make proper diagnosis and treatment extremely difficult. That’s the complexity of chronic infectious disease: different bad bugs can all cause similar symptoms!

If you, or anyone you know, have been diagnosed with an “atypical” form of the following conditions, I recommend you contact us so we can help you find a physician who is well versed in the diagnosis and treatment of complex chronic infectious disease:
• Chronic fatigue syndrome
• Fibromyalgia
• Parkinson’s disease
• Alzheimer’s disease
• Multiple sclerosis
• Gulf war syndrome

Sadly, western medicine doesn’t yet recognise Lyme disease and its coinfections to the degree it really ought to. Doctors try to treat symptoms rather than finding the underlying cause of a patient’s discomfort. Lynne’s story highlights medical ineptitude in this area of work.

Lynne contacted me because she had fallen ill having been bitten by a tick whilst walking in the English countryside. Lynne’s symptoms developed very soon after the bite, but despite this obvious association and the fact that her symptoms closely matched the Lyme symptom constellation, her doctor vehemently stated she did not have Lyme disease (no testing was performed, I might add). Lynne sought counsel from a medical doctor in Wales who acknowledges and understands Lyme disease. A test revealed that she did, indeed, have Lyme disease, although co-infections were not tested. Lynne’s symptoms began to improve once she started taking antibiotics. Via a comprehensive stool test, we identified that Lynne had a strong fungal overgrowth in her digestive system. I wasn’t able to help Lynne “treat” her Lyme disease per se, but upon fighting the fungal overgrowth and improving her digestive and immune function, Lynne experienced a significant improvement in her wellbeing.

Lynne’s story highlights the gaping hole in medical attitudes towards chronic infectious diseases. Without the help of a forward-thinking medical doctor in Wales, and the ability to use functional medicine to improve her digestive health, Lynne’s symptoms may not have improved at all. Dr. Burrascano refers to the situation as “Lyme denialism”, making the following bold statements:
• If organised medicine did not discover it, it does not exist
• If the test does not show it, it does not exist
• New illnesses become real only after years or decades of clinical trials
• But the medical system will not perform clinical trials on something that does not exist (so we have a catch-22 situation)

At Hompes Method, we do not, as a rule, work with people who have very complex conditions. We can, however, direct and refer you to people who do.

**Chronic Oral Infections**

I’m no dentist or jaw specialist, but ever since I studied with Paul Chek, I’ve researched oral, dental and jaw health in quite a lot of detail. It has become crystal clear to me that oral and dental health is of paramount importance in overall wellbeing. I consider oral health to be of such high importance that the first month of my online membership programme is dedicated to educating you how to maintain optimal oral and dental health.
Gingivitis and bleeding gums can be caused by nutritional deficiencies, especially B vitamins, vitamin C, zinc, iron and co-enzyme Q10. Most of the time, however, gum disease results from bacterial overgrowth in the oral cavity that is secondary to poor oral hygiene and too much “bad food”.

A good proportion of my clients have reported a white or yellow coating on their tongue, or even around their lips. This is a condition called oral thrush, or oral candidiasis, where Candida overgrows in the mouth. It can be very unpleasant indeed, causing soreness, dryness, a furry feeling in the mouth and worst of all, bad breath.

Gingivitis and gingivitis can be superficial and easy to deal with in some people. Basic steps to assist with the optimisation of oral health include:

- Reduction of sugar and processed carbohydrate intake
- Minimal or no soda and alcohol intake
- Avoidance of the bad foods listed in chapter 8
- A minimally processed, whole food diet
- Optimal sleep, which strengthens your immune system
- Daily flossing
- Vitamin C supplementation using a high quality supplement at doses of 2,000-5,000mg/day
- A high quality multi vitamin and mineral supplement, or a high quality B vitamin supplement
- Sodium bicarbonate mouthwash several times daily*
- Daily oil pulling using coconut oil*
- Homemade antimicrobial toothpaste*

[* These “recipes” are discussed in detail in my Hompes Method Basics 90-day online nutrition, lifestyle and health rejuvenation programme.]

Common oral conditions can be symptomatic of much deeper problems such as toxicity, malnutrition and deep oral or systemic infections. For example, I frequently see oral thrush and other Candida overgrowth symptoms improve when clients choose to have their metal amalgam fillings removed and replaced by other materials.

Cold sores are caused by the Herpes simplex virus, which has two strains. HSV-1 is thought to cause 90 percent cold sores and HSV-2 the other 10 percent. Cold sores may be triggered by a stressful event, overwork, over exercise, or trauma. Dietary triggers include arginine-rich foods such as chocolate, cashews or almonds. The use of arginine supplements has become popular in the natural treatment of high blood pressure and erectile dysfunction and its overuse may also trigger cold sores. Symptoms that accompany cold sores may include headaches, nausea, dizziness and painful ulcers.

It’s possible to counter the effects of cold sores using a natural approach. If caught early enough, you can stop cold sores breaking out using supplemental L-lysine. If you don’t catch them early enough, you can use L-lysine to reduce your symptoms. Month one of my online subscription programme provides details on
how to manage and prevent cold sores, and all the other common oral symptoms experienced so widely in society.

Mercury toxicity, root canals and cavitations present a different challenge altogether. A growing number of outspoken dentists such as Hal Huggins, Mark Breiner and David Kennedy have long understood and reported the adverse effects of poorly performed dental work and toxic dental substances. As long ago as the early 1900s, experts such as Weston A. Price began writing about the adverse health consequences of common dental procedures. Month one of my subscription service covers these topics in detail, so I will summarise them here due to a lack of space here:

- Mercury toxicity can mimic many symptoms and diseases
- Silver dental amalgams are major sources of mercury toxicity
- Mercury toxicity weakens immune, detoxification and hormonal function and increases susceptibility to acquiring infections
- Mercury toxicity appears to open the door to the accumulation of other chemicals and toxins
- Mercury is a potent neurotoxin and can cause and contribute to a raft of neurological symptoms
- Root canals and cavitations left behind after tooth extraction can become infected with anaerobic bacteria
- Infections may grow deep, affecting the jaw bone
- The bacteria can be extremely toxic
- Bacteria and their toxins may enter the bloodstream
- Once in general circulation, these substances may trigger global symptoms and even serious diseases, including heart disease

Holistic dentists, and even some conventionally trained dentists, are divided into two camps when it comes to the interactions between oral and systemic health. I learned a lot about the respective camps from Dr. Philip P. Hujoel at the University of Washington. According to Dr. Hujoel:

- One camp, the “Generalists”, asserts that the overall condition of the body dictates the health of the oral cavity – if the body is generally unhealthy, then so too will be the oral cavity.
- A second camp, the “Localists”, asserts that problems in the oral cavity spiral out of control and cause domino effects in the rest of the body.

I am no expert, but from my research I think both camps are correct and that each patient’s individual case needs to be carefully considered. In some cases, a local problem in the mouth will no doubt trigger a non-local, or even a systemic problem. In others, poor general health and vitality will reveal themselves in sub-optimal oral and dental health.

I’m sure you realise that dental toxicity and oral infections are complex challenges. It is important for you to consider them, however, as they are deal breakers for some people. In some folk, mercury toxicity from dental amalgams has the potential to override everything else and may need to be dealt with
before health and vitality improve. Careful attention from a fully qualified and experienced practitioner is required.

At Hompes Method, we do not tackle these cases – they are beyond our scope of expertise and practice. Nevertheless, if you suspect that deeper dental and oral imbalances are part of your symptom puzzle, please feel free to contact us so we can help you find the appropriate practitioner.

**Nasal Passage and Sinus Imbalances**

Your nasal passageway and sinuses are common locations for bacterial and fungal overgrowth. Symptoms of a chronic sinus imbalance may include:

- A chronically stuffy or runny nose
- Postnasal drop leading to a persistent and annoying cough
- Sneezing
- Facial pain around your cheeks, eyes and forehead
- Aching of the upper jaw and teeth
- Headaches
- Sore throat
- Fever
- Reduced sense of smell and taste
- Ear pain
- Nausea
- Bad breath
- Fatigue
- Irritability

Sinus problems can also cause seemingly unrelated symptoms such as fatigue and irritability. Also note that bad bugs are not always to blame! For example, I frequently observe improvements in nasal and sinus symptoms when folk avoid exposure to common allergens. Irritants and triggers for sinus symptoms include processed cow's milk, yeast, dust and pollen.

If a doctor suspects you have an infection in your nasal passageways or sinuses, he or she will usually examine your sinuses using a range of tools. A visual inspection will help rule out or confirm physical factors that might trigger sinus problems such as nasal polyps or other abnormalities. Other tools include:

- A nasal endoscopy during which a thin, flexible tube with a fiber-optic light inserted through your nose allows your doctor to visually inspect the inside of your sinuses.
- Imaging studies using computerised tomography (CT) or magnetic resonance imaging (MRI) can show details of your sinuses and nasal area. These may identify a deep inflammation or physical obstruction that's difficult to detect using an endoscope.

In cases where nasal and sinus symptoms fail to respond to treatment, doctors may request tissue cultures to help pinpoint specific bacteria or fungal overgrowth. Here, swab or biopsy samples are sent to the laboratory where they
are placed in a dish that favours microbial growth. Private laboratories offer these tests and may be helpful if you are struggling with chronic nasal or sinus symptoms.

A range of treatment options is available to combat nasal and sinus bugs. Of course, the optimal treatment for you will depend on your individual situation. Options include:

- Saline nasal irrigation
- Nasal corticosteroids
- Decongestants
- Over-the-counter pain relievers
- Antibiotics

Sprays and nasal irrigation products containing herbs and essential oils can be effective in helping with nasal and sinus fungal and bacterial overgrowth. A particular product called *SinuClenz* by a company called Physician’s Strength has been effective for several of my clients.

**Genitourinary Imbalances**

The genitourinary tract is a common stomping ground for bad bugs. Like digestive bugs, urinary tract bugs can cause obvious symptoms, including:

- A strong, persistent urge to urinate
- A burning sensation when urinating
- Passing frequent, small amounts of urine
- Urine that appears cloudy
- Urine that appears red, bright pink or cola-coloured — a sign of blood in the urine
- Strong-smelling urine

Symptoms that may or may not accompany the obvious bladder and urinary tract complaints include:

- Pelvic pain, in women
- Rectal pain, in men
- Upper back and side (flank) pain
- High fever
- Shaking and chills
- Nausea
- Vomiting
- Fatigue
- Irritability
- Rheumatoid arthritis
- Ankylosing spondylitis

Private laboratories are able to check for bad bugs in your genitourinary tract, so please contact us for a referral should you wish to explore that option. I have worked with a limited number of clients who were experiencing chronic urinary tract infections that had not been identified by physicians and we were able to detect bad bugs in most of these cases, even though the medical tests had not done so.
According to Alan Abringer MD, of Kings College, London, *E. coli* causes about 75 percent of all urinary tract infections. These infections typically affect the lower part of the genitourinary tract such as the bladder. *Proteus* bacteria account for approximately 15 percent and tend to affect the upper portion of the genitourinary system – the ureters and kidney. Other bacteria such as *Klebsiella*, *Staphylococcus*, *Enterococcus* and *Pseudomonas* comprise the remaining 10 percent.

While men and women both have bladders and ureters, male and female genitourinary tracts are obviously not the same. I don’t think we need a diagram to show the differences! Urinary tract infections are more common in women than men, especially the range of imbalances seen in vaginitis, or inflammation of the vagina.

As you saw earlier, we know there are at least 1,200 microbial species in the gut. The vaginal population is not quite as diverse, but the warm, moist vaginal environment still houses at least 50 different microbial species. These microbes can fall out of balance and cause much discomfort for women.

Tori Hudson, N.D. is a leading women’s health authority and has written an excellent book called *The Women’s Encyclopedia of Natural Medicine*, which is a very good resource. In her presentation titled *Vaginal Ecology - Foundations of Health and Integrative Treatments for Acute and Chronic Vaginitis*, Dr. Hudson discusses seven possible vaginitis classifications: 17

- Vulvovaginal candidiasis (yeast/fungal overgrowth with *Candida* species)
- Bacterial vaginosis (bacterial imbalances involving bugs such as *Gardnerella vaginalis*, *Mycoplasma hominis*, *Ureaplasma urealyticum*)
- *Trichomonas vaginalis* (a protozoan parasite)
- Atrophic vaginitis (where the vaginal wall thins)
- Desquamative inflammatory vaginitis
- *Mobiluncus* vaginitis (a type of bacterium)
- Lactobacillosis (where friendly *Lactobacillus* bacteria overgrow)

Just as bacteria, parasites and fungi can all cause overlapping digestive symptoms, so too can they cause overlapping symptoms in the vaginal tract. This can make it a little tricky to distinguish the precise reason for a given woman’s symptoms.

It is very important to understand the precise reason for the symptoms because the treatment for a *Candida*-related vaginal problem is completely different from a treatment for vaginal symptoms caused by *Lactobacillus* or *Gardnerella* overgrowth. Typical symptoms associated with vaginal microbial imbalances and infections include:

- Vulvar irritation
- Itching or burning
- Vaginal dryness
- Pain during sex
- Pain on urination
- Light bleeding or spotting
Vaginal discharge

The colour, consistency and odour of the discharge changes depending on the cause of the problem:

- **Candida**: thick white discharge
- **Bacterial overgrowth**: grayish-white and foul smelling
- **Trichomonas vaginalis** parasite: yellow-green and sometimes frothy discharge

Ladies, note that several factors can influence whether bad bugs set up home in your vagina. It is important to acknowledge these predisposing factors to assist with treatment and prevent future problems. Factors for consideration include:

- Number of sex partners (the more partners, the higher the risk)
- Reduced immune function resulting from stress, poor diet and lifestyle choices
- Changes in hormone status, especially at menopause where natural oestrogen levels decline
- Contraceptive pill use, which compromises your natural hormone balance
- Intrauterine device (hormone coil such as the Mirena coil)
- Nonoxynol-9 (spermicide)
- Antibiotics
- Steroid medications
- Vaginal sprays, douches and perfumed soaps products may irritate vulvar and vaginal tissues

If you are experiencing chronic symptoms in this area, it is prudent to ask yourself whether your doctor or specialist has run all the necessary tests to facilitate optimal treatment. The following list of tests is again taken from Dr. Hudson’s work:

- Abdominal / bi-manual examination
- Vaginal pH evaluation
- Saline and potassium hydroxide wet mounts
- Affirm VP III: Candida sp, BV, Trichomonas
- Genital culture: beta strep DNA probe or Group B Streptococcus culture for pregnant patients
- Yeast culture to identify different strains of Candida
- 17 test pap test by PCR – from a ThinPrep vial (this test looks at a whole range of vaginal markers, including sexually transmitted organisms/disorders, Trichomonas, yeast, bacteria, Chlamydia and viruses such as HPV, which is known to cause cervical cancer)

Please do not hesitate to contact us if you would like help with these tests. We will likely need to make a referral because these tests are only available through licensed physicians. Nevertheless, we can assist with a referral and arm you with knowledge on which tests to request. The removal of bad vaginal bugs can be achieved in different ways, including:
• Antibiotics such as Metronidazole, Clindamycin and Ampicillin
• Antifungal creams such as Butoconozole, Clotrimazole, Nystatin and Terconazole
• Oral antifungals such as Fluconazole
• Boric acid suppositories (one of Dr. Hudson’s inventions)
• Herbs such as berberine
• Garlic
• Tea tree oil
• Homeopathic remedies
• Probiotics

The appropriate strategy for a vaginal imbalance can only really be determined once the cause of a vaginal imbalance is known. Antibiotics or certain natural remedies might be completely ineffective, or even counter-productive if you have a vaginal *Candida* problem. Likewise, a boric acid suppository is not suitable for a bacterial problem.

Vaginal health challenges aside, other genitourinary problems such as bad bug overgrowth in the upper genitourinary tract may respond favourably to natural compounds such as:
• Cranberry
• D-mannose
• Uva ursi
• Hibiscus
• Horsetail extract

Successfully overcoming chronic or recurring bad bug problems in the genitourinary tract may require a process that’s not too dissimilar to the 5R’s of digestive rejuvenation. A strong and effective genitourinary rejuvenation plan will include a combination of the following steps:
• Remove/limit obstacles to cure (bad foods, bad bugs, bad toxins, stress, etc.)
• Decrease inflammation
• Improve vaginal immunity (critically important)
• Support systemic whole body immunity
• Restore gut ecology (genitourinary ecology often mirrors that of the gut)
• Restore optimal vaginal pH
• Restore optimal hormone balance (oestrogen and progesterone)

It is worth pointing out that the genitourinary ecosystem correlates with the gut ecosystem. Probiotics taken orally appear have a positive impact on the genitourinary ecosystem. As such, yoghurt and fermented foods, probiotic and prebiotic supplements can be used to improve genitourinary ecology. Rebalancing the genitourinary microbial population can be the deal-breaker in keeping bad bugs in check and preventing recurring problems.
Oestrogen creams and gels can improve hormone balance in the female genitourinary tract as well. These products can make the environment less hospitable to bad bugs. However, if you are a woman with vaginal symptoms and you are using chemical contraceptives, I suggest you speak with your doctor about whether the contraceptives might be an underlying reason for your vaginal troubles. Again, you are cordially invited to contact us if you would like assistance.

**Summary - What I’d Love You To Know About Treating Genitourinary Bugs**

- Parasite, fungal and bacterial imbalances in the genitourinary tract are relatively common.

- They can cause obvious symptoms or more subtle ones, including discharge, pain during sex and urination, cloudy urine, blood in the urine, frequent urination, itching and burning.

- As with digestion, the underlying health of the genitourinary tract plays a huge role in determining whether bad bugs have the opportunity to cause problems.

- Accurate diagnosis is the key to successfully rebalancing the genitourinary tract ecology.

- Removing the bad bugs alone may be lead to complete resolution of symptoms in some people, but in others it can only bring partial relief.

- Rejuvenating genitourinary tract health involves removing bad bugs, rebalancing good bugs and ensuring optimal immune system balance.

- Hormone balance is also very important in the vagina, being heavily influenced by nutrition, stress and chemical contraceptives.

- Probiotics, herbs and other natural protocols can be extremely effective as standalone solutions, or as adjuncts to medical treatment.
Blood-Borne Parasites

The Tropical and Exotic Bugs

When we enter the realm of blood-borne parasites, we begin to explore a truly vast area of medicine. It is so vast, in fact that I can only touch on the subject here. There are a heck of a lot of parasites, bacteria and viruses that hang out in the blood and cause problems. There are others that have the ability to leave the blood and enter your cells.

Let’s start with some of the blood-borne parasites you might collect if you happen to spend time in some of the more exotic parts of the world. These are the parasites that typically enter your body when you’re bitten by insects such as mosquitos and tsetse flies, or if you happen to bathe in infected waters:

- *Plasmodium* (malaria)
- *Trypanosoma* (sleeping sickness)
- *Schistosoma* (bilharzia or snail fever)
- *Onchocerca* (river blindness)
- *Loa* (eye worm)
- *Brugia* (elephantiasis)
- *Wuchereria* (elephantiasis)

Hundreds of millions of people are infected with these organisms and the disease burden in developing countries is enormous. I personally know several people who went to Africa and returned with malaria. My university teacher, Malcolm Greenwood, had malaria twice and a friend of mine acquired malaria when she was working as a volunteer. It is prudent to take great care when traveling to these exotic climes!

You will generally have an idea you’ve acquired an exotic microbe if your symptoms develop during or shortly after a trip to one of the world’s developing regions. If you are currently experiencing chronic symptoms of any kind, whether they are related to digestion, skin, energy, mood, aches and pains and so on, it’s helpful to grab a pen and paper so you can write a timeline of your travel itinerary and note whether there is a link between a particular trip and the onsets of your symptoms.

If you suspect your symptoms may be associated with an exotic bug, seek testing as soon as possible. Doctors can generally prescribe tests for the common exotic bugs, and if they don’t, you should be able to get an appointment at any number of tropical disease clinics.

Be aware that challenges exist with testing methods even at these specialised clinics. I’ve had many a conversation with clients and colleagues who became frustrated with a lack of diagnostic accuracy from these centres. Unfortunately, a degree of arrogance and closed-mindedness also persists in these institutions - “If the first test for a bad bug comes back negative, you don’t have it.”
In a particularly frustrating example, my colleague’s client received a positive test result for a specific worm parasite using a private laboratory in the U.S. She even collected specimens of the worms from the toilet bowl and preserved them in a glass jar.

Her UK doctor refused to prescribe treatment on the basis of a test conducted outside the medical system. In order to prescribe treatment, the doctor insisted the test be repeated at a specialist tropical medicine clinic in the U.K. The institution failed to detect the parasite using its own test and even when presented with the preserved worm specimens, they refused to confirm diagnosis.

This is not an isolated case, so I urge you to be aware of inaccuracies and skepticism among medics. Keep your mind and options open to other testing routes. If you suspect you may have acquired a blood-borne parasite while traveling, please do not hesitate to contact us - let us make the appropriate referral for you.

**Non-Tropical Blood-Borne Parasites**

The topic of blood-borne parasites is vast, especially when we expand the definition of parasite to include bacteria, viruses, molds and fungi. There are literally dozens, if not hundreds, of infectious agents that have the potential cause problems in your blood and cells.

We know these bugs exist, and we know they cause problems. There are some highly trained specialists in these areas of work – people who have gone to great lengths to study and learn about parasites. Alas, the medical system as whole doesn’t recognise the role of these chronic blood-borne infections in creating ill health. Lyme disease, which I introduced earlier, is a classic example.

I recently consumed information from a three-day symposium titled “The Challenges of Emerging Infections in the 21st Century.” Gathered at this symposium were some of the world’s leading experts in the field of bad bugs. Discussion topics included:

- *H. pylori*
- *Mycoplasma*
- Lyme disease and its coinfections
- Vaginal ecology
- Chronic infections and neurological disorders
- Chronic infections and arthritis
- The gut microbiome and its interactions with the human immune system
- Dental and oral infections
- Hepatitis B and C
- *Chlamydia*
- *Clostridium difficile*
- Chronic viral infections such as HPV, XMV
- Parasites that actually *improve* inflammatory bowel disorders like colitis
• Mold toxicity and biotoxins
• The role of chronic infections in children’s health
• The role of chronic infections in Gulf War Syndrome
• The pros and cons of different stool testing methods for detecting gut bugs
• A raft of different options for testing bacteria, viruses, parasites and so on
• The role of probiotics in improving health
• Different treatment options for various chronic infections
• The importance of improving the patient’s immune system as well as knocking out bad bugs

Despite its excellent and sometimes profound teachings, this symposium only scratched the surface of this vast topic. Nonetheless, nearly all the expert speakers touched on the following key points:

• First, virtually every speaker commented on the fact that chronic bad bug infestations are common.
• Second, most speakers acknowledged that the medical system is lagging far behind scientific research and fails to grasp the concept that chronic infections cause symptoms and major “unexplained” and “incurable” diseases.
• Third, speakers presented detailed information about testing methods that are not well known in standard medical care.
• Fourth, speakers presented overwhelming scientific evidence, case reports and decades of combined clinical experience to support the notion that chronic infections play a role in mysterious chronic illnesses.
• Fifth, speakers presented clinical cases where the treatment and eradication of bad bugs resulted in the complete reversal of complex and supposedly “incurable” diseases.
• Sixth, many experts presented their own proprietary treatment methods – techniques they have developed through clinical experience – to help patients overcome complex illnesses. These techniques incorporate various combinations of pharmaceutical, botanical, nutritional, environmental and emotional/spiritual treatments and coaching.
• Seventh, each speaker went to great lengths to express the importance of optimising the health of the patient as well as simply treating the bad bugs. In other words, consider the terrain as well as the germ.
• Eighth, the speakers stressed that it’s the interaction between bugs and humans that causes symptoms and disease, not merely the presence of the bug.

So let me ask: are you experiencing any of the chronic symptoms and diseases that are suspected by leading experts to have a microbial cause or component? Please look at the list, below. It is not exhaustive but we know for sure that microbes are important contributing factors in the following medically defined diseases:

• Chronic fatigue syndrome
• Fibromyalgia syndrome
• Rheumatoid arthritis
• Ankylosing spondylitis
• Chronic neurological diseases including Parkinson’s, Alzheimer’s, ALS and multiple sclerosis
• Childhood conditions such as ADD, ADHD
• Autism
• Inflammatory bowel diseases
• Heart disease
• Insulin resistance, metabolic syndrome and type II diabetes
• Various forms of cancer
• Autoimmune thyroid disorders such as Hashimoto’s and Grave’s diseases
• Chronic chemical sensitivity
• Liver disease
• Diseases of the urinary reproductive system

If you are struggling with any of these conditions, it is my hope that I’ve given you a new avenue of investigation to pursue. Pick up the phone and begin making enquiries to qualified practitioners about how they may be able to help you.

“Mish-Mash” Symptoms

You may not have an advanced clinical condition such as the ones listed above. Instead, you may just feel generally lethargic, listless, and low in vitality and just not yourself. There may be no obvious reason for these symptoms, and people – including doctors - might look at you as if it’s “all in your head.” Remember that any chronic infection has the potential to make you feel generally unwell. Think about how you feel when you have a common cold:

• Swollen glands
• Temperature or fever
• The sweats
• Feeling cold
• Tanked energy levels
• Headache
• Joint and muscle aches
• Shooting pains (neurological)
• Stuffy nose
• Cough
• Sneezing
• Sore throat
• Earache
• Skin rash
• Loss of appetite
• Nausea
• Vomiting
• Diarrhea
• Disrupted sleep
• No interest whatsoever in sex
Your immune system usually knocks out the virus and you’re generally feeling normal again within a few days. But imagine your immune system fighting bad bugs on a *chronic* basis. How would it feel to have a low level immune response dragging on every single day for months, years or even decades?

Well, that’s exactly what happens. We have a situation in which people are struggling with day-to-day life having been diagnosed with a “disorder”, “illness” or “disease” when, in fact, they are experiencing symptoms due to an ongoing immune response that itself has been triggered by an invading organism.

The immune system gets stuck in “fight” mode. It can’t quite get rid of the bad bugs completely, but it continues in its attempts to do so because it is designed to self-regulate and help the body move back into optimal balance. The consequences of the ongoing immune battle are chronic symptoms in the Seven Areas of Health.

The list of bad bugs implicated in this type of situation is lengthy and contains names that are hard to pronounce and that your doctor may not even be aware of. Here are some important names for your attention:

**Bacteria:**
- *Chlamydia*
- *Bordetella*
- *Staphylococcus* sp.
- *Mycoplasma*
- *Borrelia* (Lyme disease)
- *Bartonella*
- *Cyanobacteria*
- *Ehrlichia*

**Viruses:**
- Epstein barr virus (EBV)
- Human Papilloma virus (HPV)
- Cytomegalovirus (CMV)
- Hepatitis B and C
- Human Herpes virus (various HHV subtypes)
- HIV
- XMRV
- Parvovirus

**Parasites:**
- *Babesia*
- *Schistosomes*
- *Trichinella*
- *Varestrongylus klapowi*
Fungi:
- *Candida* species
- *Geotrichum*
- *Rhodotorula*
- *Cryptococcus*
- Several other yeast and fungal species that may overlap with molds (below)

Mold / Algae:
- *Aspergillus* sp.
- *Stachybotrys*
- *Trichoderma*
- *Wallemia*
- *Pfisteria*

This list is not exhaustive, nor does it include the digestive and genitourinary bugs discussed in this book.

**Confusing Symptom Clusters!**

You might think, “That’s all very well – why don’t we just find the bugs and be done with it?” If only it were that simple. The bugs listed above can cause the same or similar symptoms in different people and they can be tricky to find, not least because doctors are unaware of the problems these bugs can cause.

Bad bugs can cause fatigue, chronic pain, digestive problems, mood imbalances, cognitive and memory problems and other symptoms because they all evoke a very similar immune response, which involves inflammation and oxidative stress. Again, this highlights the enormous importance of working with a physician or practitioner who acknowledges the role of chronic infections in ill health and who truly understands how to help you safely manage and ultimately overcome these infections.

**Summary - What I’d Love You To Know About Treating “Global” Bugs**

- You can acquire blood borne or systemic parasites such as malaria when traveling to exotic countries
- Diagnosis will usually need to be made through a specialised tropical disease centre
- If your timeline show your symptoms developed after a trip abroad, you may want to seek testing
- A wide range of parasites, bacteria, fungi, mold and toxic substances can be acquired much closer to home
- They include Lyme disease and its coinfections, *Mycoplasma*, mold and a host of viruses

- A chronic immune response mounted against these invaders has the ability to cause mild, moderate or even severe symptoms

- Several complex and “untreatable” diseases appear to have a microbial component

- These include various cancers, cardiovascular disease, autism, chronic fatigue syndrome, fibromyalgia, rheumatoid arthritis, neurological diseases and learning/behavioural problems

- Most doctors don’t acknowledge the role of chronic infections in creating systemic symptoms and diseases

- Working with a physician or practitioner who acknowledges these associations, who can access appropriate tests and administer safe and effective treatment is key

**Summing Up and Conclusions**

Congratulations on making it through to the end – I truly appreciate the time and energy you have dedicated to consuming this information.

It is my deepest hope that you have learned a great deal from this book. I hope it has provided you with some “aha” moments, helping you put two and two together regarding your own health challenges, or those of your loved ones.

Chronic infections, whether in your gut, mouth, sinuses, genitourinary tract, blood, or any other part of your body, cause chronic symptoms. Your immune system mounts an ongoing response against these critters, creating inflammation and oxidative stress in the process. Science long ago uncovered the association between inflammation, oxidative stress and chronic disease. We now know, in fact, that these twin processes underpin virtually all symptoms and illnesses.

Your body's reaction to bad foods, bad bugs and bad toxins, and its struggle to cope with inadequate supplies of good foods, good bugs and good nutrients, causes you to descend the Vitality Scale. In the process, you develop symptoms in the Seven Areas of Health: digestion, sex and reproduction, energy, aches and pains, mood, sleep and skin.

In order to climb your personal Vitality Scale, it's prudent for you to consider rebalancing your Hompes Method Good Stuff and Bad Stuff Seesaw by removing bad foods, bad bugs and bad toxins from your body, whilst replacing them with good foods, good bugs and good nutrients.
Consider taking advantage of private laboratory testing to help you uncover why you’re not feeling well, alongside the tests administered by your regular doctor. Don’t underestimate the power of these tests in helping you piece together your unique, individual health jigsaw puzzle.

Imagine the peace of mind you will enjoy from finally knowing why you haven’t been feeling yourself all this time, and feel deep excitement at having the opportunity to work with practitioners who listen to you without judgment and fully understand your situation. Form a team with these skilled and willing practitioners. Let them hold your hand and guide you through your health rejuvenation process.

I recommend you don’t wait three years as I did before beginning your journey back to optimal health. In delaying my decision to run a consultation and stool test, I inadvertently added a significant amount of discomfort to my life!

I also recommend you do not subordinate to medical authority. If you are not happy with the service you are receiving from the medical system, don’t accept it. Demand tests. Demand a higher level of care.

In so doing, however, don’t burn bridges. Your doctor is your ally and wants to help. It is simply a lack of awareness through the pharmaceutically driven medical education model that prevents him or her from adding the value you crave.

Remember that nobody else on this planet is waking up with the express goal of rejuvenating your health. Nobody else can make decisions for you. If you feel unwell, make bold decisions. Don’t wait for approval from an outside authority. All the tools you need to begin your ascent up the Vitality Scale are right here waiting for you, and so are people like my practitioners and I.

Hompes Method has been designed to help you if you are struggling and frustrated with symptoms in the Seven Areas of Health:

- Digestion
- Reproduction
- Energy
- Aches and pains
- Mood
- Sleep
- Skin

By design, the first letter of each word spells out DREAMSS and we’re here and committed to helping you rejuvenate your body until you have the health of your dreams.
Appendix I – Tools To Help You Rejuvenate Your Health

1.1. Private Consultations

I’ve learned over the years that the fastest way for me to achieve my goals is to seek advice from people who have already achieved similar ones, and who possess expertise and experience in the specific areas I desire to master.

We all need a helping hand from time-to-time, and if you feel a frustrated and even a little lost regarding your state of health, we completely understand and empathise with you.

My dedicated team of Hompes Method practitioners and I would love to have an opportunity to hold your hand and guide you on your health rejuvenation journey.

If you would like to arrange a private consultation, we are able to meet you either in person at our London clinic here in the UK, or by phone or Skype. Please don’t worry if you live far away – more than half of all our clients over the years have worked with us internationally, and we’ve consulted people from 23 different countries. No matter where you are, we can help!

If you would like to see how we work, please click here:

If you would like to arrange a case review and 60min consultation, please chose the type of Consultation below:

- In person at our beautiful clinic in Knightsbridge, London
- By Phone or Skype with a Hompes Method Practitioner

1.2. Home Laboratory Testing

If you are in the same position as I was back in 2004 and 2007, you'll be experiencing daily symptoms in the Seven Areas of Health.

You might have some digestive symptoms; you may feel tired and lethargic with a mixture of anxiety and low moods, which may well be exacerbated by poor quality sleep. You might also be having headaches or muscle and joint pain on a regular basis. Your sex drive could be low, your menstrual cycle may be out of kilter and as a man, you might even a hard time with erections.

I personally had symptoms in six of the seven areas – the only area I didn't have trouble with is aches and pains. So I know how you feel! Thankfully, through the private labs you have learned about in this book, you have the ability to determine the precise reasons why your symptoms are occurring.
1.2.1. The Comprehensive Stool Test

Each and every one of the case histories you have read in this book, in which clients overcame adversity and a whole gamut of symptoms, ran a comprehensive stool test to begin their journey back to health.

Granted, providing a stool sample isn’t the most glamorous of ways to begin your health rejuvenation journey, but as God is my witness, it’s effective. A home stool test gives the ability to detect a whole host of possible imbalances in your digestive system. A comprehensive stool test can look at:

Bad bugs:
- *H. pylori*
- *C. difficile*
- *Salmonella*
- *Yersinia*
- *Shigella*
- *Campylobacter*
- *Vibrio*
- *E. coli*
- *Giardia*
- *Cryptosporidium*
- *Blastocystis hominis*
- *Entameba histolytica*
- *Candida*
- *Worms*
- *Viruses*

Good bug levels:
- *Bacteroides*
- *Bifidobacteria*
- *Lactobacillus*
- *Prevotella*
- *Fusobacteria*

Digestive capacity:
- Pancreatic enzymes
- Undigested plant fibres
- Undigested protein
- Undigested fat

Immune function and inflammation:
- Secretory IgA (front line immune soldiers in both your gut and respiratory tract)
- Anti-gliadin IgA (gluten sensitivity marker)
- Lactoferrin
- White blood cells
- Calprotectin
Digestive damage:
- Columnar epithelial cells
- Squamous epithelial cells
- Red blood cells
- Occult blood

Antibiotic sensitivity and resistance:
- *H. pylori* sensitivity to Clarithromycin
- General antibiotic sensitivity

**Why do our clients love this test?**

The stool tests are so easy to do - they sent to your home in small packages. You provide a stool specimen in the comfort of your own home and mail it back to the lab. It couldn’t be simpler.

Your test report is sent to you within a week to ten days of the lab receiving your sample. Upon receipt of your result, we schedule a follow-up consultation to help you make sense of the information and assist you in plotting a course of action to address the findings.

The comprehensive stool test has helped more of my clients make sense of their symptoms, sometimes after years or even decades of struggle, than any other tool in my functional medicine toolkit. It’s my #1 recommendation for people who have ongoing digestive symptoms, or unexplained symptoms in the other six areas of health.

[Check out our current tests](#)

**1.2.2. The “*H. Pylori Eradication*” Stool Test**

This is a great test if you want to check solely for *H. pylori*, or if you’re looking to re-test after taking *H. pylori* treatment. It does not look at other digestive factors.

The test procedure is exactly the same as for the comprehensive stool test and the laboratory assesses for *H. pylori* itself, *H. pylori* CagA strain, VacA strain and clarithromycin resistance.

[Click here for details](#)

**1.2.3. The Organic Acids Urine Test**

Using a simple urine sample that is collected in the comfort of your own home, private laboratories are able to assess for a range of compounds that provide information about your digestive health.

Because the intestine is some 25-30 feet long, sometimes a stool test can miss bad bugs that are living higher up in the small intestine. The organic acids urine
test helps to identify the imbalances that a stool test may not find, including small intestinal bacterial overgrowth.

The digestive health markers can be run as a standalone test, or they can be included in a comprehensive test that also measures other possible imbalances, including:

- Liver function – is your liver overwhelmed by toxins and struggling to detoxify your body?
- Cellular energy production – do you have enough nutrients to make energy in your cells?
- Neurotransmitter balance – heavily related to digestion, do you have enough serotonin and dopamine?
- B-vitamin status – are your B-vitamin levels optimal, or do you have deficiencies in nutrients such as folic acid and vitamins B6 and B12?
- Oxidative stress and antioxidant status – is your body inflamed or under oxidative stress, and do you require additional antioxidants such as vitamins C and E?

Some of my clients like to run the comprehensive test, especially when they have a wide range of symptoms. Others, whose symptoms may be limited to the digestive system, prefer to save a little money and assess the eleven digestive markers only.

Please contact us for details on how to run an organic acids test: Info@hompesmethod.com

"Do It Yourself" and Digital Education Products

If, like me, you are the kind of person who likes to do a lot of reading, watching and listening, my books, e-books and DVDs may be of interest.

1.2.4. The H. Pylori Diet

The H. Pylori Diet explores the topic of H. pylori infection in great detail, whilst providing a foundational eating and lifestyle plan that can be used to help ease digestive symptoms and improve the efficacy of H. pylori eradication treatments.

Whilst the book is called The H. Pylori Diet I use the same recommendations on diet, nutrition and lifestyle when my clients have parasites and other bad bugs living in their digestive system.

If you are looking for a very simple and inexpensive programme, and you don’t mind following the programme from a book, The H. Pylori Diet is a very neat little resource and should be of great help to you.

Learn more by getting your copy now
1.2.5. H. Pylori: From Heartburn To Heart Attacks

When I researched *The H. Pylori Diet*, I came across a wealth of information associating *H. pylori* with cardiovascular diseases such as high blood pressure, high cholesterol, insulin resistance and diabetes, angina, heart attacks and strokes.

As I delved deeper into the scientific literature, I uncovered some startling facts about cardiovascular disease that the medical system is not sharing with you. For example, a simple vitamin C deficiency may be the real underlying cause of heart disease!

The book details all the possible cardiovascular disease causes I could find, and presents some ultra-simple strategies to help you and your family minimize your risk of developing problems in the future.

Learn more by getting your copy

1.2.6. Hompes Method Basics Online Health Rejuvenation Plan

If you would like to do some “DIY” health rejuvenation from the comfort of your own home, but you want something a little more structured and details, Hompes Method Basics may be just for you.

This 90-days online programme takes you through the exact same step-by-step process I have used with my private clients, at a fraction of the cost.

It teaches you what took me more than a decade of trial and error, plus more than $25,000 in course tuition, consulting fees and other educational costs to figure out.

Hompes Method Basics gives you "Virtual Living Room Access" to me – Dave Hompes – for 90-Days.

I guide you week-by-week through a process of gradually optimising your nutrition and lifestyle to help you feel and look a million dollars.

It is my way of providing a “virtual consulting service” at a much lower cost than our one-to-one individualised coaching programs.

I created Hompes Method Basics for two main reasons:

- First, we received a lot of feedback from people who’ve read my books and commented that there’s just too much info to absorb and apply. I want to make the information easier to follow and implement for you.
- Second, many people commented that a personalised 90-day consulting plan with myself or one of my practitioners sounded fantastic, but was out of reach financially. I want to bring all my expertise into your living room in a more efficient and cost-effective way for you.
Hompes Method Basics bridges the gap between my books and consulting packages and provides a unique programme that’s quite unlike any other.

Hompes Method Basics is designed to be a 90-day (13-week) program, but please read right to the bottom of this letter to learn about a very special offer I have waiting for you.

- It’s delivered exclusively online via a secure member’s website.
- Lessons are delivered to you weekly so you don’t feel overwhelmed.
- Each lesson is delivered by one or more short narrated videos.
- Each lesson can be downloaded as an MP3 audio file so you can listen to the materials at your leisure (iPod, in your car, etc.)
- Each lesson PDF can be downloaded so you can file away and read at your leisure.
- You are provided with a wealth of resources to make implementation of the programme easy and stress-free.

The programme schedule runs in the following way:

**Week 1** – Optimising your morning routine, breakfast and morning snack
**Week 2** – Optimising lunch and afternoon snacks (including busy lifestyles!)
**Week 3** – Optimising dinner and evening snacks (including busy lifestyles!)
**Week 4** – Why protein is important and how to ensure you’re eating enough
**Week 5** – Why fats & oils are important and how to choose the right ones
**Week 6** – Why carbohydrates are important and how to choose the best ones
**Week 7** – How to ensure you eat adequate amounts of vitamins and minerals

*Please note that weeks 4, 5 and 6 include information on where to obtain proteins, fats, carbohydrates, vitamins and minerals, what functions they perform in your body, and which ones are dangerous to your health.

**Week 8** – The perils of gluten & grains, how to avoid them & what to eat instead
**Week 9** – Why polyunsaturated oils & some green veggies can be bad news
**Week 10** – Why cow’s milk is the No.1 allergy food & how to deal with it
**Week 11** – How soy damages your metabolism & why I recommend you avoid it
**Week 12** – Why I recommend you avoid artificial sweeteners at all costs
**Week 13** – How alcohol affects your body and why I recommend it’s minimised

[Click here](#) to learn more about this unique and powerful health rejuvenation plan:
Appendix II – A list of Common Bad Bugs & Their Symptoms

Here is a list of the most frequently detected parasites along with their main transmission routes, and the symptoms they tend to cause.

Protozoan Parasites of the Digestive Tract

*Blastocystis hominis*

*B. hominis* is the most frequently detected protozoan parasite. It is the one I had living in my intestine alongside *H. pylori*.

Typical symptoms are bloating, gas, loose stools, gurgling stomach, resembling irritable bowel syndrome

Digestive symptoms can be very severe, with chronic mucus-filled diarrhea.

Fatigue and joint pain are also relatively common.

*Giardia duodenalis / lamblia*

Typical acute symptoms are nausea, explosive diarrhea, stomach cramps and sometimes a fever.

Chronic digestive symptoms resemble “IBS” and include nausea, feeling sick, bloating, loose stools and abdominal discomfort.

Stools can appear greasy and float in the toilet bowl.

Lactose and gluten intolerance are frequently seen in *Giardia* infections.

*Giardia* is associated with chronic fatigue, changes in appetite, skin problems, reactive arthritis and depressed mood.

*Cryptosporidium parvum*

Acute symptoms include nausea, sickness, abdominal pain and diarrhoea.

Chronic symptoms resemble irritable bowels and can include abdominal pain, loose stools or constipation, nausea, loss of appetite, gargling tummy, and excessive gas.

Chronic symptoms can be cyclical – usually a 7-day cycle.
Entameba histolytica

Typical acute symptoms include explosive diarrhea, nausea, vomiting and abdominal pain as well as fever.

This organism is the cause of amebic dysentery, also known in Central and South America as "Montezuma’s Revenge".

It can migrate into the liver ducts and form abscesses, causing pain and discomfort in the right upper quadrant of the torso.

Chronic symptoms may be mistaken for irritable bowel syndrome.

Entameba dispar

This organism is very similar to Entameba histolytica, but does not cause symptoms.

Dientamoeba fragilis

There is some disagreement about whether Dientamoeba fragilis is a serious threat to human health. The scientific literature certainly supports Dientamoeba fragilis as a causative factor in digestive symptoms, as does my clinical experience.

Typical symptoms from Dientamoeba fragilis include bloating, gas, loose stools, diarrhea, abdominal tenderness, pain, cramping, fatigue, nausea, weight loss or gain.

D. fragilis has been isolated from surgically removed appendices (after appendicitis), suggesting that the infection may be a cause of this problem.

Authors have also noted that pinworm is often present alongside D. fragilis and has also been found in the appendix.

Endolimax nana

Most doctors are not aware of this parasite, and those who are tend to pass it off as being relatively harmless.

Clinical experience suggests, however, that irritable bowel type symptoms improve or resolve when this parasite is eradicated.

Some patients also experience improvements in energy levels and chronic joint pain when E. nana is successfully treated.
**Trichomonas vaginalis**

I have seen this parasite in stool test results, but it typically inhabits the genitourinary tract.

It lives in the vagina and urinary tract of females and the prostate, seminal vesicles and urinary tract of males.

Typical symptoms include burning, itching, chafing of the vagina and vaginal discharge, as well as frequent and painful urination.

*T. vaginalis* can also inflame the bladder in men and women and the prostate gland in men.

**Cyclospora & Isospora**

Typical acute symptoms are diarrhea, abdominal pain, vomiting and fever.

Chronic symptoms can resemble irritable bowel syndrome.

These parasite invade and destroy the surface layer of the intestine, causing significant damage in some cases.

**Balantidium coli**

This parasite infects the large intestine and causes typical diarrhea, and abdominal cramping symptoms. It is common in the Philippines.

**Chilomastix mesnili**

Typically considered harmless, this parasite may cause mild digestive symptoms in some people, and is often found alongside other parasites.

**Toxoplasma gondii**

*Toxoplasma* is an intracellular parasite that is often carried without any symptoms. It is very common and highly contagious.

When it does cause symptoms, they tend to be vague. As such, it is hard to pin the blame on *Toxoplasma*.

Symptoms include flu-like symptoms, headache, swollen lymph glands, low blood sugar, rashes, anemia, swollen spleen and fatigue. The liver, brain, heart and eyes can all be damaged.

The parasite can cause problems for the unborn foetus as it is able to cross from mother to baby causing brain and spinal cord swelling, eye infection and water on the brain.
According to Hanna Kroeger in *Parasites – The Enemy Within* - almost all house cats have been found to pass *Toxoplasma* cysts.

**Worms of the Digestive Tract**

**Tapeworms**

In addition to causing vague digestive symptoms, tapeworms can create problems with blood sugar, energy levels, liver problems (e.g. jaundice) and water retention.

All worms have to poop, so they can be quite toxic. Infestation can also lead to vitamin deficiencies, especially B12 and folic acid. Deficiencies in these nutrients can lead to neurological symptoms and fatigue.

Cravings, allergies, asthma, hunger pains and nausea may also be experienced during tapeworm infestation.

The larvae of certain tapeworm species can escape into the bloodstream and cause cysts in far off reaches of the body, including the muscles, heart, eye, liver and spine.

In a small number of cases, people may experience headaches, blindness, paralysis and epilepsy!

**Threadworm (*Strongyloides*)**

This tiny worm lives in the upper small intestine and buries into the intestinal lining.

It can cause symptoms such as abdominal pain and tenderness, nausea, bloating, persistent or intermittent diarrhea, nutrient deficiencies, anemia, blood and mucus in stools.

Because they enter the body through the skin, worm larvae can cause skin rashes or lesions where the larvae penetrate the skin (buttocks, trunk, groin, neck, thighs are common sites).

As the worm larvae migrate to the lungs, they can also cause a persistent, dry cough.

**Hookworm (*Necator americanus and Ancylostoma duodenalis*)**

Adult worms cause symptoms by attaching to the intestine.

They cause bleeding and enteropathy (degradation of the intestinal lining).

Hookworm infections are known to cause abdominal pain, nausea, anorexia,
constipation and diarrhea.

The intestinal damage caused by hookworm can create many symptoms outside the digestive tract, including, fatigue, mood & cognitive problems and sleep issues.

On page 571 of *Principles & Practice of Clinical Parasitology*, Dr. Stephen Gillespie states that:

“Like other intestinal nematode (worm) infections, hookworm infection is associated with intellectual impairment and improvement in cognitive function has been associated with effective treatment…”

**Whipworm (*Trichuris trichiura*)**

The severity of symptoms caused by whipworm seems to be dependent on the number of worms living in the intestine.

Heavy infections are associated with dysentery, chronic diarrhoea, anaemia and growth retardation in children. Mucus and blood may be found in the stools.

Studies have shown that patients with *Trichuris* infections have a protein-losing enteropathy. In plain English it means that the intestinal lining is eroded.

This occurs because the worms degrade the delicate mucosal lining in the intestine, which can lead to so-called *leaky gut syndrome* where undigested food particles and other compounds can leak from the gut into the bloodstream.

This leakage can set off a myriad of allergic symptoms, including food allergies, headaches, skin symptoms, fatigue and sleep, mood / cognitive problems.

Growth retardation is a significant problem for children who have whipworm. Children with infections have been reported to have a reduction in height of approximately 70 per cent.

**Roundworm (*Ascaris lubricoides*)**

*Ascaris* is a very common worm parasite. It can cause abdominal pain, bloating, diarrhea, constipation and other digestive symptoms.

Ascaris can also cause fatigue, allergies, weight loss and blood sugar imbalances that affect mood, cognitive function and sleep.

Severe infections can cause intestinal blockages, most often in children. In rare cases, this worm can migrate and cause eye infections and lung infections.
**Pinworm (Enterobius vermicularis)**

Many pinworm infections are asymptomatic (i.e. they do not really cause symptoms).

Anal itching is a common symptom. It tends to be worse at night or in the morning and may be so severe that it causes restlessness and insomnia.

Scientists have suggested that because pinworm can live in the appendix, infection may cause acute appendicitis. It is thought that the presence of worms in the appendix could cause inflammation that causes true appendicitis.

Pinworm has also been associated with vague abdominal pain, vaginitis, post-menopausal bleeding, incontinence and urinary tract infections.

Heavily infected children may develop insomnia, nervousness, poor concentration and emotional disturbances. These symptoms may also occur in adults with heavy infections, but the research is scarce.

**Toxocara**

This worm lives predominantly in cat and dog intestines, but it can also infect humans. The worms can end up in other organs where they have the potential to cause a multitude of problems.

Symptoms can include fever, joint pains, muscle pain, vomiting, liver and lung problems, rashes and even convulsions.

**Dog Heartworm (Dirofilaria immitis)**

A tiny blood and tissue dwelling parasite that's common in dogs and other mammals, heartworm can cause chest pain and coughing. In serious cases, it may cause blood vessel blockages.

I have not seen a case of heartworm in my practice.

**Trichinella spiralis**

Another tiny roundworm, *Trichinella* can cause many common digestive symptoms, including abdominal pain, diarrhea and fever.

Larval worms can migrate in the blood causing pneumonia, encephalitis, brain and eye damage. Worms can also be found in the face, throat and jaw.

Larvae ultimately settle in muscle tissue, where they can cause intense pain. They can also settle in heart muscle.

I have not seen a case of *Trichinella* in my practice.
**Flukes (flatworms)**

Flukes look like flat slugs and have two little suckers to help them attach to their preferred tissue.

They include blood flukes, liver flukes, lung flukes and intestinal flukes. Depending on the specific type of fluke, symptoms can include liver swelling, right sided pain, and general malaise from toxins produced by the worms, chronic cold and flu-like symptoms, allergies and fatigue.

The late Hulda Regehr Clark N.D. controversially asserted that the liver fluke *Fasciolopsis buskii* causes many cancers. I am not sure about this, but some of the flukes are known to cause cancer, including the South East Asian liver fluke, *Opisthorchis viverrini* and the blood fluke *Schistosoma haematobium*.

**Candida**

*Candida* and other fungi like *Cryptococcus* and *Geotrichum*, can cause many symptoms, many of which cross over with those caused by parasites.

Digestive complaints, oral thrush (white coating on tongue), vaginitis, dandruff, skin rashes and boils, athlete’s foot, jock itch and fungal toenails are common.

Fungal overgrowth can lead to allergies, food sensitivities, fatigue, mood and sleep disruption and other common complaints.

In people with severe immune dysfunction, such as AIDS or other diseases, fungal organisms can completely overrun the body, ultimately being the cause of death.

**Bacteria, Viruses and Other Organisms**

As you have seen throughout this book, bacteria can infect or overgrow in the oral cavity, digestive tract and genitourinary tract. They can also infect the skin. They have the ability, therefore, to cause an enormous range of symptoms.

The digestive bacteria – *C. difficile*, *H. pylori*, *E. coli*, *Campylobacter*, *Vibrio* and *Salmonella*, etc. all have the ability to cause chronic digestive symptoms, whilst creating allergies, reducing energy levels, triggering chronic pain and possibly skin problems.

Genitourinary bacterial infections can create painful and frequent urination, cloudy urine, coloured and foul-smelling discharge, bladder and prostate problems. They can also lead to general symptoms of malaise, as well as muscle and joint problems.
Oral infections can cause gum soreness and bleeding, a sore tongue, sores on the lips and in the corners of the mouth. They may also cause bad breath. Some experts believe that bacterial infections present in root canals and cavitations can cause serious diseases such as multiple sclerosis and heart disease.

Finally, chronic systemic infections such as Lyme disease and its co-infections, Mycoplasma and viruses like Epstein Barr, Herpes viruses, Cytomegaloviruses have been implicated in a vast array of neurological conditions, chronic fatigue and even autism and Gulf War Syndrome.
Appendix III – Generic Protocols For Digestive Rejuvenation

In this section of the appendix, I have provided some basic generic protocols to help you improve your digestive function. The protocols would generally be used in the following way:

1. General Parasite Cleanse (Remove): days 1-30
2. General Yeast Cleanse (Remove): days 31-60
3. General Digestive Support Protocol (Restore): days 61-90 (can be used concomitantly with 1 and 2)
4. General Probiotic Protocol (Reinoculate): days 91-150 (can be used concomitantly with 1, 2 and 3)
5. General Digestive Repair and Immune Support (Repair): days 91-150

If you’re in any doubt whatsoever about how to use these protocols according to your own individual circumstances, please do not hesitate to schedule a case review and 60min private consultation.

In person (Knightsbridge, London):

By phone or skype
GENERAL PARASITE CLEANSE (Step One – REMOVE)

With your doctor’s consent, use the following protocol.

Please contact [name of practitioner] should you have any queries about the protocol.

Please contact [name of practitioner] immediately should you experience any symptoms or side effects when introducing these products.

<table>
<thead>
<tr>
<th>General Parasite Cleanse (30-Days)</th>
<th>On Rising</th>
<th>With Breakfast</th>
<th>Mid Morning</th>
<th>With Lunch</th>
<th>Mid Afternoon</th>
<th>With Dinner</th>
<th>Before Bed</th>
<th>Supplier/Notes</th>
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<tr>
<td>GI Microb-X (2)</td>
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<td>Biocidin (2) * Excellent for Blastocystis</td>
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<td>Optional Liver / Gallbladder Support</td>
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<td>Support Liver or Liver Nutrients</td>
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</table>

Supplements can be taken with or without food. General consensus is that they are more effective taken without food, but if you are sensitive to the herbs, taking them with food can be helpful. Always take with plenty of clean/pure water.

Introducing supplements one by one, leaving 2-3 days in between introductions can reduce adverse effects and also helps determine whether a product is actually causing a side effect. Medications are available on prescription. In some cases these may be indicated under the supervision of a licensed health care practitioner. However be aware that prescription medications may make symptoms worse under some circumstances by not working, causing side effects or encouraging yeast and fungal overgrowth.

Contraindications:
GENERAL YEAST CLEANSE (Step One – REMOVE)

With your doctor’s consent, use the following protocol.

Please contact [name of practitioner] should you have any queries about the protocol.

Please contact [name of practitioner] immediately should you experience any symptoms or side effects when introducing these products.

<table>
<thead>
<tr>
<th>General Yeast Cleanse (30-Days)</th>
<th>On Rising</th>
<th>With Breakfast</th>
<th>Mid Morning</th>
<th>With Lunch</th>
<th>Mid Afternoon</th>
<th>With Dinner</th>
<th>Before Bed</th>
<th>Supplier/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lauricidin (2)</td>
<td></td>
<td>¼ tsp</td>
<td>¼ tsp</td>
<td>¼ tsp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orthoflora Yeast Support (2)</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanalbit (1)</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liver Support:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support Liver</td>
<td>1-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(titrate dose from 1 up to 3 caps)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Supplements can be taken with or without food. General consensus is that they are more effective taken without food, but if you are sensitive to the herbs, taking them with food can be helpful. Always take with plenty of clean/pure water. Introducing supplements one by one, leaving 2-3 days in between introductions can reduce adverse effects and also helps determine whether a product is actually causing a side effect. Medications are available on prescription. In some cases these may be indicated under the supervision of a licensed health care practitioner. However be aware that prescription medications may make symptoms worse under some circumstances by not working, causing side effects or encouraging yeast and fungal overgrowth.

Contraindications:
GENERAL DIGESTIVE SUPPORT (Step Two – RESTORE)

With your doctor’s consent, use the following protocol.

Please contact [name of practitioner] should you have any queries about the protocol.

Please contact [name of practitioner] immediately should you experience any symptoms or side effects.

<table>
<thead>
<tr>
<th>General Digestive Support (90-Days)</th>
<th>On Rising</th>
<th>With Breakfast</th>
<th>Mid Morning</th>
<th>With Lunch</th>
<th>Mid Afternoon</th>
<th>With Dinner</th>
<th>Before Bed</th>
<th>Supplier/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swedish Bitters *</td>
<td>1tsp 15min b4 meal</td>
<td>1tsp 15min b4 meal</td>
<td>1tsp 15min b4 meal</td>
<td>1tsp 15min b4 meal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(*Swedish Bitters can be replaced by Wasatch Bitters)

Do NOT use Betaine HCl supplementation if H. pylori is present.

NOTES:
Ideally, a Gastro-Test should be performed to ascertain stomach acid levels. This will guide therapy and enable it to be fine tuned to you as an individual. Ask your practitioner for details on how to do this.

Do a zinc tally test (or hair mineral / blood nutrient element tests) to check for zinc status; if zinc is deemed low, add 50-75mg zinc (away from all other mineral supplements, with a meal). Zinc is needed for stomach acid production. Vitamin B6 is needed for the absorption of zinc, and should also be considered either sublingually or in a high-quality B-Complex supplement. B6 status can be checked with the urine Organic Acids test).

It can take a long time to restore stomach acid production. Allow a minimum of 6 months to repair stomach lining following H. pylori, re-establish zinc, B6 and stomach acid levels, etc.
GENERAL PROBIOTIC REINOCULATION (Step Three – REINOCULATE)

With your doctor’s consent, use the following protocol.

Please contact [name of practitioner] should you have any queries about the protocol.

Please contact [name of practitioner] immediately should you experience any symptoms or side effects when introducing these products.

<table>
<thead>
<tr>
<th>Probiotic Replacement</th>
<th>On Rising</th>
<th>With Breakfast</th>
<th>Mid Morning</th>
<th>With Lunch</th>
<th>Mid Afternoon</th>
<th>With Dinner</th>
<th>Before Bed</th>
<th>Supplier/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one from:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Formula CP-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>See Guidelines Below</td>
</tr>
<tr>
<td>(kids over 3 can use - dosing)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>See Guidelines Below</td>
</tr>
<tr>
<td>11-Strain Probiotic Powder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>See Guidelines Below</td>
</tr>
<tr>
<td>Pro-Biota 12</td>
<td>1-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1-2</td>
</tr>
<tr>
<td>Complete Probiotics (Mercola)</td>
<td>1-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1-2</td>
</tr>
<tr>
<td>Prebiotics: Inupower</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If using an antimicrobial programme, take probiotics 4 hours away from herbs or antibiotics.

Dosing Guidelines for Custom Probiotics Products:

**Adult Formula CP-1**
Start with one capsule (60 Billion cfu’s) first thing in the morning (30 minutes prior to eating) and one capsule at bedtime with a full glass of water. Continue this dosage for three days. After three days raise the dosage to two capsules first thing in the morning and two at bedtime, if need be. Continue for 3 days. If you are not getting the expected results, raise the dosage to three capsules first thing in the morning and three at bedtime. Remain at the dosage that works best for you.

**11-Strain Probiotic Powder**
Start with one adult scoop (0.8 gram, 200 billion cfu’s) of the probiotic powder first thing in the morning on an empty stomach (30 minutes prior to eating). Dissolve the powder in a glass of dechlorinated water and drink it. Do this ONCE a day only. Stay at this dosage for about 3-5 days.
If you are not happy with the results, raise the dosage to two scoops a day, one in the morning and one at bedtime. After one week go to three scoops a day if you still are not getting the expected results. The highest dosage we recommend is four adult scoops a day. You can always lower the dosage or stop taking probiotics for a few days.

*NOTE: Every digestive system is different and unique like a fingerprint. You need to find the dosage that best suits YOU. It may be one, two, four or six capsules per day. This gradual increase is a good way to find your optimum personal dosage.*
Children’s Dosing (over 3 years – use Infant Formula for toddlers and infants <3 yrs)
Start with one baby scoop (0.1 gram, 25 billion cfu’s) of the probiotic powder first thing in the morning on an empty stomach. Dissolve the powder in a glass of de-chlorinated water and drink it. Stay at this dosage for about 3-5 days.
If your child is not getting the expected results raise the dosage to one scoop in the morning and one scoop at bedtime. Stay at this dosage for one week. If you are still not happy with the results go up to 2 scoops in the morning and 2 scoops at bedtime. You can always lower the dosage or stop taking probiotics for a few days.

Note:
Mercola’s Complete Probiotics is heat stable and is good for traveling (Emma Lane – www.holisticsonline.com).
iFlora is also heat stable and good for traveling (David Brassey).
Bio Kult Pro-Cyan is good for use when clients/patients have urinary tract infections.
**GENERAL DIGESTIVE REPAIR and IMMUNE SUPPORT (Step Four – REPAIR)**

With your doctor’s consent, use the following protocol.

Please contact [name of practitioner] should you have any queries about the protocol.

Please contact [name of practitioner] immediately should you experience any symptoms or side effects when introducing these products.

<table>
<thead>
<tr>
<th>Supplier/Notes</th>
<th>Vendor/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>GI Revive</td>
<td>1 scoop or tsp</td>
</tr>
<tr>
<td>Repair Vite</td>
<td>1 scoop or tsp</td>
</tr>
<tr>
<td>Glutagenics</td>
<td>1 scoop or tsp</td>
</tr>
<tr>
<td>Collostrum Broad Spectrum or <em>Candida Pro</em></td>
<td>2</td>
</tr>
<tr>
<td>Oramune Max</td>
<td>2</td>
</tr>
</tbody>
</table>

Consider adding probiotic support, including *S. boulardii* (Floramymes, Sacro-B, which can increase sIgA).

**Caution:** when using Transfer Factor in Oramune or Multi-Immune, if symptoms worsen it may indicate a Th1 dominant client/patient.

**Contraindications:**
References

Welcome to the reference list and bibliography in support of the material presented in this book.

Every effort has been made to ensure that the information within this book is accurate and up to date. However I acknowledge that research into the area of H. pylori and, indeed in the wider area of general health is continuously expanding our knowledge. As such, this book is likely to be updated periodically.

Introduction


Chapter One


Chapter Two

Chapter Three

There are no references for this chapter.

Chapter Four

1. Gittleman, A. Guess What Came To Dinner: Parasites and Your Health.
8. http://www.cdc.gov/mmwr/preview/mmwrhtml/00000170.htm
10. Gittleman, A. Guess What Came To Dinner: Parasites and Your Health.

Chapter Five


Chapter Six

2. Hompes D. H. Pylori: From Heartburn To Heart Disease. 2014. Health For The People Ltd.
16. [http://mdheal.org/articles/word2/intestinalprotozoan2.htm](http://mdheal.org/articles/word2/intestinalprotozoan2.htm)
19. Hompes, D. *H. Pylori: From Heartburn to Heart Attacks*. Health For The People Ltd.
21. Rogers, S. *Detoxify Or Die*.
23. Crinnion, W. *Clean, Green and Lean: Get Rid of the Toxins That Make You Fat*.

**Chapter Seven**


**Chapter Eight**

5. [http://www.nutri-linkltd.co.uk/articulate/gastro/player.html](http://www.nutri-linkltd.co.uk/articulate/gastro/player.html)