

General Psychology

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Chapter 12: Development 2: Adolescence to the
End of Life

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Chapter Outline

- Adolescent Development
 - Physical Development
 - Puberty- spurt of physical growth
 - Cognitive Development
 - Moral development
 - Social Development
 - Identity Development
- Adulthood and Aging
 - Physical changes during adulthood and into old age

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Puberty

- Three Chief Physical Manifestations
 - Growth spurt
 - Primary sex characteristics - development of the gonads
 - Development of secondary sex characteristics
- Puberty Affected by Context
 - Timing of physical changes in adolescence varies by
 - Regions of the world
 - Socioeconomic class
 - Ethnic group
 - Historical era
- Example: Menarche (first menstruation)
 - U.S. average 12 to 13 years
 - Lumi (New Guinea) average > 18 years

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Variability in Pubertal Maturation

- Two key environmental influences:
nutrition and health
- Interaction between genes and environment – shared
determinism
- Differences in timing/rate among individuals in the same
general environment result chiefly from genetic factors
- Exposure to pheromones
- Secular trend
 - Leveling off in industrialized nations
 - U.S. average age of menarche has not changed in 30 years

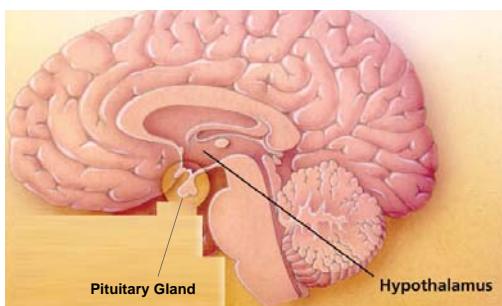
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Puberty: An Overview

- The Endocrine System
 - No new hormones are produced and no new bodily systems develop at puberty
 - A feedback loop develops involving the
 - Hypothalamus
 - Pituitary gland
 - Gonads
- Some evidence that rising levels of leptin may be the root trigger for the process

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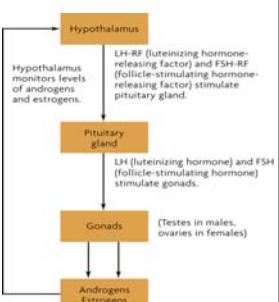
Hypothalamus & Pituitary



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The Endocrine System: HPG Feedback Loop

- HPG Axis:
 - Hypothalamus
 - Pituitary gland (master gland)
 - Gonads (testes and ovaries)
- Gonads release sex hormones into bloodstream
 - Androgens and estrogens

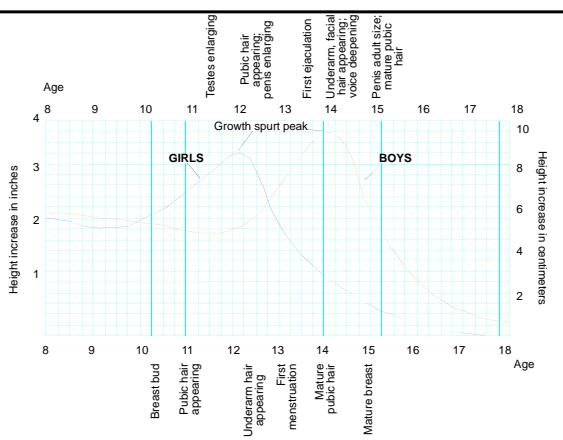


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Somatic Development: Changes in Stature/ Dimensions of the Body

- Adolescent growth spurt
 - Simultaneous release of growth hormones, thyroid hormones, and androgens
- Peak Height Velocity
 - Time that adolescent is growing most quickly
- Average female growth spurt is 2 years before the average male growth spurt

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Somatic Development: Changes in Stature/ Dimensions of the Body

- Skeletal changes
 - Bones become harder, denser, more brittle
 - Conclusion of puberty
 - Closing of ends of long bones
 - Growth in height is terminated
- Relative proportions of body fat/muscle change for boys and for girls
- Changes in the circulatory & respiratory systems

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Erikson - Identity Development

- Developing a sense of "Who I am" including commitments, ideals, and goals
- As alternatives increase, establishing a sense of identity is more difficult
- Likelihood of prolonged identity crisis is greater today than in the past
- James Marcia's Identity Statuses
 - Made commitments?
 - Exploration?

		Commitment	
		Present	Absent
Exploration	Present	Identity achievement	Moratorium
	Absent	Identity foreclosure	Identity diffusion

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Moral development

- Kohlberg's levels (& stages) of moral development
 - Preconventional stage (1.Punishment and Obedience/2.Instrumental)
 - morality is based on external forces
 - Conventional stage (3.Interpersonal Harmony/4.Social Order)
 - morality based on winning praise and recognition, maintaining social order
 - Postconventional stage (5.Social Contract/6.Universal Ethical Principles)
 - morality based on principles the individual is personally committed to that are shared by others
- Criticism of Kohlberg - Gilligan
 - Caring vs. Justice
- Often reason from two or more stages



Physical development across adulthood

- Muscular system gains strength throughout 20's and peaks in early 30's
- Prime time for playing strenuous sports
- Organ reserve
 - Total capacity of our organs that we do not need to use
 - Extra capacity each body has for responding to particularly intense or prolonged effort
- Age related changes
 - Early signs
 - Wrinkles (changes in skin's elasticity)
 - Gray hairs (reduction in # of pigment producing cells)
 - Occur in all systems
 - Cardiovascular
 - Respiratory
 - Sensory
- Changes are minimal during early adulthood, actually age when physical functioning is most stable



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Adulthood physical development (cont.)

- The climacteric
- Women react differently to menopause
- Men experience a decrease in sexual potency
- In late adulthood
 - Reaction Time Slows Down
 - Sensory Abilities Decline
 - Vision
 - Hearing
 - Smell & Taste
 - Other Body Systems Become Weaker
 - Skeletal system
 - Locomotion slows down
 - Muscular strength declines

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