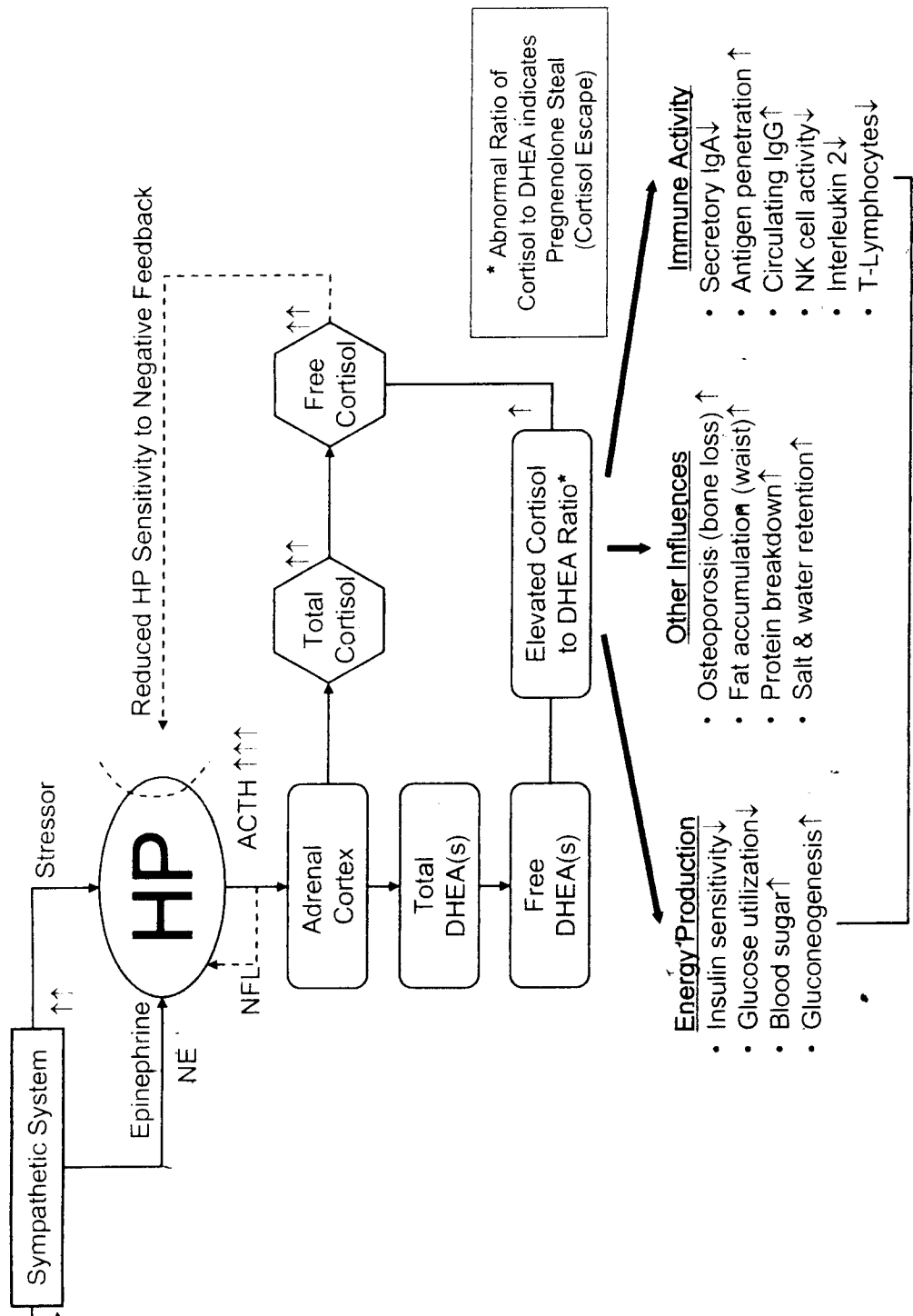


Chronic Stress Response™

Potential Sources of Stress

- Anger - Fear
- Worry/Anxiety
- Depression
- Guilt
- Overwork
- Physical and Mental strain
- Excessive exercise
- Sleep deprivation
- Light-cycle disruption
- Late hours
- Surgery
- Trauma/Injury
- Whiplash - Head injury
- Inflammation
- Pain
- Temperature extremes
- Toxic exposure
- Infections
- Chemicals - Heavy metals
- Electromagnetic fields
- Radiation
- Geophysical
- Malabsorption
- Maldigestion
- Illness
- Low blood sugar - Poor diet
- Nutritional deficiencies
- Allergies
- Foods
- Mold - Pollens



- Energy Production**
- Insulin sensitivity ↓
 - Glucose utilization ↓
 - Blood sugar ↑
 - Gluconeogenesis ↑

- Other Influences**
- Osteoporosis (bone loss) ↑
 - Fat accumulation (waist) ↑
 - Protein breakdown ↑
 - Salt & water retention ↑

- Immune Activity**
- Secretory IgA ↓
 - Antigen penetration ↑
 - Circulating IgG ↑
 - NK cell activity ↓
 - Interleukin 2 ↓
 - T-Lymphocytes ↓

Clinical Conditions

- Chronic viral infections (EBV, CMV, Herpes I-II, etc.)
- Increased infections
 - Yeast overgrowth
 - Allergies
 - Fatigue
 - Headaches
 - Autoimmune disease
 - Cancer
 - Cardiovascular disease
- Insomnia
- Hypoglycemia
 - Hunger
 - PMS
 - Depression
 - Irritable bowel
 - Digestive problems
 - ADD/ADHD

KEY

- Association ————
- Stimulus ———→
- Outcome ———→
- Inhibition - - - - -→
- HP = Hypothalamus - Pituitary
- NFL = Negative Feedback Loop
- NE = Norepinephrine