

## Product Optimisation Using Ingredients/Processes, Sensory/Consumer Data and Experimental Design Software

A one day workshop designed to encourage wider user of statistical experimental design techniques for product development and optimisation

Course Developed and Written by Hal MacFie and Anne Hasted

Presented by Anne Hasted, Qi Statistics Ltd  
15<sup>th</sup> April 2019

Venue:  
Microtek Labs  
5th Floor, 230 W. Monroe  
Suite 550 Chicago, IL 60606  
USA

**Virtual Attendance Available at no extra cost (numbers limited)**

### Course Summary

This one day workshop covers the approaches to product optimisation which control the recipes/processing variables tested with the aim of giving clear guidance on the key drivers of sensory/consumer responses. There are many different software tools which help with this, creating the experimental sample designs and providing graphical analysis to aid interpretation of the results. We will use Design Expert ([www.statease.com](http://www.statease.com)) and there will be opportunities for you to “play” with the software and evaluate its ease of use and functionality.

### Workshop Outline

- Motivation for use of structured sample designs.
- Finding the key influences on consumer liking and sensory characteristics and uncovering interactions between ingredients and process parameters.
- Using these key parameters to plan further studies to optimise and predict liking.
- Dealing with more difficult problems -investigating the complete recipe or mixture.

- Visualisation of the response surfaces, simultaneous optimisation of several performance measures including cost.

### Software

We will be running the workshop using Design Expert V11, Computers are provided at the venue – so no need to bring your own laptop unless you prefer to work from your own machine. If so, please download a 30 day demo version of the software from [www.statease.com](http://www.statease.com) before the workshop

### The Trainer

Anne Hasted began her career as an academic statistician at Reading University. She is the founder and senior consultant at Qi Statistics Ltd, a UK based consultancy, offering statistical training and support to research and industry. She has many years training and consultancy experience in the food industry, particularly in the areas of consumer and sensory research and is well recognised for providing user friendly training courses.

### Course Schedule

9.00-9.45	Motivation for using structured designs: benefits, clarity, efficiency
9.45-10.30	Factorial Designs – experimenting on several process or product components simultaneously. Interpretation of results, importance of understanding interactions.
10.30-10.45	Coffee/Tea
10.45-11.30	Workshop – graphical interpretation of effects
11.30-12.00	Application to sensory profile data and consumer test data.
12.00-12.45	What can you do if there are too many samples for an achievable experiment? Compromises and risks.
12.45-13.30	Lunch (provided at the venue and included in price)
13.30-14.30	How and why of Optimisation designs Case Study examples optimising recipes and processes under cost constraints
14.30-15.00	Workshop on joint optimisation for recipe and cost
15.00-15.15	Coffee/Tea
15.15-16.15	Working in constrained spaces -mixture designs. Graphical interpretation
16.15-16.30	Summary and Close of workshop

## Training Facility

Microtek Labs  
 5th Floor  
 230 W. Monroe  
 Suite 550  
 Chicago, IL 60606  
 USA



The building is in the Loop, at the corner of Franklin and Monroe, one block from the Sears Tower. The facility is 3 blocks from both the Union and Ogilvie train stations. MicroTek is on the 5th floor.

Please see the facility website [www.mclabs.com/room-rentals/microtek-chicago](http://www.mclabs.com/room-rentals/microtek-chicago) for details of hotels nearby with discounted rates. We usually stay at La Quinta which is next to the facility and very reasonable with a free breakfast. However Club Quarters is also close and gets good scores from attendees

## Virtual Training Option

*This Microtek Facility offers Virtual Training*

*This gives you the option to attend the class from the comfort of your home or office, you'll feel as if you are physically present in the classroom and will be able to join in discussions, ask questions and get help with the practical exercises just as if you were in the classroom. All you need is a standard internet connection and a computer that has a camera and microphone..*

*Easy-to-Use: No complicated software to buy or learn. The interface is intuitive and easy to navigate. In the event you need assistance, technical support is there to assist you before and during the training. We will send you a folder with all the class notes and exercises and you will be able to download the data sets.*

## Pricing and Fees\*

Registration Fee - Course attendance	£675
Registration Fee – Virtual attendance	£675

\*Payment may be made in £, \$ or Eu. The current exchange rate will be applied at the time of payment.

- Fees include folder of course material, refreshments and lunch.

- Discounts: We offer a 10% discount on registrations when two or more people from the same company register for the same course at the same time.
- Course fees reduced by 10% for members of academia

Book online from this link: <https://www.qistatistics.co.uk/upcoming-training/qi-hal-macfie-courses>

**\*To make a payment in \$ or Eu please choose the 'pay cheque or direct payment' option on the booking page after adding the items to your basket and we will be in touch to take your payment, but your booking will still be registered in the booking system.**



Please select your preferred payment option and then click the Checkout Now.



Pay Cheque or Direct Payment

#### IMPORTANT NOTES:

**Registration Policy:** Registration is not final until payment is received. Unpaid spaces will be opened to new registrants 30 days ahead of the course. Virtual attendees must register and make payment at least 30 days before the start of the course to secure a virtual seat.

**Payment:** Payment may be made in, Euros, GB pounds or US Dollars via the Qi Statistics website or by transfer into Qi Statistics' currency accounts. Contact the course administrator Karen Starke: [karen@qistatistics.co.uk](mailto:karen@qistatistics.co.uk) for routing and IBAN details of the currency account you require.

**Refund policy:** Cancellation of registration can be made up to 30 days ahead, and return of payments, minus reasonable administrative expenses, will be made for these cancellations. Cancellations within 15 to 30 days of the course start will receive a credit for a future course. Registrants who fail to attend or cancel less than 15 days prior to the seminar start date are responsible for the entire fee. Substitution of another person for the same course may be made at any time.

**Course Cancellation:** Qi Statistics Ltd retains the right to cancel the course 30 days before the start date if less than 4 delegates have registered by that date. Please do not book your travel before this.

**For further information or questions contact:  
Qi Statistics Ltd at [www.qistatistics.co.uk](http://www.qistatistics.co.uk) or telephone +44 (0)1189 345722**