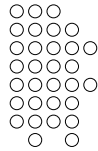


## Chapter 12

### Stress, Health, and Coping



### Stress



- A negative emotional state in response to events that we perceive as taxing our resources or our ability to cope
- Stressors—events that are perceived as harmful, threatening, or challenging

### Biopsychosocial Model of Health



- Biopsychosocial model—the belief that physical health and illness are determined by the complex interaction of biological, psychological, and social factors
- Health psychology—the study of how psychological factors influence health, illness, and health-related behaviors

### Life Changes



Change is stressful—e.g., death, marriage, divorce, loss of job, vacations, retirement

### Daily Hassles



Annoying events in everyday life—  
We all have “bad hair” days; these minor things can add up to lots of stress

### Catastrophes



Unpredictable, large-scale events can be extremely stressful and change our lives; can lead to PTSD

## Conflict

Pull between two opposing desires or goals

- Approach-approach conflict
  - choice between 2 appealing outcomes
  - easy to resolve, low stress
- Avoidance-avoidance conflict
  - choice between 2 unappealing outcomes
  - more stressful than approach-approach
- Approach-avoidance conflict
  - one goal with appealing & unappealing aspects
  - most stressful type of conflict
  - often see vacillation

## Social and Cultural Sources of Stress

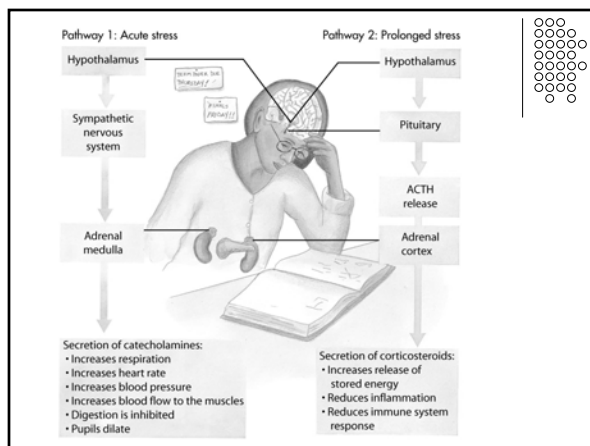
- Social conditions that promote stress
  - poverty, racism, crime
  - low SES tend to have highest levels of stress
- Culture clashes lead to stress
  - company owned by different culture
  - refugees, immigrants suffer
  - acculturative stress

## Health Effects of Stress

- Indirect effects—promote behaviors that jeopardize physical well being such as use of drugs, lack of sleep, poor concentration
- Direct effects—promote changes in body functions, leading to illness such as headaches and other physical symptoms

## Endocrine Responses to Stress

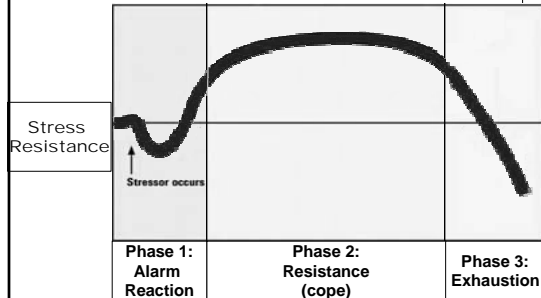
- Fight or flight preparation of body
- Stress hormones—produced by adrenal glands
  - Adrenal medulla—catecholamines
    - Epinephrine and norepinephrine
    - Increases respiration, BP, heart rate
  - Adrenal cortex—corticosteroids
    - Release stored energy
    - Reduces inflammation and immune system responses



## General Adaptation Syndrome

- Hans Selye
- Three stage process
  - Alarm—intense arousal, mobilization of physical resources (catecholamines)
  - Resistive—body actively resists stressors (corticosteroids)
  - Exhaustion—more intense arousal but this leads to physical exhaustion and physical disorders

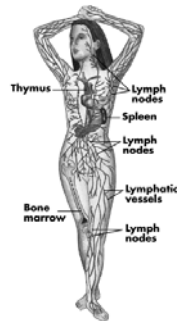
## General Adaptation Syndrome



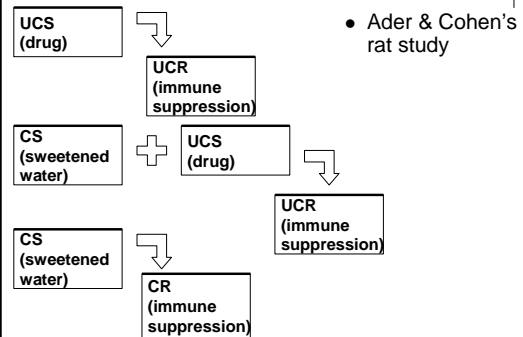
## Stress and the Immune System

- Psychoneuroimmunology—studies interaction between nervous system, endocrine system, and immune system
- Stress leads to suppressed immune function
- Chronic stress tends to have more influence
- Stress-weakened immune system increases likelihood of illness

Your immune system battles bacteria, viruses, and other foreign invaders that try to set up housekeeping in your body. The specialized white blood cells that fight infection are manufactured in the bone marrow and are stored in the thymus, spleen, and lymph nodes until needed.



## Immune Suppression Can Be Learned



## Response to Stress

- Psychological Factors
  - Perception of control
  - Explanatory style
  - Chronic negative emotions
  - Hostility
- Social Factors
  - Outside resources
  - Friends and family
  - Positive relationships

## Perceived Control

- Sense of control decreases stress, anxiety, & depression
- Perceptions of control must be realistic to be adaptive

## Explanatory style

- Optimism
  - use external, unstable, & specific explanations for negative events
  - predicts better health outcomes
- Pessimism
  - use internal, stable, & global explanations for negative events
  - predicts worse health outcomes



## Stress, Personality, and Heart Disease

- Coronary heart disease is North America's leading cause of death
- Habitually grouchy people tend to have poorer health outcomes
- Chronic negative emotions have negative effect on immune system



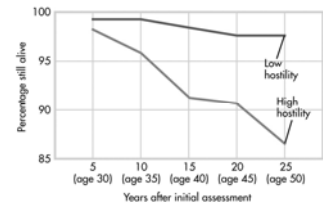
## Type A vs. type B Personality

- Type A
  - time urgency
  - intense ambition and competitiveness
  - general hostility
  - associated with heart disease
- Type B
  - more easygoing
  - not associated with heart disease



## Research on type A Personality

- Time urgency & competitiveness not associated with poor health outcomes
- Negative emotions, anger, aggressive reactivity
- High levels of hostility increase chance of all disease (e.g., cancer)



## Social Factors Promoting Health

Social support—resources provided by others in times of need

- Emotional—expressions of concern, empathy, positive regard
- Tangible—direct assistance such as lending money, providing meals
- Informational—such as making good suggestions, advice, good referrals



## Social Support

- Improves ability to cope with stress & benefits health
  - person modifies appraisal of stressor's significance to be less threatening
  - helps to decrease intensity of physical reactions to stress
  - make person less likely to experience negative emotions
- Pets as social support
  - especially for elderly and people who live alone
- Gender and social support



## Coping



- Behavioral and cognitive responses used to deal with stressors
- Involves efforts to change circumstances or our interpretation of them to make them more favorable and less threatening

## Coping



- Problem-focused coping
  - managing or changing the stressor
  - use if problem seems alterable
  - confrontive coping
  - planful problem solving
- Emotion-focused coping
  - try to feel better about situation
  - use if problem out of our control

## Emotion-focused Coping Strategies



- Escape-avoidance—try to escape stressor
- Distancing—minimize impact of stressor
- Denial—refuse to acknowledge problem exists

## Emotion-Focused Coping Strategies



- Wishful thinking—imagining stressor is magically gone
- Seeking social support—turn to friends, support people
- Positive reappraisal—minimize negative, emphasize positive
- Downward comparison—compare self to those less fortunate

## Culture and Coping



- Individualist
  - less likely to seek social support
  - favor problem-focused coping
- Collectivist
  - more oriented to social support
  - favor emotion-focused coping

## Active Coping Strategies



- Aerobic exercise can reduce stress, depression, & anxiety
- Effect above relaxation treatment

## Relaxation



- Meditation can lower blood pressure, heart rate, oxygen consumption
- Can it help with stress-related disease?