**Cholesterol**

* type of lipid found in every cell in our body, made by all animal cells
* structural component of all animal **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* maintain both membrane **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** and **\_\_\_\_\_\_\_\_\_\_\_** (eliminating need for cell wall)
* precursor for **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** and **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.
* Allows body to produce **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**
* Cholesterol is **\_\_\_\_\_\_\_\_\_\_\_** and so **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** mix with the blood (water-based).
* Therefore carried around the body in the blood by **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**
  + fat (lipid) on the inside and proteins on the outside.
  + two types of lipoprotein:
* **Low-density lipoprotein (LDL)** 
  + cholesterol carried by this type is known as '**\_\_\_\_\_\_**' cholesterol.
  + LDL is the main source of artery-clogging **\_\_\_\_\_\_\_\_\_**
    - thick, hard deposit that can clog arteries and make them less flexible.This condition is known as **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**. If a clot forms and blocks a narrowed artery, **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** or **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**can result.
* **High-density lipoprotein (HDL)**
  + cholesterol carried by this type is known as '**\_\_\_\_\_\_\_**' cholesterol.
  + HDL carries cholesterol from other parts of your body back to your **\_\_\_\_\_\_\_\_\_\_\_\_** for **\_\_\_\_\_\_\_\_\_\_\_\_** from the body.
  + HDL actually works to **\_\_\_\_\_\_\_\_\_\_** LDL cholesterol from the blood, carrying it to the liver, where it is **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** and passed from the body.
  + One-fourth to one-third of blood cholesterol is carried by HDL.
  + A healthy level of HDL cholesterol may also **\_\_\_\_\_\_\_\_\_**against heart attack and stroke,
  + while **\_\_\_\_\_\_\_\_** levels of HDL cholesterol have been shown to **\_\_\_\_\_\_\_\_\_\_\_\_\_** the risk of heart disease.
* **LDL cholesterol** and **HDL cholesterol**, along with one fifth of your **triglyceride level**, make up your **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**, which can be determined through a blood test.

**Role of Diet**

* Normally, the liver makes all the cholesterol the body needs.
* But also from food, such as animal-based foods like **\_\_\_\_\_\_, \_\_\_\_\_\_,\_\_\_\_\_.**
* Too much cholesterol in your body is a risk factor for **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**:
  + too much cholesterol in your blood builds up in the **\_\_\_\_\_** of arteries, causing atherosclerosis, a form of heart disease.
  + The arteries become **\_\_\_\_\_\_\_\_** and blood flow to the heart muscle is slowed down or **\_\_\_\_\_\_\_\_\_\_**.
  + Not enough blood to heart may cause **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.
  + Completely cut off the result is a **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**.
* Replacing dietary **\_\_\_\_\_\_\_\_\_\_\_\_** fat with **\_\_\_\_\_\_\_\_\_** fat could lower LDL-cholesterol levels
* low-fat diets which replaced saturated fat with carbohydrates could lower both LDL-cholesterol and HDL-cholesterol levels.
* **\_\_\_\_\_\_\_** (artificial or hydrogenated) fats have been shown to reduce levels of HDL while increasing levels of LDL.
* Increased dietary intake of industrial trans fats is associated with an increased risk in cardiovascular diseases and **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**Statins**

* Class of drugs that **\_\_\_\_\_\_\_\_\_\_\_\_\_**cholesterol levels in blood
* work by **\_\_\_\_\_\_\_\_\_\_\_\_** the action of the liver **\_\_\_\_\_\_\_\_\_** responsible for producing cholesterol.
* Statins lower **\_\_\_\_\_\_\_\_\_**cholesterol
* Also lower **\_\_\_\_\_\_\_\_\_\_\_** and **\_\_\_\_\_\_\_\_\_\_\_\_\_** cholesterol levels.
* Statins may also help to stabilize plaques in the arteries, making heart attacks less likely.

**North American Diet** -rich in red meat, dairy products, processed and artificially sweetened foods*,* and salt, with minimal intake of fruits, vegetables, fish, legumes, and whole grains