

NAFLD

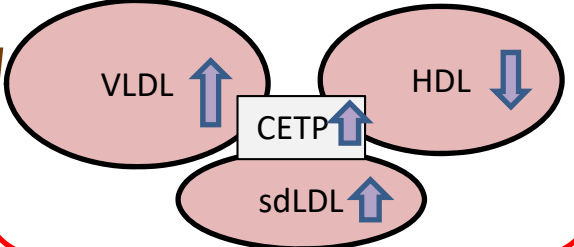
Modifying influence of NAFLD-related gene variants

Inflammation  
Insulin resistance  
Oxidative stress

Lipid globule  
TAG

VLDL assembly

**Atherogenic dyslipidemia**



Decreased Akt-P  
PKC-ε

Ceramide  
di-P PA  
DAG

LCFAs

LCFAs/glycerol/  
inflammatory cytokines  
decreased adiponectin

**Adipose tissue**

Dysfunctional and inflamed  
visceral adipose tissue (from  
activated macrophages)

Intestine

Chylomicron  
remnants  
(TAG)

TLR4

LPS

**Metabolic syndrome features  
associated with NAFLD:**

- Waist circumference >94 cm (men)  
>80 cm (women)
- Blood pressure ≥130/85 mmHg
- Fasting glucose ≥5.6 mmol/L
- Fasting triglycerides ≥1.7 mmol/L
- HDL-C <1.0 mmol/L (men)  
<1.3 mmol/L (women)

**Cardiovascular &  
Cardiac diseases**