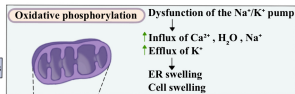
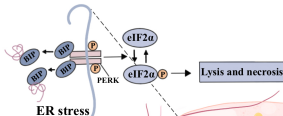
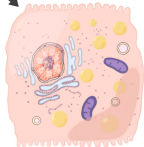


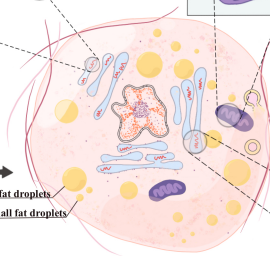
Insulin resistance
Oxidative injury
Hepatic iron
Gut hormones
Antioxidant deficiency
Host microbiome



Lipid peroxidation
Excessive lipid accumulation



Large fat droplets
Small fat droplets

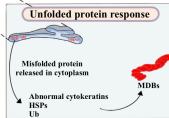


The activation of SHh signaling



Fibrosis

HSC activation
fibrogenesis



Normal cell

Swelling of hepatocyte

Ballooning of hepatocyte

Physiologic and adaptive

Degenerative