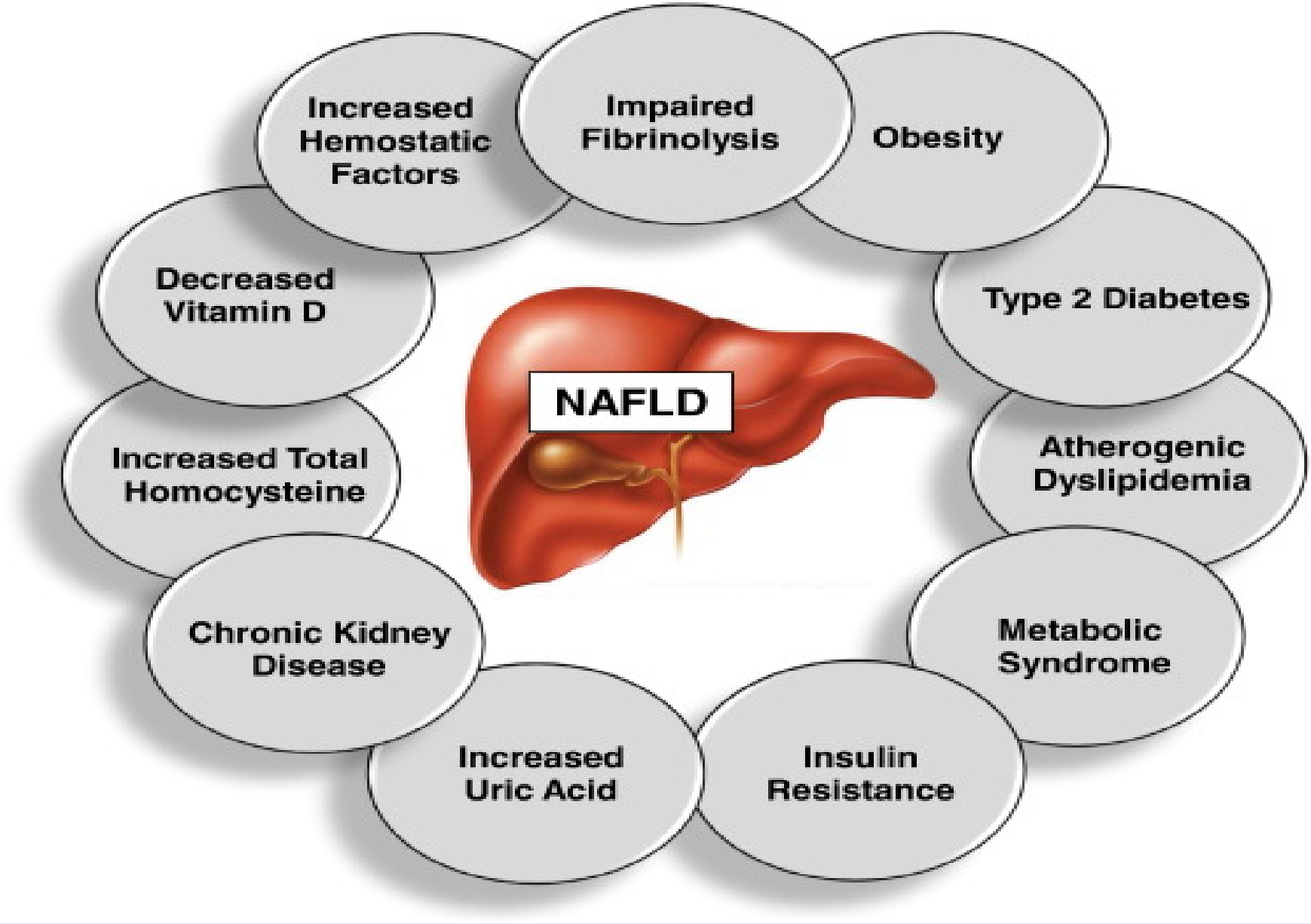
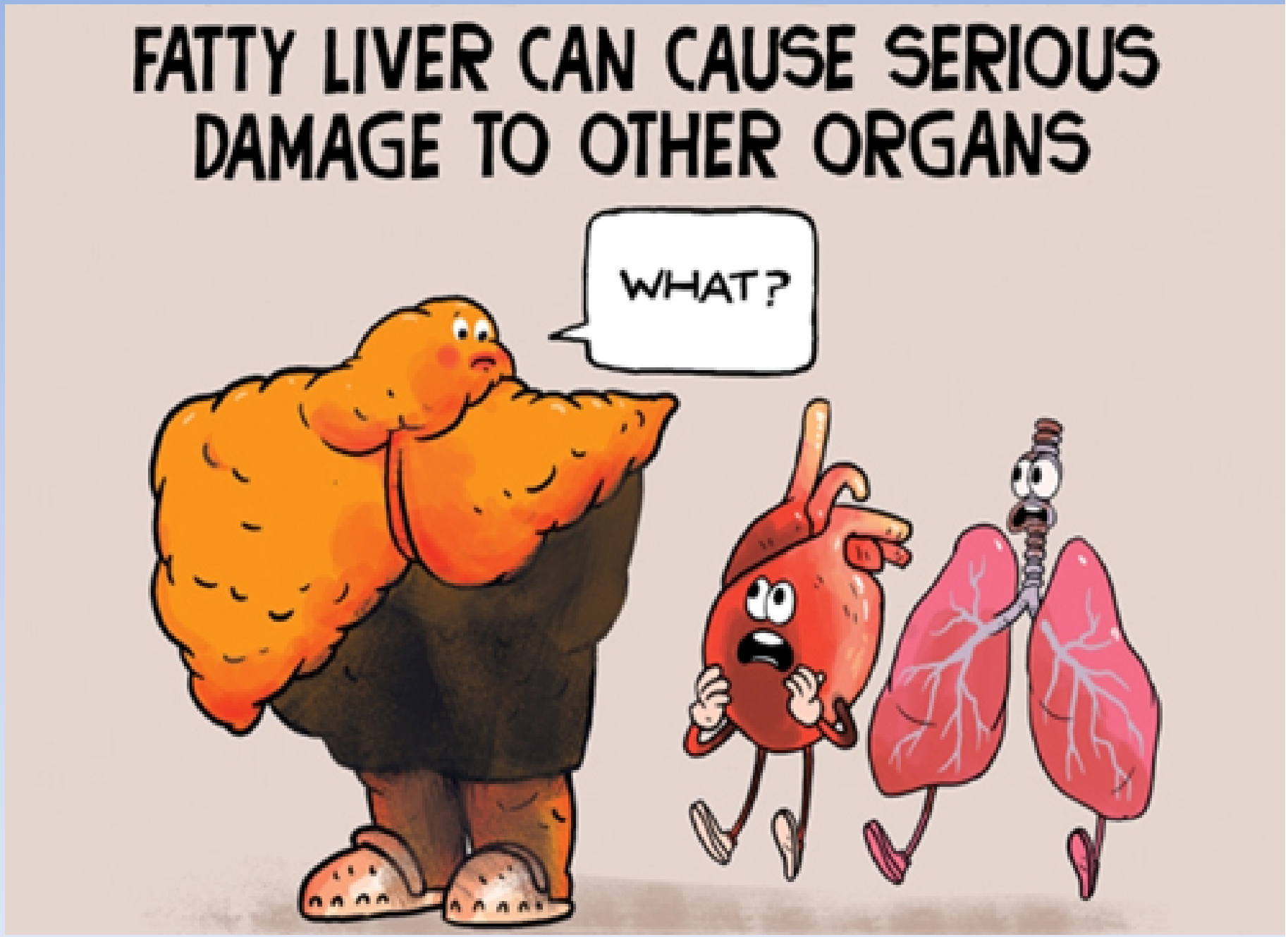
Nonalcoholic Fatty Liver Disease In Diabetes Mellitus

Prof.Dr.Nuray ARI, 2018

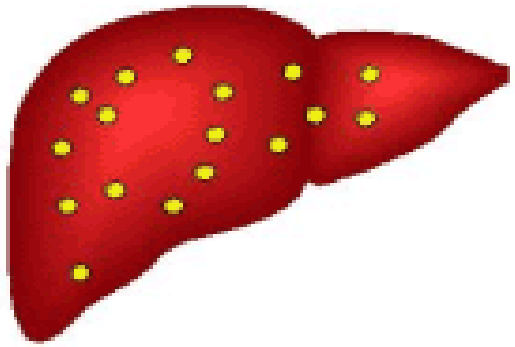


Lonardo et al, Metabolism, 65(8): 1136-1150,2016


FATTY LIVER CAN CAUSE SERIOUS DAMAGE TO OTHER ORGANS
WHAT?

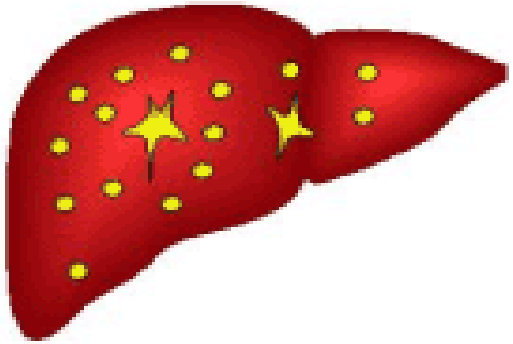
The Spectrum of NAFLD

Fatty Liver



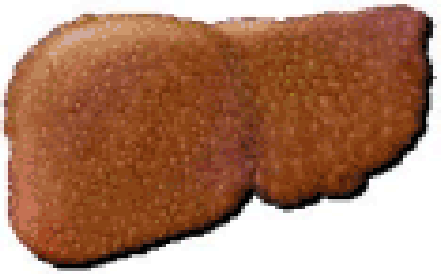
Fat accumulates in the liver

NASH



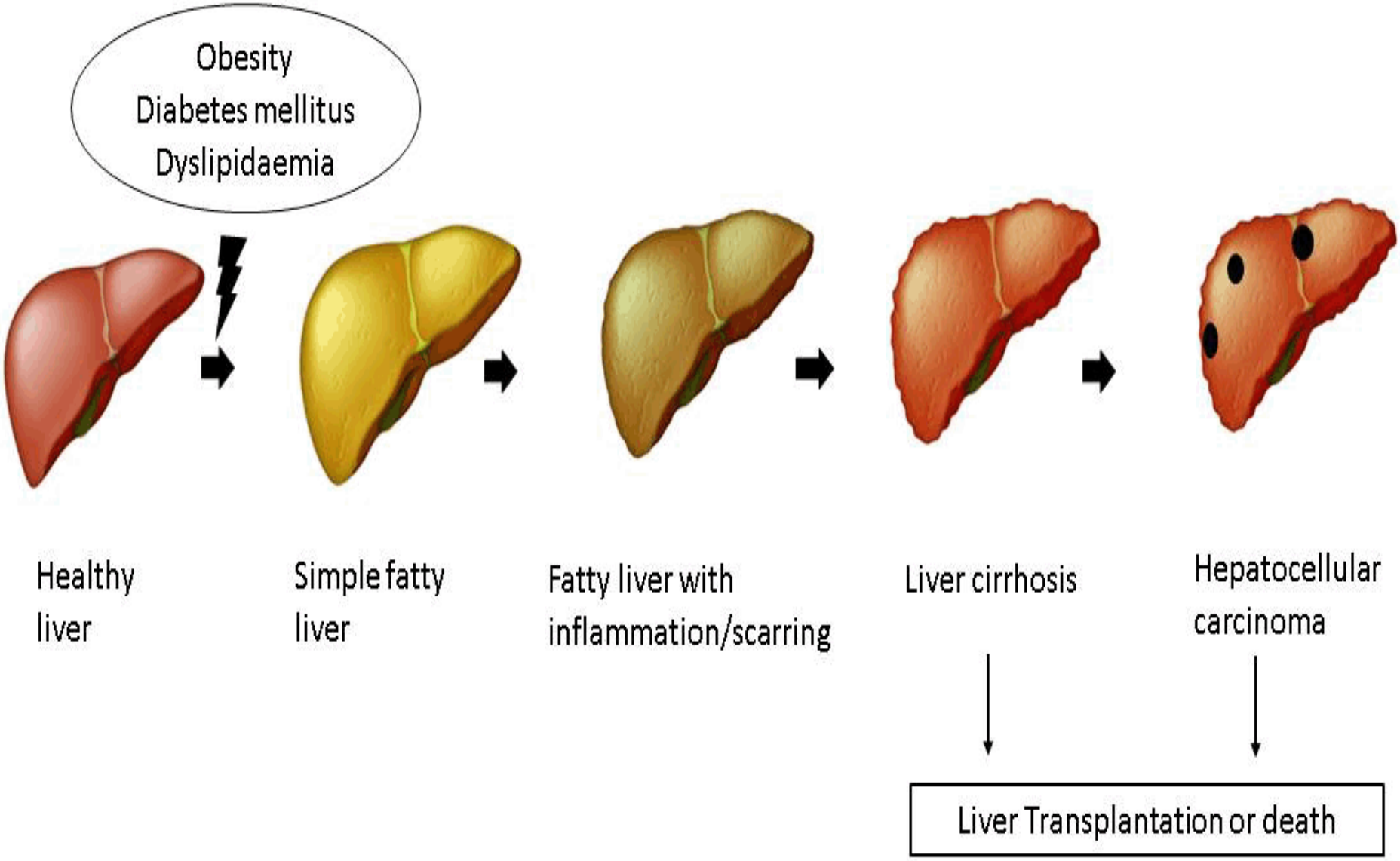
Fat plus inflammation and scarring

Cirrhosis

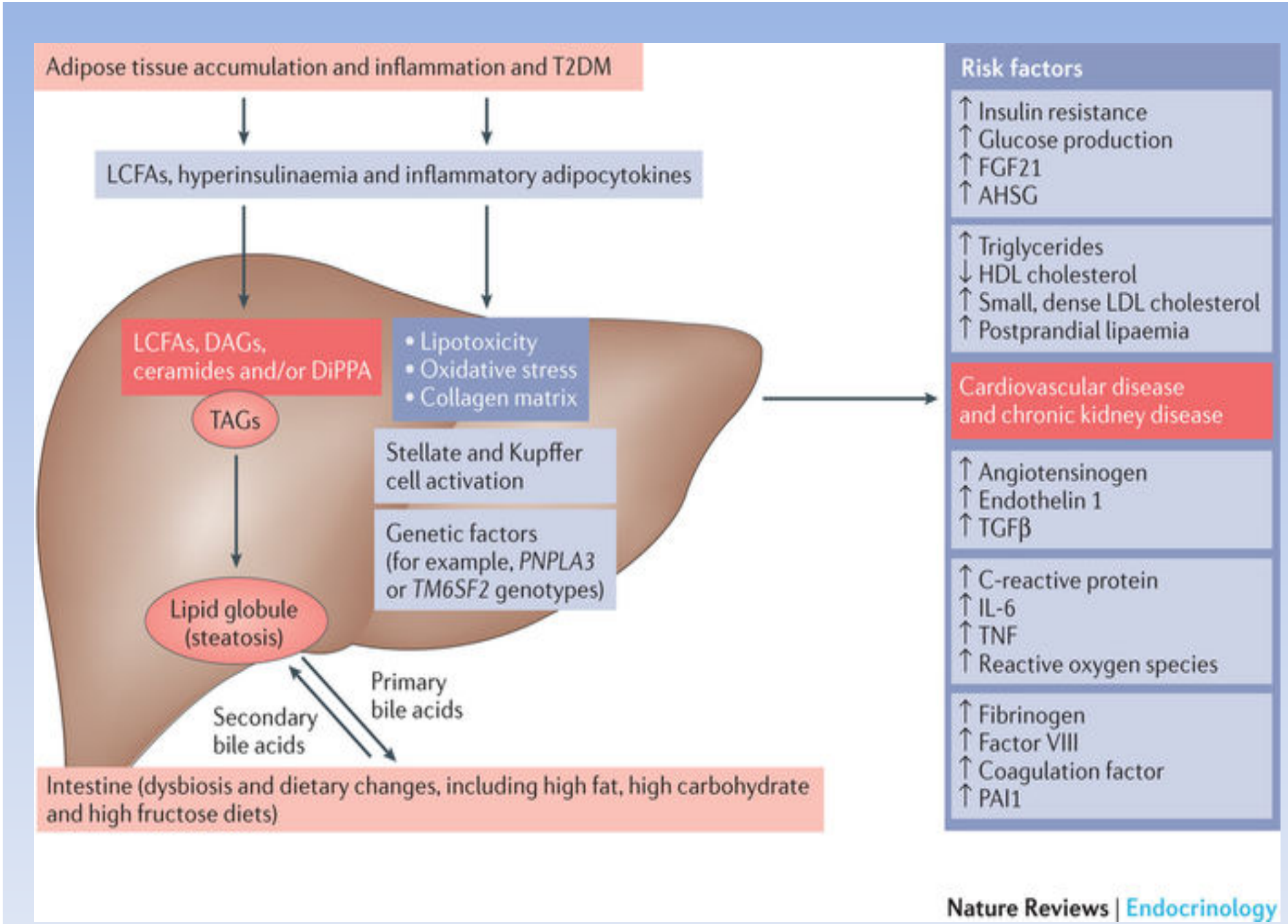


Scar tissue replaces liver cells

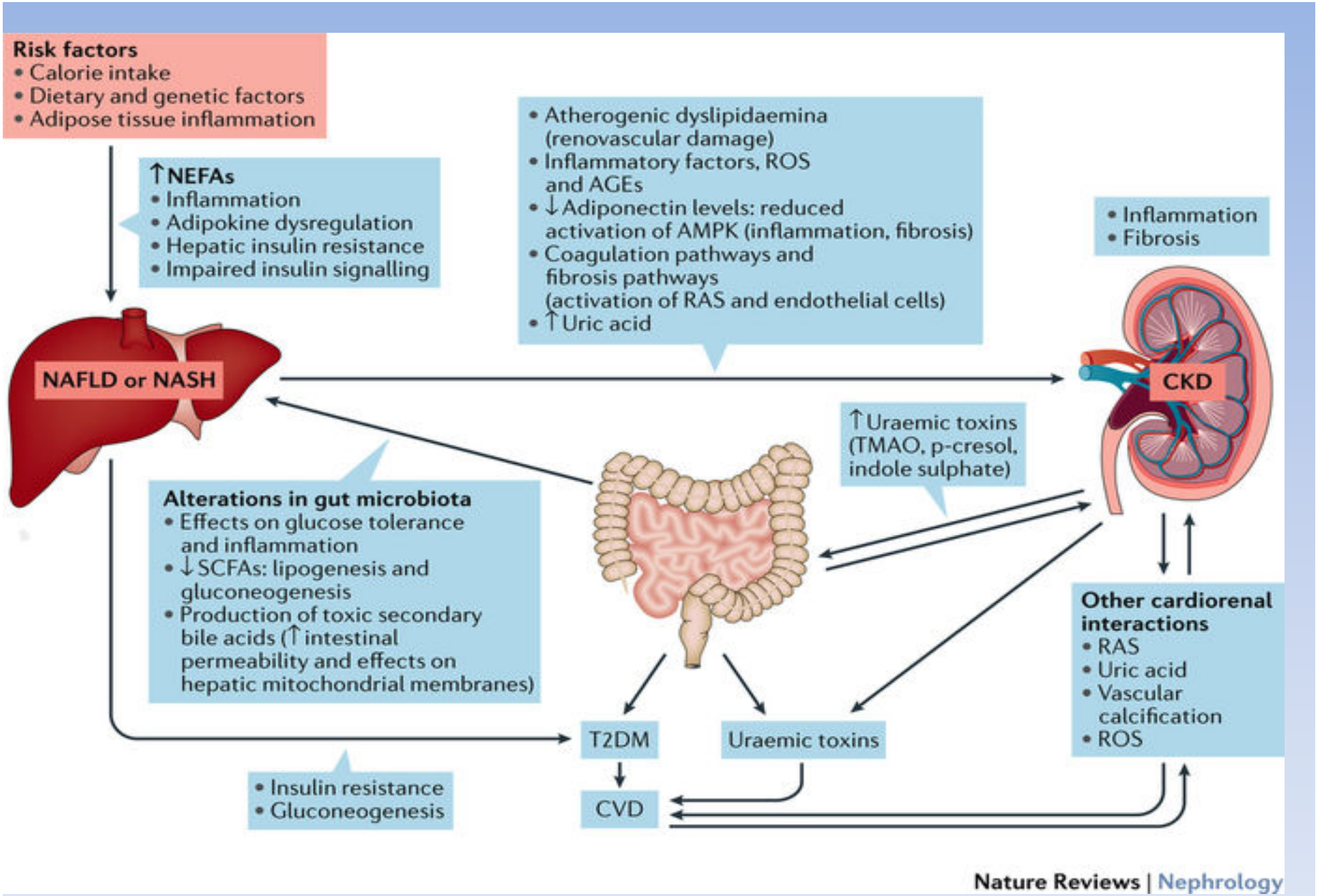
http://www.calgarygi.com/index.php?mode=webpage&id=735



Clin Med (Lond). 2015 http://atlasofscience.org



Targher et al. *Nature Rev Endocrinol* 14,:99–114(2018)



Targher G. and Byrne CD. *Nature Rev Nephrology* **,13:**297–310 (2017)

Serum Biomarkers for Nonalcoholic Fatty Liver Disease: Are We There Yet?

Liu K. et al . HEPATOLOGY, VOL. 65, NO. 1, 2017

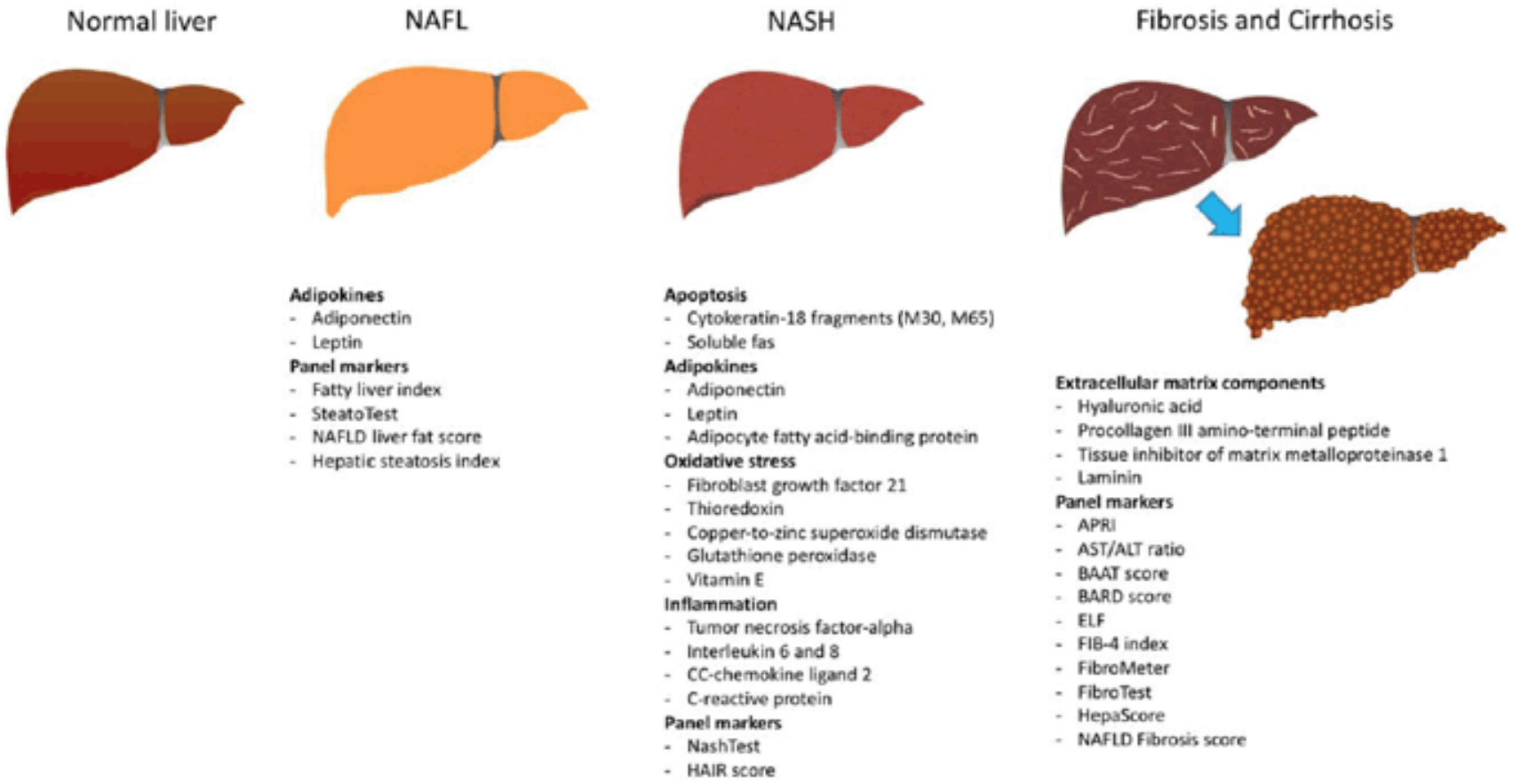
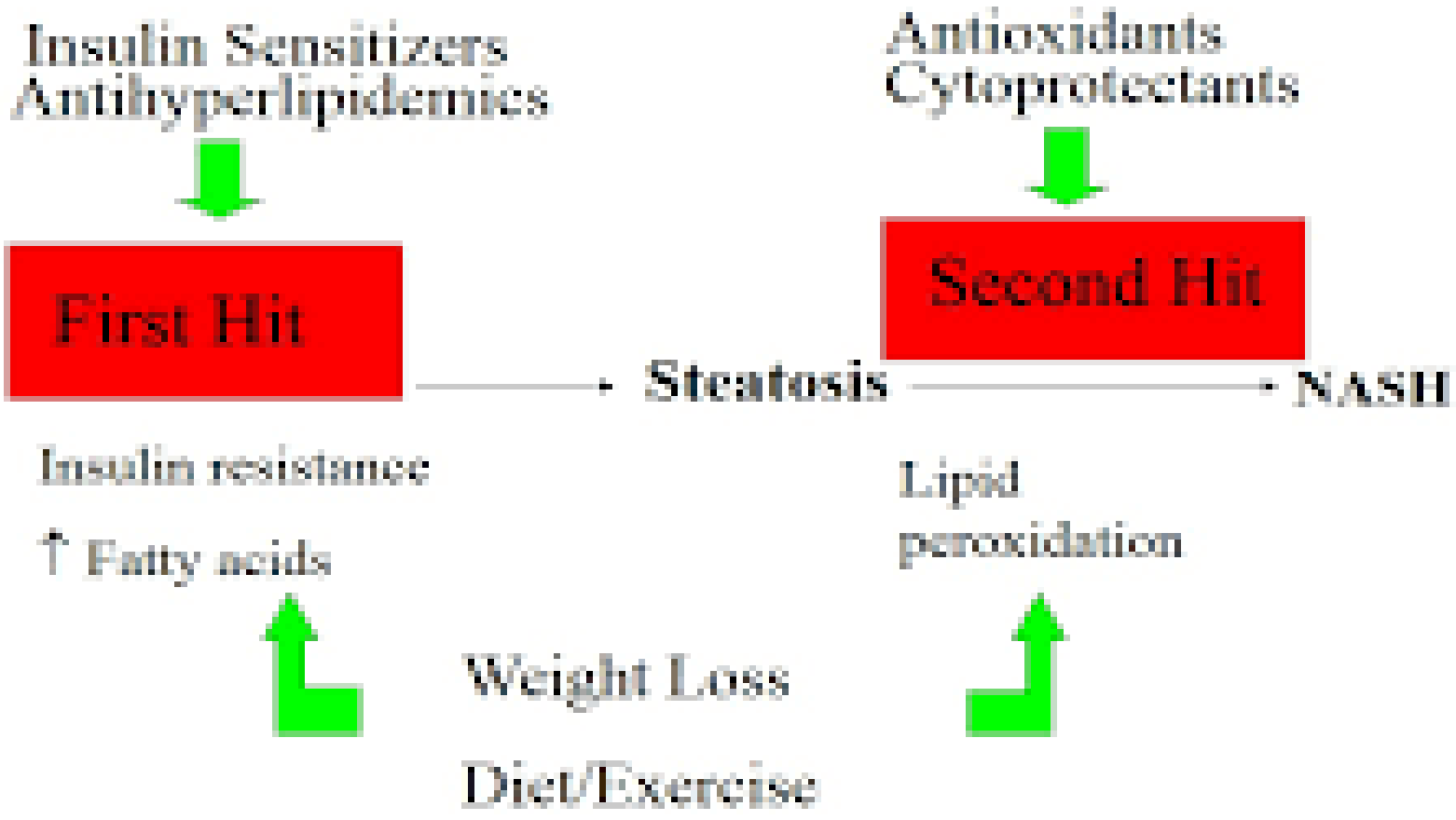


FIG. 1. Serum biomarkers across the NAFLD spectrum. Abbreviations: ALT, alanine aminotransferase; APRI, aspartate aminotransferase/platelet ratio index; AST, aspartate aminotransferase; BAAT, body mass index, alanine aminotransferase, and triglycerides; BARD, body mass index, alanine aminotransferase/aspartate aminotransferase ratio, and presence of diabetes; ELF, enhanced liver fibrosis; FIB-4, fibrosis-4; HAIR, hypertension, alanine aminotransferase, and insulin resistance.

Liu K. et al, HEPATOLOGY, VOL. 65, NO. 1, 2017

How to Treat?



http://howmed.net/pathology/nonalcoholic-fatty-liver-disease/

Treatment options

Lifestyle modifications	Diet Exercise with aim to lose 7-10% of body weight
Weight loss therapies	Orlistat Bariatric surgery
Therapies for insulin resistance	Metformin Glitazones Glucagon-like peptide 1 (GLP1)
Lipid lowering agents	Statin
Emerging therapies	Cytoprotective and anti-oxidant agents 1) Ursodeoxycholic acid (UDCA) 2) Vitamin E Angiotensin receptor blockers Pentoxyphylline
Novel therapies	Caspase inhibitors Peroxisome proliferator-activated receptor (PPAR) agonist Farnesoid X receptor agonists (obeticholic acid)

Clin Med (Lond). 2015 Apr, http://atlasofscience.org