## Report card

### Saudi Arabia

<table>
<thead>
<tr>
<th>Contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity prevalence</td>
<td>2</td>
</tr>
<tr>
<td>Overweight/obesity by education</td>
<td>4</td>
</tr>
<tr>
<td>Overweight/obesity by age</td>
<td>5</td>
</tr>
<tr>
<td>Overweight/obesity by region</td>
<td>7</td>
</tr>
<tr>
<td>Overweight/obesity by socio-economic group</td>
<td>9</td>
</tr>
<tr>
<td>Insufficient physical activity</td>
<td>10</td>
</tr>
<tr>
<td>Estimated per capita fruit intake</td>
<td>13</td>
</tr>
<tr>
<td>Estimated per-capita processed meat intake</td>
<td>14</td>
</tr>
<tr>
<td>Estimated per capita whole grains intake</td>
<td>15</td>
</tr>
<tr>
<td>Mental health - depression disorders</td>
<td>16</td>
</tr>
<tr>
<td>Mental health - anxiety disorders</td>
<td>17</td>
</tr>
<tr>
<td>Oesophageal cancer</td>
<td>18</td>
</tr>
<tr>
<td>Breast cancer</td>
<td>20</td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td>21</td>
</tr>
<tr>
<td>Pancreatic cancer</td>
<td>23</td>
</tr>
<tr>
<td>Gallbladder cancer</td>
<td>25</td>
</tr>
<tr>
<td>Kidney cancer</td>
<td>27</td>
</tr>
<tr>
<td>Cancer of the uterus</td>
<td>29</td>
</tr>
<tr>
<td>Raised blood pressure</td>
<td>30</td>
</tr>
<tr>
<td>Raised cholesterol</td>
<td>33</td>
</tr>
<tr>
<td>Raised fasting blood glucose</td>
<td>36</td>
</tr>
<tr>
<td>Diabetes prevalence</td>
<td>38</td>
</tr>
<tr>
<td>Health systems</td>
<td>39</td>
</tr>
</tbody>
</table>
Obesity prevalence

Adults, 2013

Survey type: Measured
Age: 15+
Sample size: 10735
Area covered: National
References: Saudi Health Interview Survey (SHIS)
Notes: NB. Combined adult data estimated. These estimates were calculated by weighting male and female survey results. Weighting based on World Bank Population % total female 2019 (https://data.worldbank.org/indicator/SP.POP.TOTL.FE.ZS - accessed 08.10.20)

Unless otherwise noted, overweight refers to a BMI between 25kg and 29.9kg/m², obesity refers to a BMI greater than 30kg/m².
Children, 2015

Survey type: Measured
Age: 6-16
Sample size: 7930
Area covered: Regional
Notes: Region: Riyadh City (urban), WHO 2007 Cut Off
Cutoffs: WHO
Overweight/obesity by education

Children, 2006

Survey type: Measured
Age: 6-16
Sample size: 1243
Area covered: Riyadh
Notes: Prevalence of overweight and obesity by Fathers Education Obesity and overweight were defined using the WHO 2007 growth standards.
Cutoffs: WHO
Overweight/obesity by age

Adults, 2013

Survey type: Measured
Sample size: 10735
Area covered: National

Unless otherwise noted, overweight refers to a BMI between 25kg and 29.9kg/m², obesity refers to a BMI greater than 30kg/m².
### Children, 2006

**Survey type:** Measured

**Sample size:** 7056

**Area covered:** Eastern Province

**References:**

**Notes:** This study used the Centers for Disease Control and Prevention (CDC) 2000 growth charts to define BMI. The children were classified into 3 weight categories: normal weight (BMI < 85th percentile for age and sex), overweight (BMI between 85th–95th percentiles) and obese (BMI > 95th percentile).

### Cutoffs:

<table>
<thead>
<tr>
<th>Age</th>
<th>Obesity</th>
<th>Overweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-4</td>
<td>15%</td>
<td>25%</td>
</tr>
<tr>
<td>5-9</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>10-13</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>14-18</td>
<td>30%</td>
<td>30%</td>
</tr>
</tbody>
</table>
Overweight/obesity by region

Boys, 2009-2010

Survey type: Measured
Age: 14-19
Sample size: 2,908
Area covered: National
Notes: IOTF cut-offs used.
Cutoffs: IOTF
Girls, 2009-2010

Survey type: Measured
Age: 14-19
Sample size: 2,908
Area covered: National
Notes: IOTF cut-offs used.
Cutoffs: IOTF
Overweight/obesity by socio-economic group

Children, 2006

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Obesity</th>
<th>Overweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3000</td>
<td>5%</td>
<td>15%</td>
</tr>
<tr>
<td>3000-4999</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>5000-6999</td>
<td>15%</td>
<td>25%</td>
</tr>
<tr>
<td>7000-9999</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td>10000-14999</td>
<td>25%</td>
<td>35%</td>
</tr>
<tr>
<td>15000-19999</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>20000+</td>
<td>35%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Survey type: Measured
Age: 6-16
Sample size: 1243
Area covered: Riyadh


Notes: Prevalence of overweight and obesity by Income (Saudi Riyal/Month). Obesity and overweight were defined using the WHO 2007 growth standards.

Cutoffs: WHO
Insufficient physical activity

Adults, 2016

Men, 2016

Women, 2016

Estimated per capita fruit intake

Adults, 2017

Survey type: Measured
Age: 25+
References: Global Burden of Disease, the Institute for Health Metrics and Evaluation [http://ghdx.healthdata.org/]
Definitions: Estimated per-capita fruit intake (g/day)
Estimated per-capita processed meat intake

Adults, 2017

Survey type: Measured
Age: 25+
Definitions: Estimated per-capita processed meat intake (g per day)
Estimated per capita whole grains intake

Adults, 2017

Survey type: Measured
Age: 25+
Definitions: Estimated per-capita whole grains intake (g/day)
Mental health - depression disorders

Adults, 2015

References:

Definitions:
% of population with depression disorders
Mental health - anxiety disorders

Adults, 2015


Definitions: % of population with anxiety disorders
Oesophageal cancer

Men, 2018

Age: 20+


Definitions: Estimated age-standardized incidence rates (World) in 2018, oesophagus, adults ages 20+. ASR (World) per 100,000
Women, 2018

Age: 20+


Definitions: Estimated age-standardized incidence rates (World) in 2018, oesophagus, adults ages 20+. ASR (World) per 100,000
Breast cancer

Women, 2018

Age: 20+


Definitions: Estimated age-standardized incidence rates (World) in 2018, breast, females, ages 20+. ASR (World) per 100,000
Colorectal cancer

Men, 2018


Definitions: Estimated age-standardized incidence rates (World) in 2018, colorectum, adults, ages 20+. ASR (World) per 100,000
**Women, 2018**

![Bar chart showing incidence rates per 100,000 for colorectal cancer among women in various countries.](chart.png)

**Age:** 20+


**Definitions:** Estimated age-standardized incidence rates (World) in 2018, colorectum, adults, ages 20+. ASR (World) per 100,000
Pancreatic cancer

Men, 2018

Age: 20+


Definitions: Estimated age-standardized incidence rates (World) in 2018, pancreas, adults, ages 20+. ASR (World) per 100,000
Age: 20+


Definitions: Estimated age-standardized incidence rates (World) in 2018, pancreas, adults, ages 20+. ASR (World) per 100,000
Gallbladder cancer

Men, 2018

Age: 20+


Definitions: Estimated age-standardized incidence rates (World) in 2018, gallbladder, adults, ages 20+. ASR (World) per 100,000
Women, 2018

Incidence per 100,000

Age: 20+


Definitions: Estimated age-standardized incidence rates (World) in 2018, gallbladder, adults, ages 20+. ASR (World) per 100,000
Kidney cancer

Men, 2018


Definitions: Estimated age-standardized incidence rates (World) in 2018, kidney, adults, ages 20+. ASR (World) per 100,000
Women, 2018

Age: 20+


Definitions: Estimated age-standardized incidence rates (World) in 2018, kidney, adults, ages 20+. ASR (World) per 100,000
Cancer of the uterus

Women, 2018


Definitions: Estimated age-standardized incidence rates (World) in 2018, cervix uteri, females, ages 20+. ASR (World) per 100,000
Raised blood pressure

Adults, 2015


Definitions: Age Standardised estimated % Raised blood pressure 2015 (SBP>=140 OR DBP>=90).
Men, 2015


Definitions: Age Standardised estimated % Raised blood pressure 2015 (SBP>=140 OR DBP>=90).
Women, 2015

% raised blood pressure


Definitions: Age Standardised estimated % Raised blood pressure 2015 (SBP>=140 OR DBP>=90).
Raised cholesterol

Adults, 2008

References:
Global Health Observatory data repository, World Health Organisation,
http://apps.who.int/gho/data/node.main.A885

Definitions:
% Raised total cholesterol (>= 5.0 mmol/L) (age-standardized estimate).
Men, 2008

References:
Global Health Observatory data repository, World Health Organisation,
http://apps.who.int/gho/data/node.main.A885

Definitions:
% Raised total cholesterol (>= 5.0 mmol/L) (age-standardized estimate).
Women, 2008

References:
Global Health Observatory data repository, World Health Organisation,
http://apps.who.int/gho/data/node.main.A885

Definitions:
% Raised total cholesterol (>= 5.0 mmol/L) (age-standardized estimate).
Raised fasting blood glucose

Men, 2014


Definitions: Age Standardised % raised fasting blood glucose (>= 7.0 mmol/L or on medication).
Women, 2014


Definitions: Age Standardised % raised fasting blood glucose (≥ 7.0 mmol/L or on medication).
Diabetes prevalence

Adults, 2017


Definitions: Diabetes age-adjusted comparative prevalence (%).
Health systems

Economic classification: High Income

Health systems summary

Saudi Arabia has a national health care system that is provided and financed by the Ministry of Health. Full and free at point of service care is available to all citizens (as well as expats working within the public sector), with services provided for at primary, secondary and tertiary level. Free healthcare is also provided to the approximately 2 million pilgrims visiting the holy cities (Mecca & Medina), putting an immense strain on the healthcare budget. This public system also struggles with staffing, with most health professionals being expatriates.

To complement the national system, there is cooperative health insurance provided by private employers and the government (for public workers only). This is compulsory for all working non-Saudi nationals and Saudi nationals who work in the private sector. Citizens also have the choice to have private health insurance schemes to enter the private healthcare system.

Indicators

<table>
<thead>
<tr>
<th>Question</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where is the country’s government in the journey towards defining ‘Obesity as a disease’?</td>
<td>Defined as disease</td>
</tr>
<tr>
<td>Where is the country’s healthcare provider in the journey towards defining ‘Obesity as a disease’?</td>
<td>Some progress</td>
</tr>
<tr>
<td>Is there specialist training available dedicated to the training of health professionals to prevent, diagnose, treat and manage obesity?</td>
<td>Yes</td>
</tr>
<tr>
<td>Have any taxes or subsidies been put in place to protect/assist/inform the population around obesity?</td>
<td>Yes</td>
</tr>
<tr>
<td>Are there adequate numbers of trained health professionals in specialties relevant to obesity in urban areas?</td>
<td>Some progress</td>
</tr>
<tr>
<td>Are there adequate numbers of trained health professionals in specialties relevant to obesity in rural areas?</td>
<td>No</td>
</tr>
<tr>
<td>Are there any obesity-specific recommendations or guidelines published for adults?</td>
<td>Yes</td>
</tr>
<tr>
<td>Are there any obesity-specific recommendations or guidelines published for children?</td>
<td>Yes</td>
</tr>
<tr>
<td>In practice, how is obesity treatment largely funded?</td>
<td>Out of pocket</td>
</tr>
</tbody>
</table>
Perceived barriers to treatment

<table>
<thead>
<tr>
<th>Lack of political will, interest and action</th>
<th>Lack of treatment facilities</th>
<th>Lack of training for HCP's and lack of trained HCP's</th>
<th>Lack of treatment guidelines or pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor availability of pharmaceuticals</td>
<td>Cultural norms and traditions</td>
<td>Lack of knowledge of potential treatment options</td>
<td>Lack of opportunity for physical activity</td>
</tr>
</tbody>
</table>

Summary of stakeholder feedback

Stakeholders reported that a lot of work has been done around obesity prevention and control in recent years, with obesity being recognised as a disease by many.

There is said to be a range of treatment options available that are government funded. Demand, however, is high in the public sector and so many of those seeking treatment obtain support via the private system as an out of pocket expense. Demand in the public system is said to be so high that people only get treatment when they have comorbidities, and even then, it is on a case by case basis. Bariatric surgery and obesity medication is also covered by the cooperative health insurance for those that meet the criteria (BMI ≥ 45 kg/m² for surgery) but this is a recent change.

It was generally agreed that one of the main ways in which people enter the system is via referral when they have comorbidities and their obesity is affecting their health. However, treatments are more readily available in urban areas, with patients in rural areas commonly referred to the cities.

Stakeholders noted that government and association guidelines exist but suggested that these are not yet fully implemented within the health system and at times they did not match insurance criteria. For example, government guidelines recommended surgical intervention for those with a BMI ≥ 35 kg/m² with comorbidities, but cooperative health insurance only covers surgery when BMI ≥ 45 kg/m².

It was reported that there is limited specialist obesity training available. There appears to be a focus on bariatric surgery, with trainees funded to train. Away from this, there is one bariatric surgery fellowship program and a bariatric medicine fellowship programme, but they are both located in Riyadh. Stakeholders called for more training that encouraged multidisciplinary working.

Based on interviews/survey returns from 6 stakeholders

Last updated: June 2020