

types and estimated methods of lipid profile

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Intended learning outcomes

- Identify the principles of the lipid profile test
- Calculation of total cholesterol concentration in the unknown sample

Lipids profile

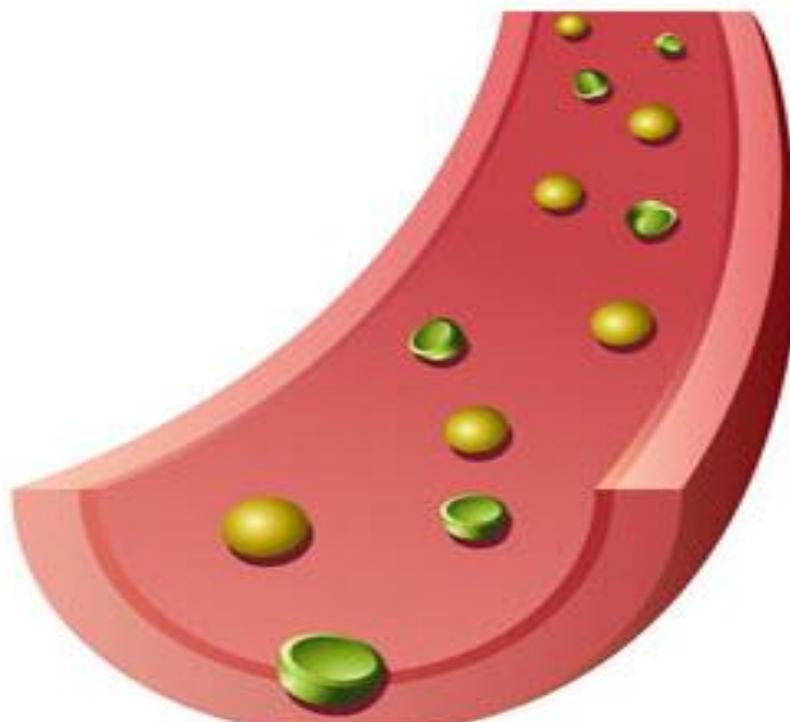
Lipid profile: A pattern of lipids in the blood.

A lipid profile usually includes the levels of total cholesterol, high-density lipoprotein (HDL), low-density lipoprotein (LDL) and triglycerides (TG), by using these values, a laboratory may also calculate: Very low-density lipoprotein (VLDL) and triglyceride:HDLratio

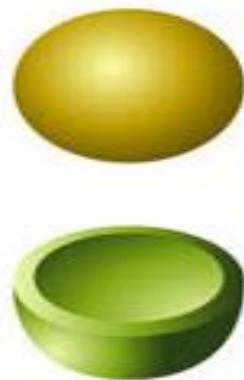
Lipids profile

It is used to determine the risk of heart diseases. Lipids are different from most tests in that it is not used to diagnose or monitor a disease but is used to estimate the risk of developing a disease, specifically the heart diseases.

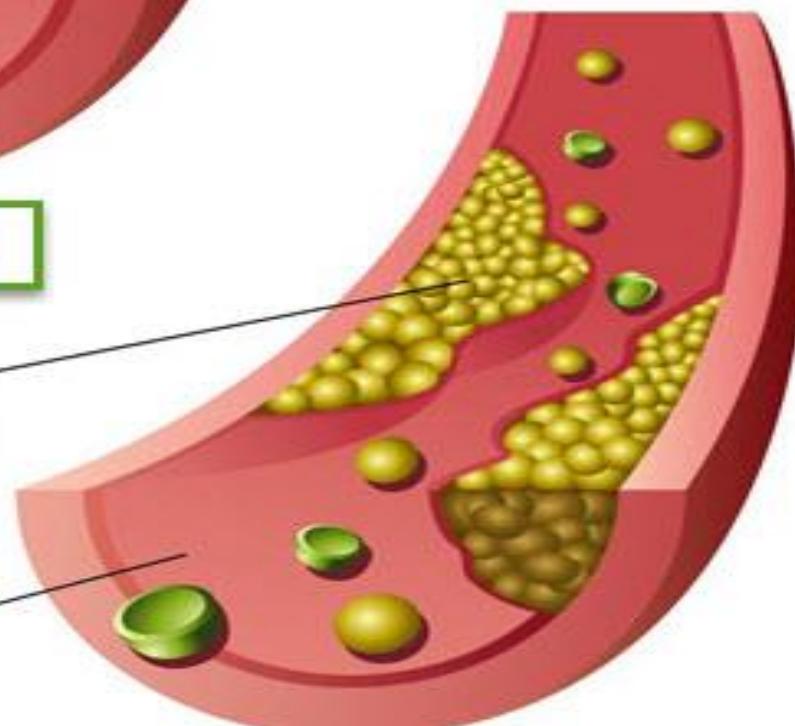
- Blood lipoprotein
 - They are lipids carrier particles . Composed of: cholesterol, cholesterol ester, TG, phospholipids and protein
 - Four major types: vLDL, LDL, HDL and chylomicron
 - They differ in the contents of each composition.
 - Function: transport lipids in blood to organs (lipids are hydrophobic and can't transport in blood without carrier)
 - Then these lipids are either: stored in adipose tissue or oxidized to give energy



شريان طبيعي



الكوليسترول الضار



دهون مترسبة

شريان

شريان متصلب

الدهون

✗ الدهون المتحولة

زيت نباتي مهدرج
الوجبات السريعة
طعام مقلي
معجنات



✗ الدهون المشبعة

دهون نباتية
جوزة الهند
زيت النخيل



✓ الدهون غير المشبعة

دهون الحيوانات
جلد الدواجن
اللحم الدهنية
زبدة
منتجات الألبان
(كاملة الدسم)



✓ الدهون المتعددة
زيوت عباد الشمس
فول الصويا
بذور الكتان
سمك



الدهون الأحادية
زيوت الزيتون
افوكادو
اللوز والبندق والجوز
بذور اليقطين والسمسم



Thank you
for attention