

## Diet, overweight and obesity

---

### Diet and heart health

The role of diet is crucial in the development and prevention of cardiovascular disease (CVD). Diet is a key modifiable risk factor for CVD.

#### *Change in eating habits*

- Human beings' average weight is increasing. The latter half of the 20<sup>th</sup> century saw major changes to daily diets, moving from plant-based diets to high-fat, animal-based diets
- The obesity epidemic is spreading to low- and middle-income countries as a result of new dietary habits and sedentary ways of life, fuelling chronic diseases and premature mortality

#### *Components of a healthy diet*

- A healthy diet is low in saturated fats, salts and refined carbohydrates and high in fruit and vegetables. As well as this, eating whole grains, at least two servings of fish a week, and nuts can reduce the risk of CVD
- The World Health Organization (WHO) recommends individuals to:
  - o Limit energy intake from total fats and shift fat consumption away from saturated fats to unsaturated fats and towards the elimination of trans fatty acids<sup>1</sup>
  - o Increase consumption of fruits and vegetables, and whole grains and nuts. Adults should consume at least 500g of fresh fruit and vegetables a day<sup>2</sup>.
  - o Limit the intake of free sugars and salt (sodium) consumption from all sources<sup>2</sup>. Recent guidance recommends eating less than 1,500 mg of sodium per day<sup>3</sup>

### Overweight and obesity

- Overweight and obesity are classified by an individual's body mass index (BMI). BMI is measured by dividing a person's weight by their height squared in metres
- In adults, overweight is defined as a BMI of 25.0 to 29.9 kg/m<sup>2</sup>; obesity is defined as a BMI of 30.0 kg/m<sup>2</sup> or greater

#### *Facts & figures: prevalence*

- Latest projections from the WHO indicate that globally in 2005 approximately 1.6 billion adults aged 15 and above were overweight; at least 400 million adults were obese<sup>4</sup>
- The WHO further projects that by 2015, approximately 2.3 billion adults will be overweight and more than 700 million will be obese<sup>4</sup>
- Once considered a problem only in high-income countries, overweight and obesity are now dramatically on the rise in low- and middle-income countries, particularly in urban settings<sup>4</sup>

#### *Impact of obesity on heart health*

- Obesity is an independent risk factor for CVD
- An overweight person may develop hypertension, type-2 diabetes and musculoskeletal disorder, putting them at high risk of CVD<sup>1</sup>.
  - o Increased body weight leads to increased risk of developing type-2 diabetes and incidence of hypertension rises. Statistics show that 58 per cent of diabetes mellitus globally and 21 per cent of chronic heart disease are attributable to a BMI above 21<sup>5</sup>
  - o Excess fat can also affect an individual's blood pressure and blood lipid levels and interferes with their ability to use insulin effectively<sup>4</sup>

## References

---

<sup>1</sup> World Health Organization. 2008-2013 Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases. World Health Organization. Geneva.

<sup>2</sup> World Health Organization. Global Strategy on Diet, Physical Activity and Health. May 2004. World Health Organization. Geneva

<sup>3</sup> American Heart Association. Sodium Recommendations. Last accessed at: <http://www.americanheart.org/presenter.jhtml?identifier=538>, 10 December 2010

<sup>4</sup> World Health Organization. Factsheet No. 311 - Obesity and Overweight. September 2006. Geneva. Last accessed at: <http://www.who.int/mediacentre/factsheets/fs311/en/index.html>, 18 January 2011

<sup>5</sup> American Heart Association. International Cardiovascular Disease Statistics. Statistical Factsheets Population. Last accessed at: [http://www.sld.cu/galerias/pdf/servicios/hta/international\\_cardiovascular\\_disease\\_statistics.pdf](http://www.sld.cu/galerias/pdf/servicios/hta/international_cardiovascular_disease_statistics.pdf), 3 February 2011