

Enas Amaireh's lecture notes extracted from her summary written in doc form  
[ie a replacement for a sheet]

<RISK FACTORS FOR HEART DISEASES PART ONE>

AST -> Heart Specific

ALT -> Liver Specific

LDH: [imp]

-heart specific isoform: LDH1

-muscle & liver specific: LDH5

CK: total OR CK-MB

-cytosolic-> two subunits: M & B ((3 isoforms))

mitochondrial ((extra: two isoforms: ubiquitous & sarcomeric))

LDL: mainly contains cholesterol & very low percentage of protein, thus it is responsible for transportation of Cholesterol from Liver to Peripheral tissues.

[imp] names of scientists who studied hypercholesterolaemia: Michael Brown & Joseph Goldstein

-familial hypercholesterolaemia is inherited in an: Autosomal Dominant manner

RELATED BORDERLINES:

1. Total Cholesterol
2. LDL Cholesterol
3. HDL

NOT DIRECTLY RELATED:

1. TAG; mostly obesity, diabetes, thus heart disease

\*\*Iron level: Ferritin: a protein that stores iron and releases it in a controlled fashion

- other proteins that incorporate iron: Transferrin (a plasma protein), Lactoferrin, Ferroprotein

-another test for measuring iron levels: Total Iron Binding Capacity (TIBC)

-Iron toxicity mainly results from: blood transfusions  
(antidote: deferoxamine)

[imp] women before menopause have lower total cholesterol levels than men that rise up after menopause-> due to the effect of oestrogen

[imp] medical conditions that raise cholesterol levels: Hypothyroidism, liver disease, kidney disease

Lovastatin: Recall: HMG-CoA reductase is the rate limiting step in cholesterol synthesis; responsible for the formation of mevalonate.

Niacin is derived from: Tryptophan

Bile Acid's function: emulsification ((extra: meaning the breaking up of fat globules into much smaller emulsion droplets))

-enterohepatic circulation:

circulation of biliary acids, drugs, & other substances from the liver to the bile -> entry to small intestine-> absorption by enterocytes -> transport back to the liver

((Intestine & Liver))

CRP Levels decrease in a healthy lifestyle.

-CRP test must be of HIGH SENSITIVITY & HIGH SPECIFICITY

**</ PART ONE >**