

# On-Call

Health Literacy

Diet Related Health Issues

# Excess Weight Gain and Obesity



- ▶ Excess weight gain and [obesity](#) are increasingly affecting adults, adolescents and children throughout the world.
- ▶ Weight gain can result from a change in diet or level of physical activity and can lead to [obesity](#) and other [chronic](#) diseases.
- ▶ Certain types of foods and eating habits such as snacking, [binge-eating](#), and eating out can contribute to excessive weight gain and [obesity](#).
- ▶ A moderate to high level of regular physical activity is important in preventing unhealthy weight gain and moderate to high fitness entails health benefits (independently of body weight). A healthy weight may reduce the risk of disease and premature death.
- ▶ Many factors have been shown to protect against [obesity](#):
  - ▶ Regular physical exercise
  - ▶ High dietary fibre [intake](#)
  - ▶ Home and school environments that promote healthy food and activity choices
  - ▶ Having been breastfed
- ▶ Some factors that may increase the risk have also been identified:
  - ▶ Sedentary lifestyles, particularly sedentary occupations and inactive recreational activities such as watching television
  - ▶ Large portion sizes
  - ▶ High [intake](#) of drinks containing added sugars
- ▶ [Obesity](#) may be prevented by encouraging healthy habits early in life. Individuals can reduce the overall risk of obesity by maintaining a healthy [Body Mass Index \(BMI\)](#) and controlling waist measurements. Engaging in a moderate to high level of regular physical activity (for instance walking for one hour per day), and limiting consumption of foods and drinks that contain high amounts of fats and sugars can also decrease the risk of becoming overweight or obese.

# Diabetes



- ▶ [Diabetes](#) is a disease that is linked to the hormone [insulin](#) which regulates levels of sugar in the blood.
- ▶ [Type 1 diabetes](#) occurs when the body fails to produce [insulin](#).
- ▶ [Type 2 diabetes](#), which is much more common, occurs when the body fails to respond to insulin in a normal way.
- ▶ [Diabetes](#) can lead to serious complications including blindness, kidney failure, heart disease, and [strokes](#). In the case of [type 2 diabetes](#), lifestyle changes are important in preventing and managing the disease.
- ▶ The number of cases of [diabetes](#) is currently estimated to be around 150 million worldwide, but that number is expected to double by 2025.
- ▶ Inactive lifestyles and excessive weight gain increase the risk of [type 2 diabetes](#), especially when excess fat is stored in the abdomen.
- ▶ Excess fat in the abdomen can contribute to the development of [insulin](#) resistance, a condition that underlies most cases of [type 2 diabetes](#). Children of mothers who are affected by [diabetes](#) during pregnancy are also at high risk of developing [obesity](#) and type 2 diabetes early in life. Consumption of saturated fats may increase the risk of developing type 2 diabetes.
- ▶ Efforts to prevent excessive weight gain and [cardiovascular](#) disease can also reduce the risk of developing [diabetes](#). Measures include maintaining a healthy weight, engaging in at least one hour of moderate physical activity (for instance walking) in the course of the day most days of the week, consuming sufficient fibre from fruits, vegetables and wholegrain cereals, and limiting consumption of saturated fats

# Cardiovascular Diseases



- ▶ Ongoing lifestyle changes are contributing to the increase in the global burden of [cardiovascular diseases](#). Currently, one third of all the deaths in the world are estimated to be due to diseases which affect the heart and blood vessels.
- ▶ Risk factors such as poor nutrition, insufficient physical activity, and tobacco use tend to accumulate over time, increasing the overall risk of developing [cardiovascular](#) disease.
- ▶ Certain dietary **fats**, especially those that are commonly found in dairy products, meat and hardened oils (such as certain margarines) have been shown to increase the risk of [cardiovascular](#) disease. Other dietary fats, such as those found in soybean and sunflower oils, can lower the risk of cardiovascular disease. Fish oil (which is found in fatty fish) is also beneficial.
- ▶ A high [intake](#) of **salt** can increase blood pressure and the risk of [stroke](#) and [coronary heart disease](#), whereas eating a diet high in fiber and wholegrain cereals can reduce the risk of coronary heart disease. [More...](#)
- ▶ A high [intake](#) of fruits, vegetables, and fish can contribute to good [cardiovascular](#) health and reduce the risk of developing certain [cardiovascular diseases](#). [Alcohol](#) consumption should be limited in view of cardiovascular and other health risks.
- ▶ To prevent [cardiovascular](#) disease, [intake](#) of fat from dairy products, meat and certain cooking fats should be limited. Eating 400 to 500g of fruits and vegetables everyday and fish once or twice per week is recommended. Restricting salt intake to less than 5 g per day and exercising for at least 30 minutes a day are also beneficial to cardiovascular health.

# Cancer



- ▶ As the population is aging, cancer is becoming a growing problem and a major cause of death. Apart from tobacco smoke, which is the most common proven cause of developing cancer, other identified and unidentified factors also play a role.
- ▶ Dietary factors are estimated to account for nearly a third of cancers in industrialized countries, making diet second only to tobacco as a theoretically preventable cause of cancer. The risk of developing cancer can increase due to factors such as obesity, high consumption of alcohol or preserved meat, and lack of physical activity.
- ▶ Stomach cancer and liver cancer occur more frequently in certain developing regions. Excessive alcohol consumption is the main dietary risk factor for liver cancer and high intake of salty, preserved foods can increase the risk of stomach cancer. However, certain infections are also known to play a role.
- ▶ Aspects linked with the Western diet and obesity may be contributing to an increased risk of developing cancer, such as colorectal cancer, cancer of the pancreas, breast cancer, and prostate cancer. These types of cancers are more common in developed countries.
- ▶ The risk of developing certain types of cancer may be reduced for instance by maintaining a healthy Body Mass Index (BMI), engaging in one hour of physical activity per day (for instance fast walking), limiting consumption of alcohol and salt, consuming sufficient fruits and vegetables and not eating foods when they are at a very high temperature.

# Dental Diseases



- ▶ Dental diseases, such as tooth decay and gum disease, are a costly burden to health care services. Although [caries](#) (dental decay) have become less frequent over the past 30 years, as people are living longer the number of people developing dental diseases is likely to increase. This is a particular concern in countries where sugar consumption is increasing and where [fluoride exposure](#) may be inadequate.
- ▶ Diet is an important factor in the risk of developing dental diseases. The development of [caries](#) requires the presence of both sugars (from the diet) and [bacteria](#). The tooth surface can also be attacked by acids from some foods and drinks.
- ▶ Sugar consumption is the most significant factor for [dental caries](#). Studies found a strong link between the amount and frequency of sugar consumption and the development of [caries](#).
- ▶ Adequate [exposure](#) to [fluoride](#) is the most effective preventive measure against [dental caries](#), but sugar consumption needs to be limited as well in order to further reduce the risk. Eating certain foods, such as cheese, may stimulate salivary flow which can protect against the development of dental [caries](#). Breastfed babies tend to have less dental caries in early childhood than babies fed on formula milk.
- ▶ The main diet-related recommendations for reducing the risk of dental diseases are: limiting the amount and frequency of consumption of [free sugars](#), assuring adequate [exposure](#) to [fluoride](#), and avoiding certain [nutrient](#) deficiencies

# Osteoporosis



- ▶ [Osteoporosis](#) is a disease affecting millions of people around the world that leads to [bone](#) fragility and a consequent increase in risk of bone fracture. The risk of osteoporosis increases with age and can lead to illness, disability, and even premature death.
- ▶ The risk of fractures of the hip and vertebrae increases exponentially with age. In countries where fractures are frequent, women are affected more often than men. Overall, approximately 1.66 million hip fractures occur each year, and that number is expected to rise in the future.
- ▶ **Calcium** and [vitamin D](#) deficiencies increase the risk of [osteoporosis](#) in older people. Other dietary factors and physical activity may reduce the risk, whereas low body weight and high [alcohol](#) consumption increase the risk.
- ▶ The risk of [osteoporosis](#) in older people may be reduced through a diet providing more calcium and [vitamin D](#). However, such preventive measures should focus on [population groups](#) that are at a high risk of suffering from [osteoporotic](#) fractures. Other prudent measures include increasing sunlight [exposure](#) (a source of Vitamin D), increasing physical activity, eating more fruit and vegetables, and consuming less [alcohol](#) and salt.



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