

# NAFLD

## Understanding the next global epidemic

### What is NAFLD?

Non-alcoholic Fatty Liver Disease



Presence of hepatic fat in people who do not consume excessive alcohol [1]

### Epidemiology

**25%** of the global population could be affected [2]

**10-25%**

NAFL develops into Non-alcoholic SteatoHepatitis (NASH)

**#1** Liver disease

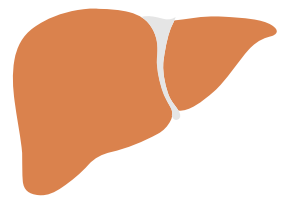
### Risk factors

The exact cause of NAFLD remains unknown. However, some risk factors have been described.

- Obesity 🍷 🍩 🍷
- Sedentary lifestyle 🎮 📺
- Genetic background 🧬
- Type 2 diabetes 🩸
- Hypertriglyceridemia 📊
- ...

### Progression of NAFLD

**Normal** - Healthy liver



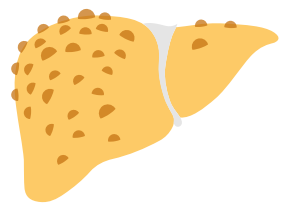
Reversible

**NAFL** - Fat accumulation (least severe)



Reversible

**NASH**  
Fat accumulation  
Ballooning Inflammation



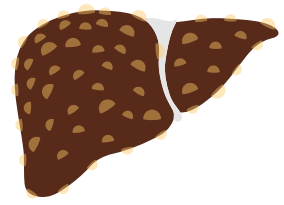
Reversible

**Fibrosis**  
Excessive deposition of extracellular matrix (ECM)



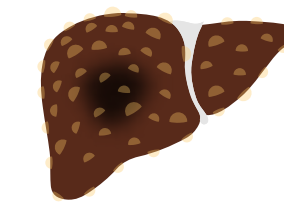
Irreversible

**Cirrhosis**  
Scar tissue destroys liver cells

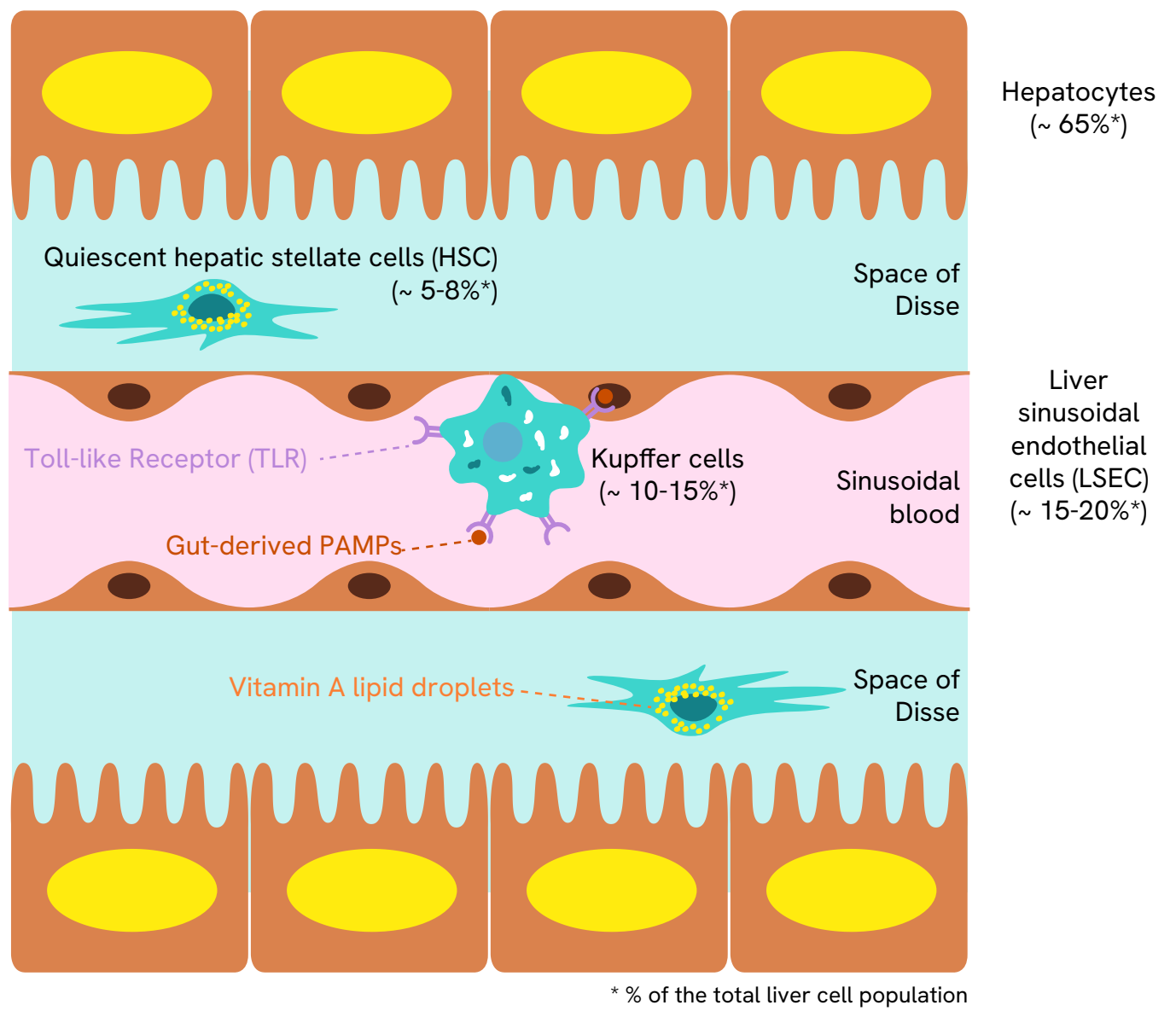


Irreversible

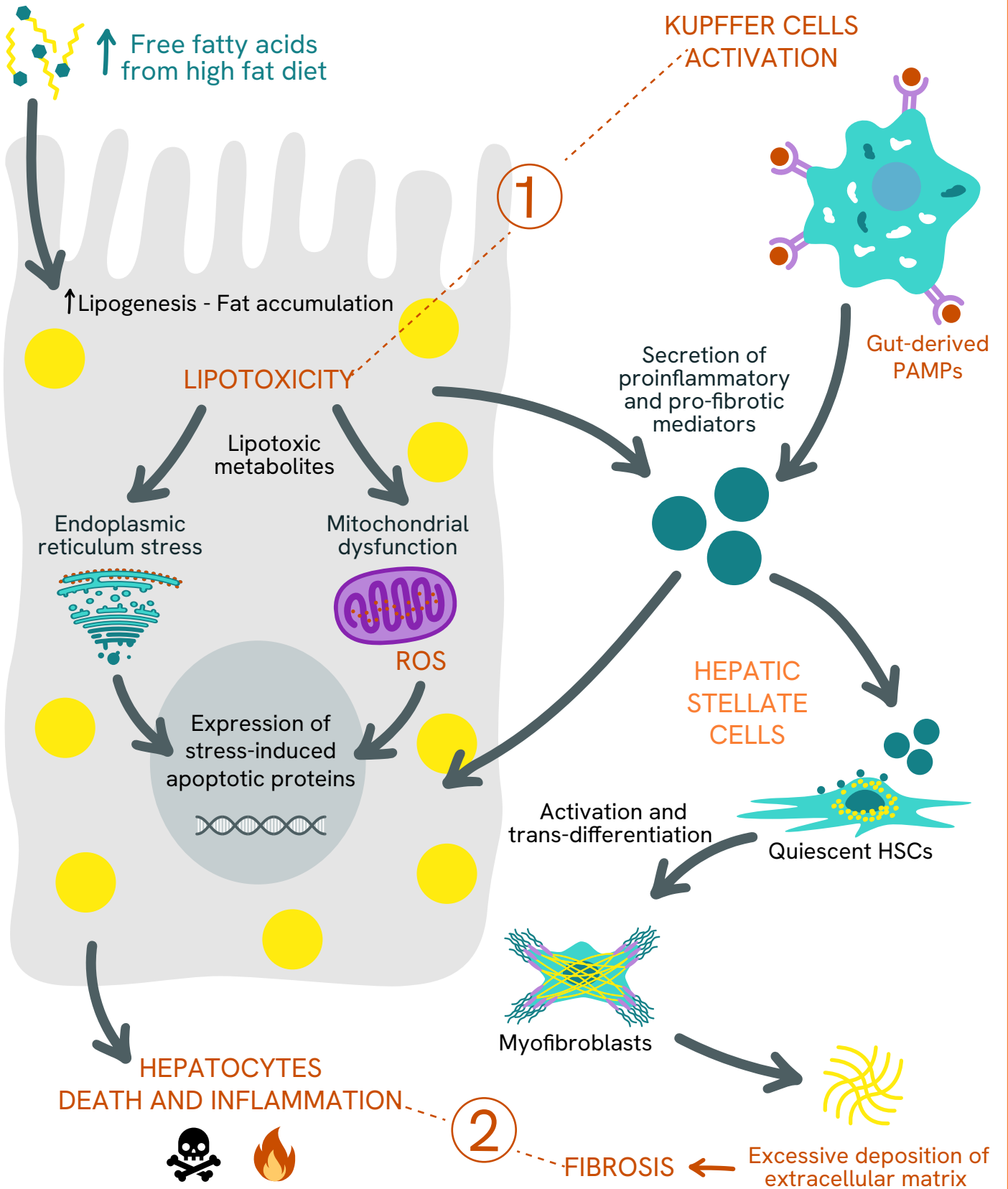
**HCC**  
Hepatocellular carcinoma = liver cancer (most severe)



### Healthy liver cut



### NASH development



### References

- [1] Ludwig, J., Viggiano, T. R., McGill, D. B. & Oh, B. J. Nonalcoholic steatohepatitis: Mayo Clinic experiences with a hitherto unnamed disease. Mayo Clin. Proc. 55, 434-438 (1980)
- [2] Younossi, Z. M. et al. Global epidemiology of nonalcoholic fatty liver disease-Meta-analytic assessment of prevalence, incidence, and outcomes. Hepatol. Baltim. Md 64, 73-84 (2016)
- [3] Nonalcoholic fatty liver disease. Nature Reviews Disease Primers (2015)

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