Chapter 4: Middle Childhood
Module 4.1
Physical Development in Middle Childhood

PHYSICAL DEVELOPMENT IN MIDDLE CHILDHOOD

Looking Ahead
• In what ways do children grow during the school years, and what factors influence their growth?
• What are the main health concerns at this age?
• What special needs may become apparent during these years, and how can they be met?

See How We Grow!
Slow but steady…
• Height changes
• Weight changes
• Only time in lifespan when girls are, on average, taller than boys
• Variation in heights up to 6 inches not unusual

Cultural Patterns of Growth
• Sufficient or insufficient nutrition
• Disease
• Genetic inheritance
• Familial stress

Should hormones be used to make short children grow?
Benefits of Adequate Nutrition

**Relationship to social and emotional functioning**
- More peer involvement
- More positive emotions
- Less anxiety
- More eagerness to explore new environments
- More persistent in frustrating situations
- Generally higher energy levels

Obesity

- Most common causes:
  - Genetic factors
  - Lack of physical activity
  - Unhealthy eating patterns
  - Combination of these factors
- Only in rare cases is being overweight caused by a medical condition such as a hormonal problem

Childhood Obesity

Obese children
- More likely to be overweight as adults
- Greater risk of heart disease, diabetes, and other diseases

The other side of “fat”

- Even very young children are aware of society’s fixation on thinness
- Lowered self-esteem has been associated with being overweight in girls as young as 5
- Attitude was closely correlated with parents’ perceptions

Gross Motor Development

- Improved muscle coordination
Do boys and girls differ in motor skills?
- Gender differences in gross motor skills became increasingly pronounced during middle childhood,
  - Boys outperform girls
  - Little or no difference when equal participation in exercise/activities
  - Influenced by societal expectations

Fine Motor Development
- Necessary for wide range of school-related tasks
- Influenced by increase in amount of myelin → speeds up electrical impulses between neurons

Health and School-agers
- Middle childhood is period of robust health
- Routine immunizations have produced considerably lower incidence of life-threatening illnesses
- More than 90 percent of children in middle childhood have at least one serious medical condition but most are short term illnesses

Other Health Risks
- Accidents
  - Motor vehicles
  - Bikes
  - Fires and burns
  - Drowning
  - Gun-related deaths
- Reduced by use of seatbelts and helmets

Safety in Cyberspace
- Newest threat to the safety of school-age children comes from Internet and the World Wide Web
- Parent and Caregiver Resources:
  - The Serious Risks of Cyberspace
  - Child Safety on the Information Highway
  - Safety Net for the Internet: A Parent’s Guide

PSYCHOLOGICAL DISORDERS
Identifying the Problem

- Psychological disorders in children overlooked for years
  - Incidence
  - Symptoms inconsistent from those of adults
  - Antidepressant drugs used for treatment have never been approved by governmental regulators for use with children

Drugs As Treatment

FOR
- Depression and other psychological disorders treated successfully using drug
- More traditional nondrug therapies that largely employ verbal methods simply are ineffective

AGAINST
- Long-term effectiveness of antidepressants with children not known
- Use of antidepressants on developing brains and long-term consequences more generally not known
- Correct dosages for children of given ages or sizes no known

Depression

- Key defining features of major depressive disorder in children and adolescents are same as they are for adults
- Way symptoms are expressed varies with developmental stage of child

Children with Special Needs

- Visual impairments
- Auditory impairments
- Speech impairments
- Learning disabilities

Do you see what I see?

- Difficulties in seeing
  - Blindness (20/200 after correction)
  - Partial sightedness (20/70 after correction)

Say what?

- Loss of hearing or some aspect of hearing
- Affects 2 percent of school-age children
- Varies across number of dimensions
Children who do not hear

- Children with speech-language impairment have an impairment of their speech and/or language structures and functions.

- Parts of the body used in speaking and understanding - the brain, nerves, mouth and throat - may be damaged or not developing or working properly.

- Level of speech-language impairment can range from mild to severe.

- Impairment may be obvious before school or not show itself until the child has difficulty learning at school.

I am talking to YOU!

**Definition**

- Impairment of speech articulation, voice, fluency, or the impairment or deviant development of language comprehension and/or expression.

- Impairment of use of spoken or other symbol system that adversely affects educational performance.

Stuttering

- Substantial disruption in rhythm and fluency of speech.

- Most common speech impairment; 20 percent of all children go through stage.

- No clear-cut answers to the causes of stuttering.

Learning Disabilities: Discrepancies Between Achievement and Capacity to Learn

- Difficulties in acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities.

- 2.8 million children in US.

- Dyslexia, dysgraphia, dyscalculia.

- ADD/ADHD.