

Glossary – Podcast 6

"The fundamentals of cardiovascular disease risk management: It all begins with diet and lifestyle."

American Heart Association Life's Essential 8: Life's Essential 8 includes the 8 components of cardiovascular health: ⁽¹⁾

- Healthy diet
- Participation in physical activity
- Avoidance of nicotine (smoking)
- Healthy sleep
- Healthy weight
- Healthy level of blood lipids, glucose, and blood pressure

Atherosclerotic cardiovascular disease (ASCVD): Atherosclerotic cardiovascular disease refers to cardiovascular complications/events (ie. stroke and heart attacks) caused by atherosclerosis and it is the leading cause of death worldwide.⁽²⁾

Cardiovascular risk factor: A factor that increases a person's likelihood of developing cardiovascular disease. Some factors are modifiable (diet, blood pressure and cholesterol levels, smoking habits) while others are non-modifiable (age, gender, and heredity). ⁽³⁾

Hypercholesterolaemia: Hypercholesterolaemia is most often defined as elevated levels of low-density lipoprotein cholesterol (LDL-C) or non-high-density lipoprotein cholesterol (non-HDL-C) in the blood. ⁽⁴⁾

Hyperlipidaemia: Hyperlipidaemia on the other hand, accommodates the fact that elevated LDL-C might be accompanied by an increase in triglycerides, decrease in HDL-C, or other lipid abnormalities. ⁽⁴⁾

Cholesterol: Cholesterol is a naturally occurring fat-like (waxy) substance produced mainly by the liver. Cholesterol is vital to the structure and function of cells within the body. However, having too much cholesterol, particular of the bad type may increase the risk of cardiovascular disease. There are two main types of cholesterol: HDL-C (High-density lipoprotein cholesterol, "good cholesterol") and LDL-C (Low-density lipoprotein cholesterol, "bad cholesterol"). Lipoprotein is the name given to cholesterol when combined with the proteins that transport it around the body. ⁽⁵⁾

Mediterranean diet: The Mediterranean diet, although several descriptions exist, is generally one that is low in saturated fats and high in vegetable oils. Key components include: ⁽⁶⁾

- High intake of extra virgin (cold pressed) olive oil, vegetables (leafy green), fruits, cereals, and nuts/legumes
- Moderate intake of fish and other meat, dairy products, and red wine
- Low intake of eggs and sweets

Saturated fats: Saturated fats are those which are derived from animals (beef, poultry, pork, full-fat dairy products), tropical oils (ie. coconut and palm oil) and eggs. These fats are typically solid at room temperature, and hence termed "solid fats". Saturated fats can elevate LDL-C ("bad cholesterol") and in doing so, increase the risk of cardiovascular disease. ⁽⁷⁾

Triglycerides (TGs): Triglycerides are another type of fat (lipid) within the blood. Triglycerides are stored in fat cells and provide the body with energy. High levels may further increase a person's risk of cardiovascular disease and is often associated with obesity and other metabolic diseases. Very high triglyceride levels can lead to pancreatitis (inflammation of the pancreas). ⁽⁸⁾

Unsaturated fats: Unsaturated fats differ from saturated fats in that their chemical structure contains one or more double bonds. Unsaturated fats tend to come from plant sources (avocado, nuts and olives) and present typically as liquid at room temperature. According to the American Heart Association, most of our daily fat intake should be unsaturated in nature on the basis that they reduce LDL-C levels ("bad cholesterol") and inflammation and provide essential nutrients for the body. ⁽⁷⁾

These fats can be further classified as:

- Mono-unsaturated fats Contain only one double bond in structure. Types include olive and canola oil.
- Poly-unsaturated fats Contain two or more double bonds in structure. Types include sunflower oil and corn oil. Omega-3 fats, which are not produced by the body, are in important type of poly-unsaturated fat. A good source of Omega-3 is fish, flaxseeds, walnuts and tofu/soybeans.

Reference List

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