

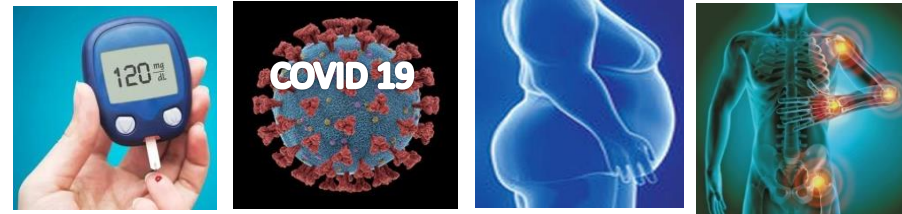
# There are two types of inflammation

## Good: Acute inflammation



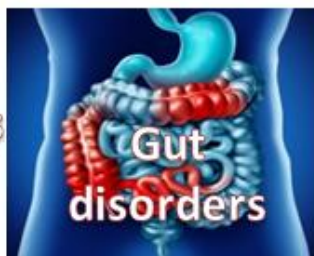
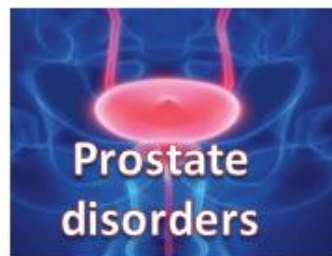
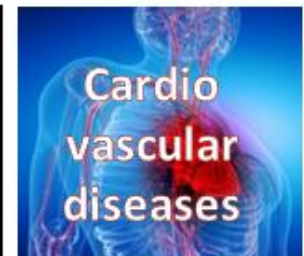
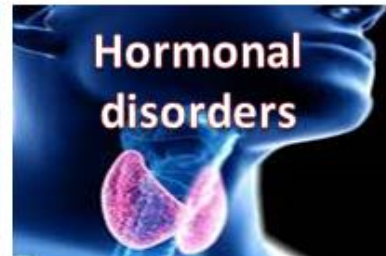
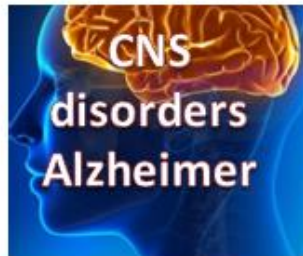
**Short-term** inflammatory responses protecting injured tissue which ends within a few hours or several days.

## Bad: Chronic inflammation



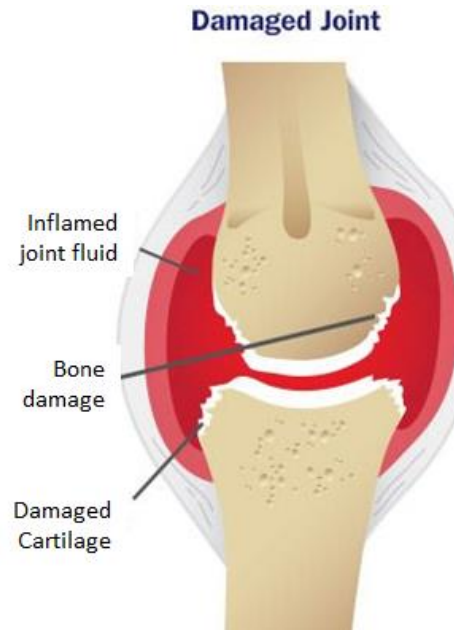
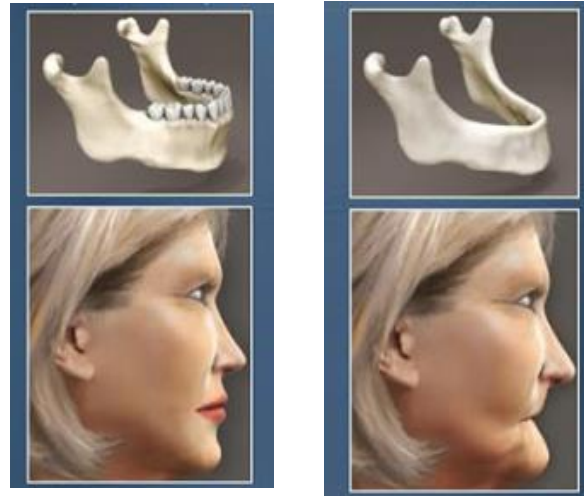
**Lingering** low inflammatory levels causing constant state of alert damaging tissues and degrading organs' function.

# Chronic inflammation has been linked to many health disorder



# Chronic inflammation accelerates aging - InflammAging

- Increased Oxidative stress
- Pain
- Cartilage degradation
- Bone loss

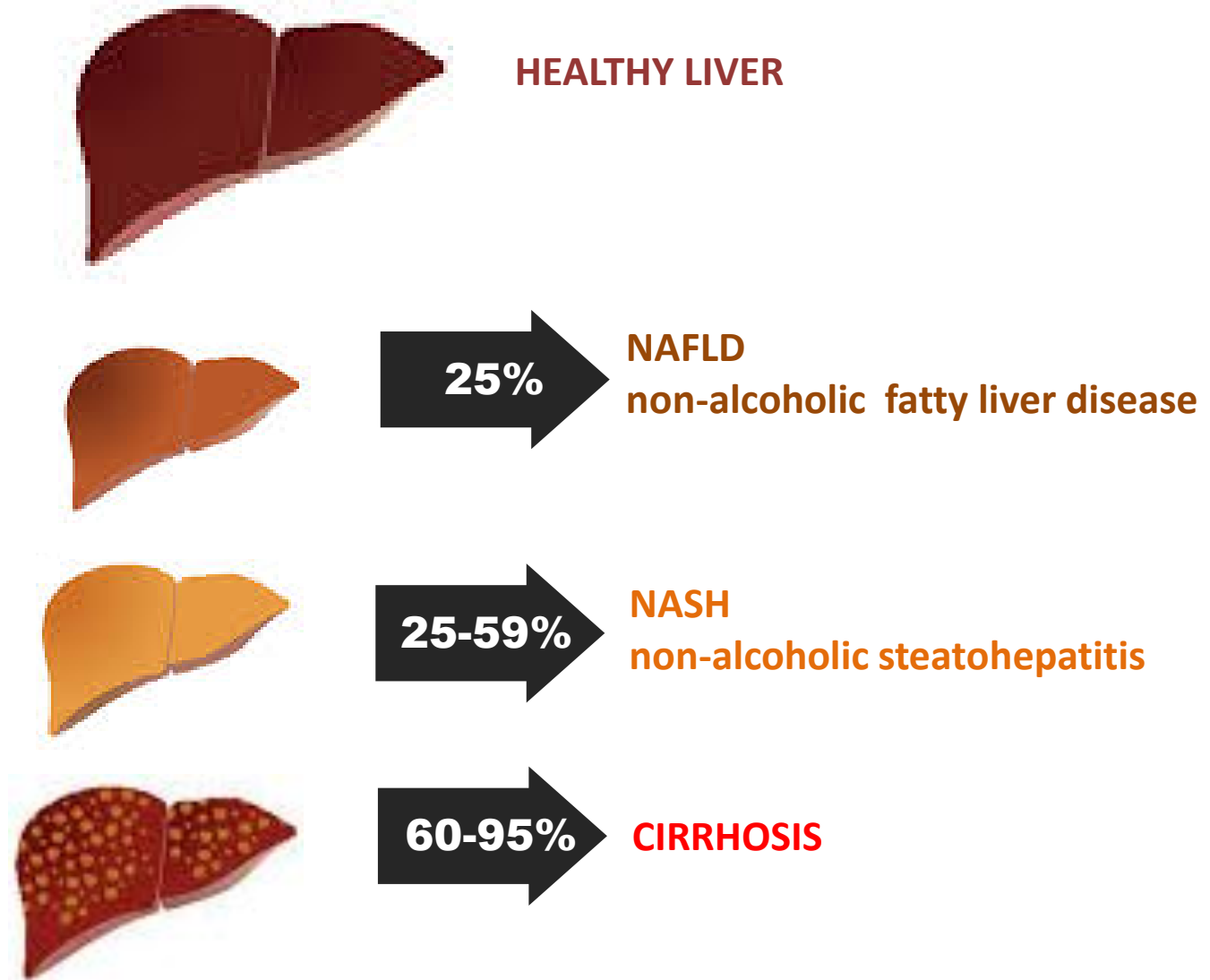


# Chronic Inflammation limits body to use fat as energy resource leading to:

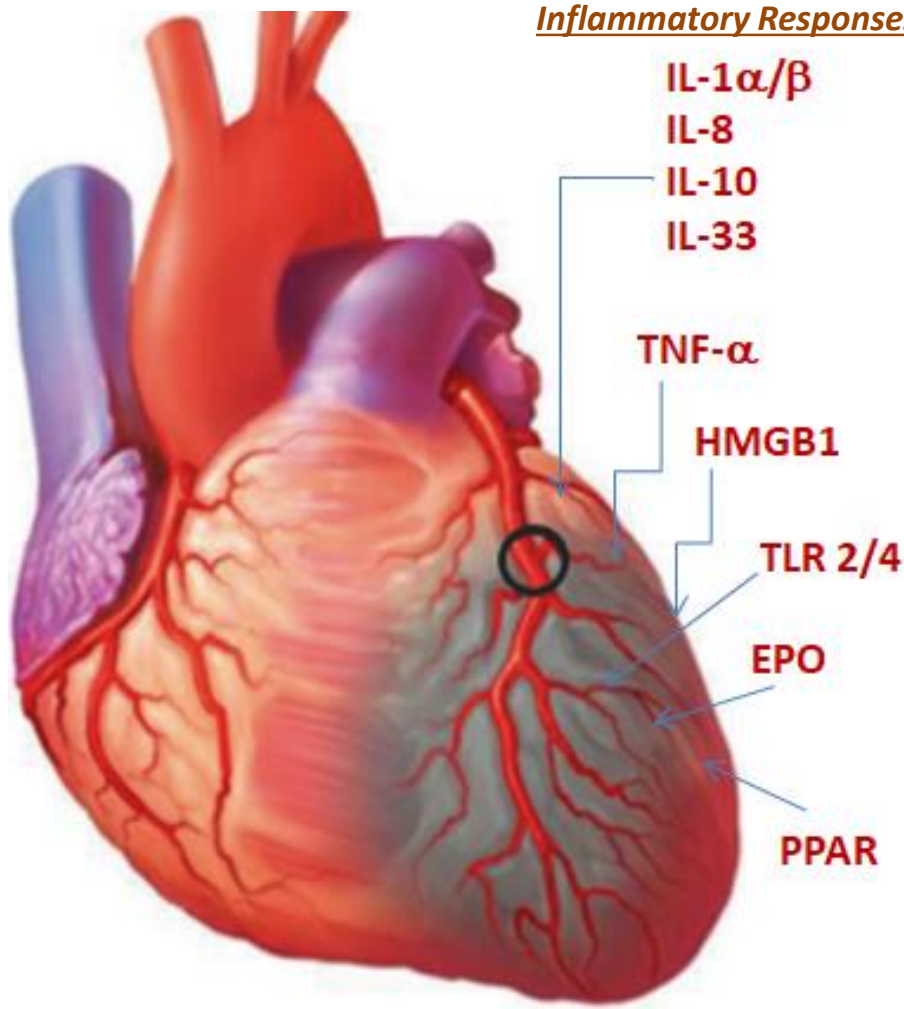
- Obesity
- Low insulin sensitivity
- Liver disorders
- Hypertension



# Chronic inflammation Degrades liver's function

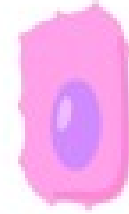


# Monitoring chronic inflammatory responses may prevent heart and blood vessel disorders



- **Atherosclerosis**  
hardening and narrowing of the coronary arteries
- **Heart Attack**  
Myocardial Infarction" (MI)  
blood flow to the heart is severely reduced or cut off
- **Heart Failure**  
the heart can't supply enough blood and oxygen to the body's cells, resulting in fatigue and shortness of breath
- **Cardiomyopathy**  
the heart to become abnormally enlarged / thickened/ stiffened, limiting pump blood effectively

# Chronic activation of specific immune responders are contributing factors of psoriasis

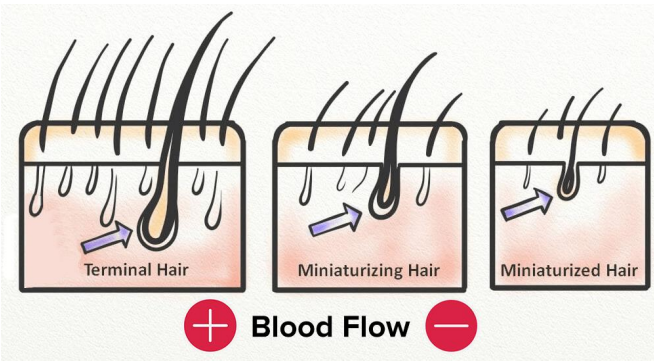
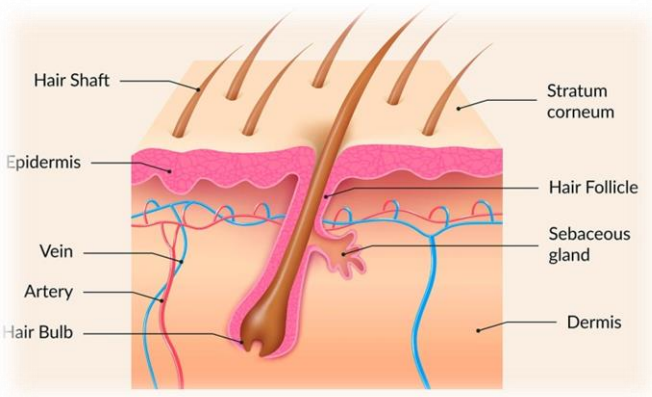


Keratinocyte



- IL-6
- IL-8
- IL-1 family
- IL-17C
- CCL20
- CXCL family
- AMPs

# Chronic inflammation decreases blood flow to the hair follicles causing hair loss





# Long Hauler Syndrome has been linked to chronic inflammatory responses

## Inflammatory Responses

- CRP ↑
- ESR ↑
- 
- 
- IL-6 ↑
- IL1β ↑
- 
- IL12 ↑
- TINF ↑
- IFNγ ↑
- 
- 
- MCP1 ↑
- RANKL ↑

