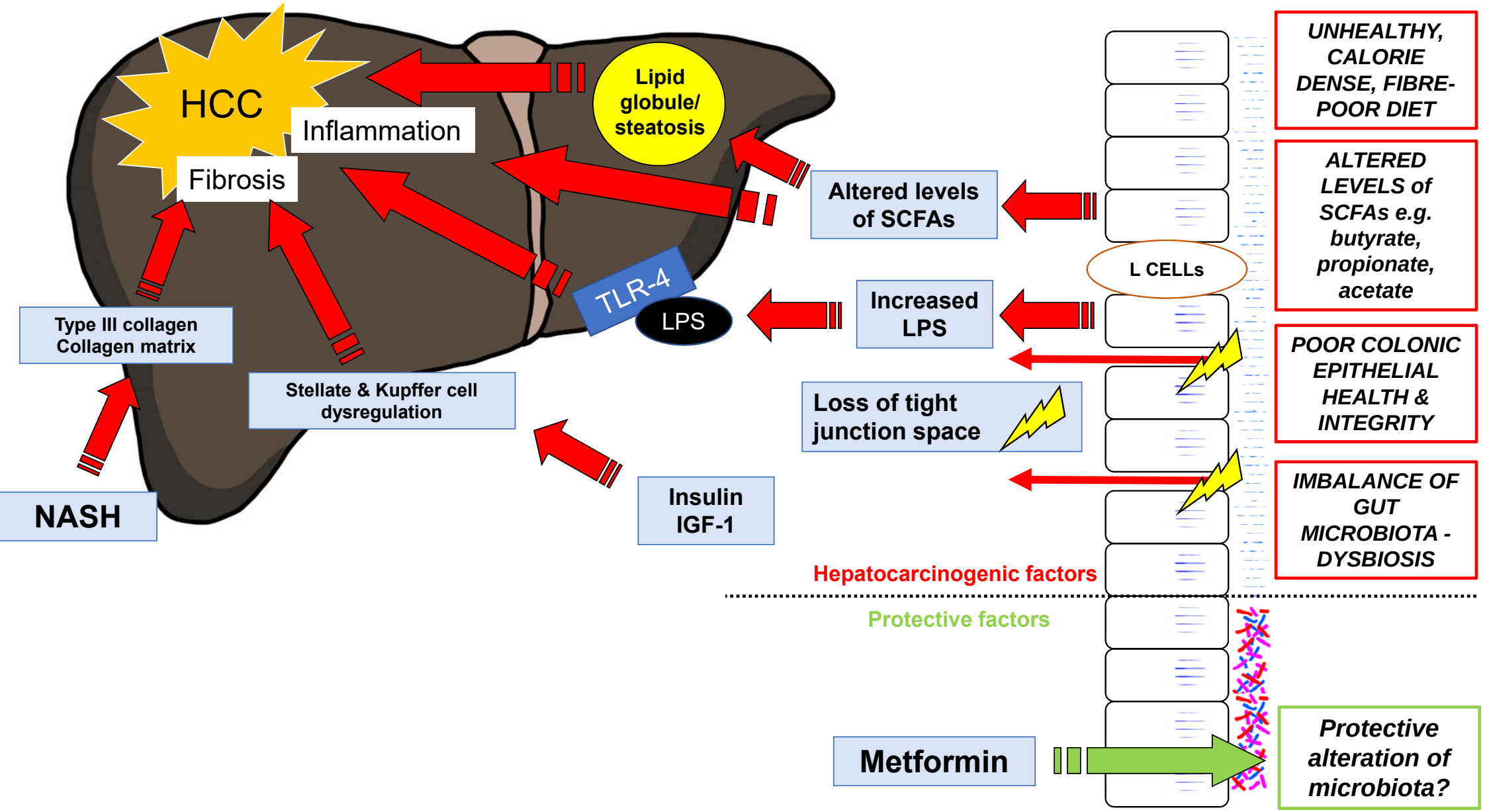
HCC
Inflammation
Fibrosis
Lipid globule/ steatosis
Altered levels of SCFAs
L CELLs
Increased LPS
TLR-4
LPS
Type III collagen Collagen matrix
Stellate & Kupffer cell dysregulation
Loss of tight junction space
NASH
Insulin IGF-1
UNHEALTHY, CALORIE DENSE, FIBRE-POOR DIET
ALTERED LEVELS of SCFAs e.g. butyrate, propionate, acetate
POOR COLONIC EPITHELIAL HEALTH & INTEGRITY
IMBALANCE OF GUT MICROBIOTA - DYSBIOSIS
Hepatocarcinogenic factors
Protective factors
Metformin
Protective alteration of microbiota?