United Arab Emirates: Obesity in numbers

1 in 4 adults are living with obesity in the UAE, ranging from 22% in Dubai to 39% in Ajman and Fujairah.

Nearly 40% of children are living with overweight or obesity.

7,622 adult deaths from non-communicable diseases were due to overweight or obesity in 2019.

The economic impact of overweight and obesity was US$11.67 billion in 2019.

Over 1 in 3 adult Emiratis are living with obesity compared to 1 in 4 of adult non-Emiratis.

By 2035

Almost 7.5 million adults, children and adolescents will be living with overweight or obesity.

66,127 children will have high blood pressure, 24,815 will have hyperglycaemia and 69,640 will have low HDL cholesterol due to overweight and obesity.

Economic impact is predicted to amount to nearly 5% of GDP.

DEFINITIONS

<table>
<thead>
<tr>
<th></th>
<th>Overweight</th>
<th>Obesity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults</td>
<td>BMI between 25kg and 29.9kg/m²</td>
<td>BMI greater or equal to 30kg/m²</td>
</tr>
<tr>
<td>Children</td>
<td>BMI between 1SD and 2SD above the WHO median child reference values</td>
<td>BMI greater than 2SD above the WHO median child reference values</td>
</tr>
</tbody>
</table>

March 2024
## Obesity prevalence: Where are we today?

According to the UAE’s 2017–2018 National Health Survey, 67.9% of adults aged 18–69 years are living with overweight or obesity. While combined overweight and obesity is greater in men, obesity is greater in women (30.6%) compared to men (25.1%).

<table>
<thead>
<tr>
<th></th>
<th>18–69</th>
<th>13–17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overweight</td>
<td>40.1%</td>
<td>21.8%</td>
</tr>
<tr>
<td>Obesity</td>
<td>27.8%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Total</td>
<td>67.9%</td>
<td>38.4%</td>
</tr>
</tbody>
</table>

In contrast, combined overweight and obesity are greater in adolescent boys than girls (13–17 years). 21.1% of boys are living with obesity compared to 12.3% of girls. Overall, 38.4% of children are living with overweight or obesity. While this is based on self-report data, a 2019 study using anthropometric measurements with a smaller sample size found similar findings.

## Who are most affected?

Generally, combined overweight and obesity increases with age in the adult UAE population. The trend is more prominent in women where prevalence rises from 48.9% in 18-29 year olds to 80.6% in 60-69 year olds. Over half of women between 60-69 years of age are living with obesity. In contrast, obesity prevalence in men is relatively stable across age groups.
It is also notable that obesity is more prevalent in Emiratis (36.9%) compared to non-Emiratis (26.3%), with the difference more marked in women.

Finally, obesity prevalence varies greatly by Emirate – ranging from 22.2% in Dubai and 39.1% in Ajman and Fujairah.\(^4\)
Where are we coming from?  
...And where are we going?

NCD RisC estimates show that in 1975 obesity was as low as 9.64% in adult men and 25.05% in women. Since then, obesity levels have only continued to rise, with overweight initially rising and then falling. It is projected that the prevalence of obesity will become higher than the prevalence of overweight in adult men, a trend supposedly already seen in women.

It is estimated that over 6.5 million adults will be living with overweight or obesity by 2035 – over 4.5 million men and nearly 2 million women.

By 2060, obesity is projected to be as high as 66.48% in men and 64.21% in women if the status quo continues.
Trends and projections in children and adolescents are equally alarming. There has been and will continue to be a steady rise in overweight and obesity. **By 2035, nearly 700,000 children and adolescents will be living with overweight or obesity** – nearly 400,000 boys and over 300,000 girls.

### 1975-2016 trends and 2019-2060 projections for male children and adolescents (5-19 years)

![Graph showing trends in BMI for male children and adolescents](image1)

### 1975-2016 trends and 2019-2060 projections for female children and adolescents (5-19 years)

![Graph showing trends in BMI for female children and adolescents](image2)
What will this cost individuals and the economy?

The economic impact of overweight and obesity includes treatment costs as well as associated costs such as travel costs to obtain treatment. There are also indirect costs such as absenteeism, presenteeism and premature mortality that make up the bulk of economic impact.

In 2019, healthcare expenditure amounted to US$1.4 billion. This is expected to rise to US$1.9 billion in 2035. In contrast, premature death, absenteeism and presenteeism cost US$10.3 billion in 2019 and will rise to US$30.7 billion in 2035.

Projected economic impact of overweight and obesity, 2019-2035

2022 NATIONAL ECONOMIC INDICATORS

- US$507 billion GDP
- US$53,708 GDP per capita
- 7.9% GDP growth (annual %)
- 2.8% unemployment rate (estimated)
- 4.8% inflation of consumer prices (annual %)
Obesity and... other non-communicable diseases (NCDs)

Adult overweight and obesity were responsible for **7,622 deaths from NCDs** in 2019. Of these 14% were from diabetes, 35% were from CHD, 18% were from stroke and 8% were from cancer.

Meanwhile, **372,742 disability-adjusted life years lost to NCDs** were attributable to adult overweight and obesity in 2019.

**Deaths from NCDs due to overweight or obesity in adult, 2019**

<table>
<thead>
<tr>
<th>Disease</th>
<th>DALYs* lost to select NCDs due to adult overweight or obesity, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neoplasms</td>
<td>100,788</td>
</tr>
<tr>
<td>Stroke</td>
<td>77,451</td>
</tr>
<tr>
<td>Coronary HD</td>
<td>66,717</td>
</tr>
<tr>
<td>Diabetes</td>
<td>22,934</td>
</tr>
<tr>
<td>All other NCDs</td>
<td>325,894</td>
</tr>
</tbody>
</table>

DALYs* lost to select NCDs due to adult overweight or obesity, 2019

Based on current projections, and assuming no interventions, the prevalence and numbers of young people (aged 5-19 years) with overweight or obesity is predicted to rise from nearly 470,000 children (38%) in 2020 to nearly 680,000 (49%) by 2035.

As a result, by 2035 **66,127 children will have high blood pressure**, **24,815 will have hyperglycaemia** and **69,640 will have low HDL cholesterol** due to overweight and obesity.

**Prevalence and number of children with overweight or obesity**

- **66,217 will have high blood pressure** due to overweight or obesity
- **69,640 will have low HDL** due to overweight or obesity
- **24,185 will have hyperglycaemia** due to overweight or obesity

* A DALY is a way to measure overall disease “burden”. It adds the years of life lost due to ill-health, disability, illness or early death. The presentation of DALYs from select NCDs does not account for potential overlap between diseases.
WHAT ELSE IS HAPPENING?

82.8% of adults eat less than 5 servings of fruit and/or vegetables on average per day

70.8% of adults have insufficient physical activity (defined as < 150 minutes of moderate-intensity activity per week, or equivalent)

59.7% of infants 0–5 months of age who are fed exclusively with breast milk

9.8% of the total population were suffering from moderate or severe food insecurity in 2021

88% of adults are covered by some form of health insurance, most of those who are not covered are Non-Emiratis

77% of deaths were caused by non-communicable diseases in 2019

The universal health coverage service coverage index rose from 48 in 2000 to 82 in 2021
Endnotes

1 UAE National Health Survey Report 2017-2018. United Arab Emirates, Ministry of Health & Prevention
2 Global School-Based Student Health Survey 2016. United Arab Emirates – 2016 Fact Sheet
3 Non-communicable Disease Risk Factor Survey (STEPS). Data book for UAE 2017-2018
4 Obesity Study, 2023. Ministry of Health & Prevention Statistics and Research Center
7 Global Health Observatory. Out-of-pocket expenditure as percentage of current health expenditure (CHE) (%)
https://www.who.int/data/gho/data/indicators/indicator-details/GHO/out-of-pocket-expenditure-as-
percentage-of-current-health-expenditure-(che)-(-) (Accessed 10.02.2024)
13 World Obesity Federation estimates – see World Obesity 2024 Atlas for methodology
14 UAE National Health Survey Report 2017-2018. United Arab Emirates, Ministry of Health & Prevention
15 UAE National Health Survey Report 2017-2018. United Arab Emirates, Ministry of Health & Prevention
16 UAE National Health Survey Report 2017-2018. United Arab Emirates, Ministry of Health & Prevention
17 UAE National Health Survey Report 2017-2018. United Arab Emirates, Ministry of Health & Prevention. Note that this is from a sample of ever-married women who reported exclusively breastfeeding them.
20 Global Health Observatory. UHC Service Coverage Index (SDG 3.8.1) https://www.who.int/data/gho/data/
indicators/indicator-details/GHO/uhc-index-of-service-coverage