

# THE STRESS

## ALARM PHASE

## RESISTANCE

RESISTANCE TO STRESS



### POSSIBLE STRESSORS

- Physical Stress
- Emotional
- Environmental
- Metabolic



### 1. Alarm Phase - Immediate Response to Stress

**Key Hormones: Epinephrine, renin, aldosterone**

- Increased mental alertness
- Increased energy consumption by skeletal muscles
- Increased blood flow to skeletal muscles
- Drastic reduction in digestion and urine production
- Increased blood pressure, heart rate and respiratory rate

TIME

# RESPONSE

## EXHAUSTION

### 2. Resistance - Stress Persists

**Key Hormones: Glucocorticosteroids, epinephrine, growth hormone, thyroid hormones**

- Higher than normal energy demands
- Glycogen reserves are being depleted
- Lipids and protein reserves are mobilized
- Glucose is conserved for the nervous system

### 3. Exhaustion - Collapse of Vital Systems

- Homeostatic regulation breaks down
- Problems with mineral balance arise
- Exhaustion of lipid reserves
- Inability to maintain hormonal and metabolic demands