

# Timing of Menarche is Impacted By Toxins, Food Intake

# Consequences of Perturbed Timing of Menarche

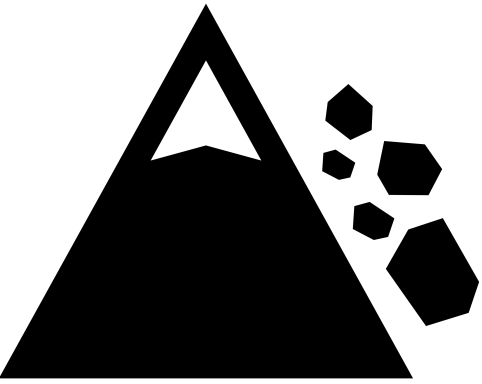
## Climate Change Affects Weather Events



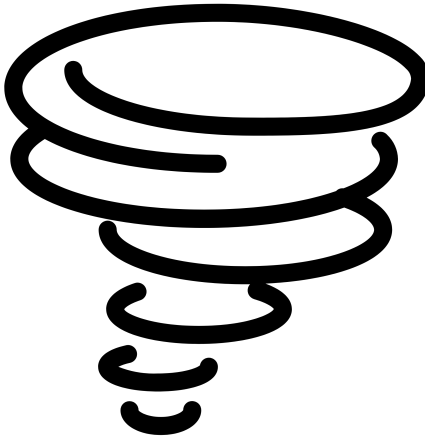
Hurricanes



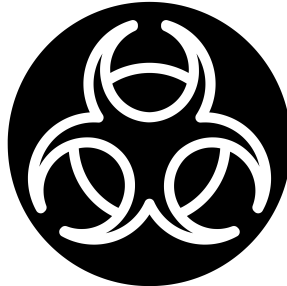
Extreme Weather



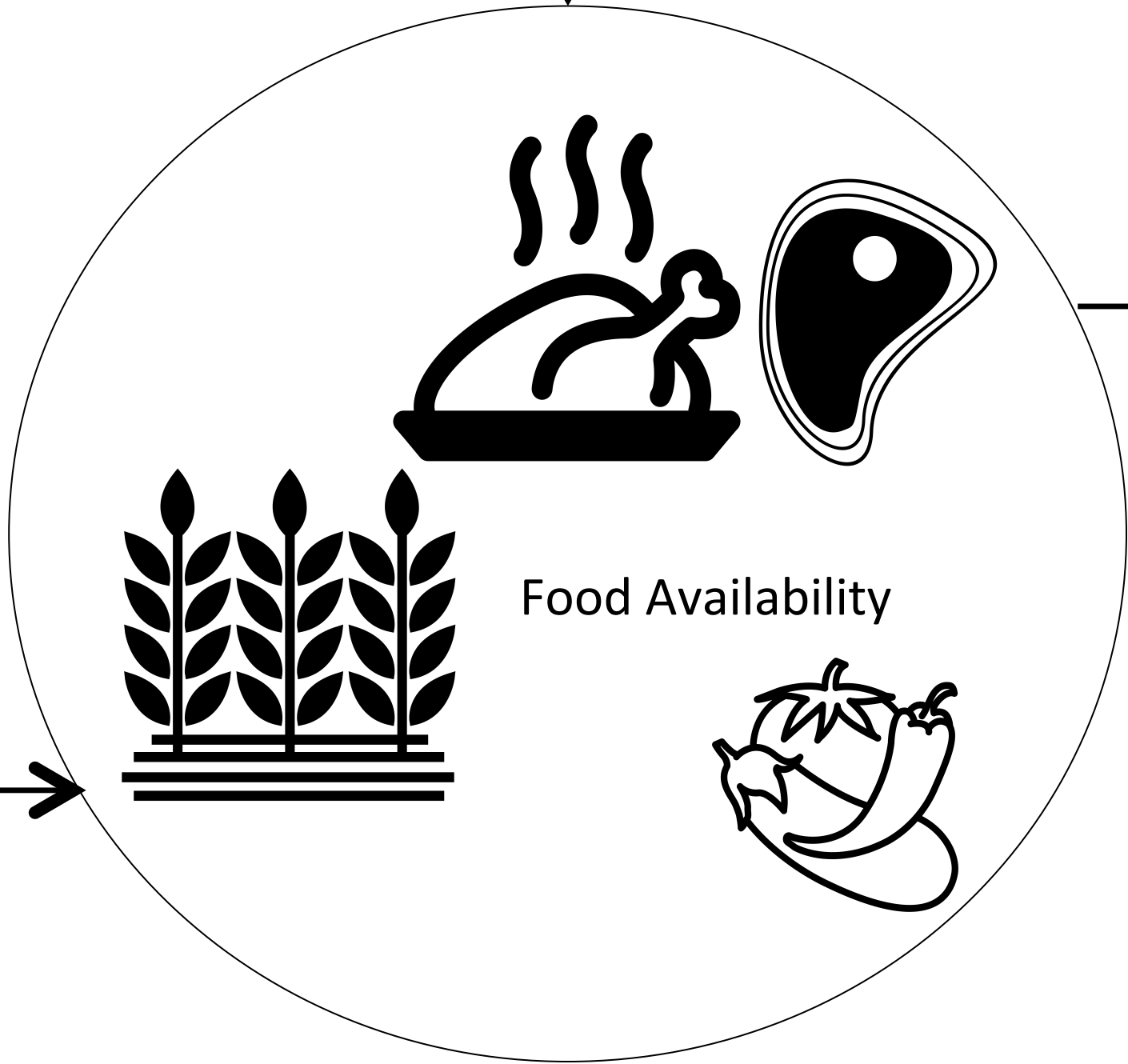
Avalanches



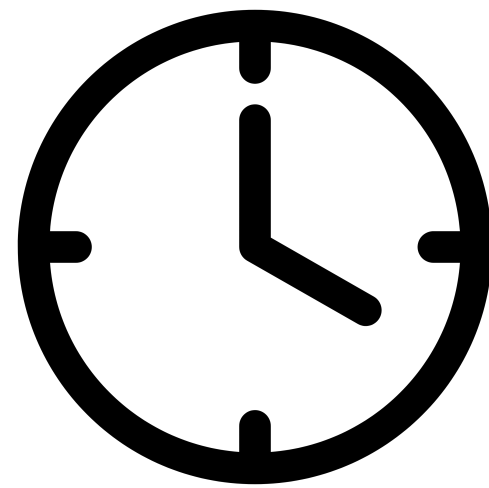
Twisters



Toxins Released into Environment



Food Availability



Perturbations in Timing of Menarche

## Increases Disease Burden



**Bone Health:**  
• Osteoporosis  
• Short Stature



**Cardiovascular Disease:**  
• Carotid artery intima-media thickness



Increases in Disease



**Mental Health:**  
• Depression  
• Thoughts of self-harm  
• Fear  
• Distress  
• Externalizing disorders  
• Behavioral problems



**Fertility-Related Conditions:**  
• Breast Cancer  
• Increased Antral follicle count  
• Premature menopause  
• Hysterectomy  
• Fetal loss  
• Longer time to first baby  
• Hirsutism