



# Early childhood

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# Stages of Growth and Development

- Prenatal
  - Embryonic (conception- 8 w)
  - Fetal stage (8-40 or 42 w)
- Infancy
  - Neonate
    - Birth to end of 1 month
  - Infancy
    - 1 month to end of 1 year
- Early Childhood
  - Toddler
    - 1-3 years
  - Preschool
    - 3-6 years

# Stages of Growth and Development


- Middle Childhood

- School age
- 6 to 12 years

- Late Childhood

- Adolescent
- 13 years to approximately 18 years



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- **Early childhood is defined** as the period from birth to eight years old. A time of remarkable brain growth, these years lay the foundation for subsequent learning and development.
  - In psychology the term, *early childhood* is usually defined as the time period from the age of two until the age of six or seven years. There are three simultaneous development stages

# Early childhood

- Early childhood is defined as the period from prenatal development to eight years of age. What a child experiences during the early years sets a critical foundation for the entire life course.
- This is because early child development including health, physical, social/emotional and language/cognitive domains strongly influences basic learning, school success, economic participation, social citizenry and health.

# The importance of Early Childhood

- It is the most rapid period of development in a human's life and is critical to a child's cognitive, social, emotional, and physical development.
- Early years of childhood form the basis of intelligence, personality, social behaviour, and capacity to learn and nurture oneself as an adult.

# Physical Growth

- infant rapid growth and development
- Slows during preschool years
- Girls and boys gain 2 to 3 inches in height per year
- Weight gains remain fairly even at about 4 to 6 pounds per year
- Children become “slender” as height increases
- Boys become slightly taller and heavier than girls

# Physical Growth

- Milestone
- Reflexes
- Gross motor skills
  - Involve large muscles used in locomotion  
balancing on one foot, walking up stairs, pedaling a bike
  - By age 4 to 5, most older preschoolers  
have mastered large motor skills.
- Fine motor skills involve the small muscles  
used in manipulation and coordination.



# Cognitive development

- involves sensory learning, perceptual-motor integration, and simple attention. during the second year and infants begin to use symbols, cognitive skills expand to include planning, and goal-directed behavior. During the preschool age, with the rapid growth of language and the maturation of the prefrontal cortex, cognitive development involves the mastery of executive functions

# Psychosocial Development

- Psychological and social development are interconnected. Psychoanalyst Erik Erikson identified various psychosocial stages, composed of basic conflicts, occurring throughout life.
- The first stage, spanning birth to 2 years, is characterized by trust development; a baby learns whether she can trust her environment based on her caregiver's response to her needs.

# Psychosocial Development

- The next stage, occurring during the toddler years, is based around toilet training. Children develop a sense of autonomy with toileting success or feelings of shame and doubt with toileting failure. Independence is a crucial aspect of the loco motor stage, spanning ages 3 to 6 years.
- During this time, children develop initiative but may experience feelings of guilt if they are too assertive

# Emotional Development

- By age 2, most children experience self-conscious emotions including pride and embarrassment. The toddler years are marked by frequent temper tantrums because children at that age do not have full control over their emotions.
- As children mature, they develop more effective ways of dealing with negative emotions

# Brain Development

- Brain develops more quickly than any other organ during childhood
  - At 2 years, brain is 75% of adult weight
  - At 5 years, brain is 90% of adult weight
- Increase in brain size due in part to myelination of nerve fibers
- Preoperational stage lasts from age 2 to age 7.
- Language ability is the greatest symbolic activity during this stage.

# Brain Development

- Parts of the brain involved in the ability to sustain attention and screen out distractions have become increasingly myelinated (between ages 4 and 7).
- Visual processing speed improves and reaches adult level (at adolescence)
- Functions of left and right hemispheres overlap
- The hemispheres are aided in cooperation by the myelination of the corpus callosum.

**Table 7.1 Development of Gross Motor Skills in Early Childhood**

2 YEARS (24–35 MONTHS)	3 YEARS (36–47 MONTHS)	4 YEARS (48–59 MONTHS)	5 YEARS (60–71 MONTHS)
<ul style="list-style-type: none"> <li>• Runs well straight ahead</li> <li>• Walks up stairs, two feet to a step</li> <li>• Kicks a large ball</li> <li>• Jumps a distance of 4–14 inches</li> <li>• Throws a small ball without falling</li> <li>• Pushes and pulls large toys</li> <li>• Hops on one foot, two or more hops</li> <li>• Tries to stand on one foot</li> <li>• Climbs on furniture to look out of window</li> </ul>	<ul style="list-style-type: none"> <li>• Goes around obstacles while running</li> <li>• Walks up stairs, one foot to a step</li> <li>• Kicks a large ball easily</li> <li>• Jumps from the bottom step</li> <li>• Catches a bounced ball, using torso and arms to form a basket</li> <li>• Goes around obstacles while pushing and pulling toys</li> <li>• Hops on one foot, up to three hops</li> <li>• Stands on one foot</li> <li>• Climbs nursery-school apparatus</li> </ul>	<ul style="list-style-type: none"> <li>• Turns sharp corners while running</li> <li>• Walks down stairs, one foot to a step</li> <li>• Jumps from a height of 12 inches</li> <li>• Throws a ball overhand</li> <li>• Turns sharp corners while pushing and pulling toys</li> <li>• Hops on one foot, four to six hops</li> <li>• Stands on one foot for 3–8 seconds</li> <li>• Climbs ladders</li> <li>• Skips on one foot</li> <li>• Rides a tricycle well</li> </ul>	<ul style="list-style-type: none"> <li>• Runs lightly on toes</li> <li>• Jumps a distance of 3 feet</li> <li>• Catches a small ball, using hands only</li> <li>• Hops 2 to 3 yards forward on each foot</li> <li>• Stands on one foot for 8–10 seconds</li> <li>• Climbs actively and skillfully</li> <li>• Skips on alternate feet</li> <li>• Rides a bicycle with training wheels</li> </ul>

Note: The ages are averages; there are individual variations.



## Table 7.2 Development of Fine Motor Skills in Early Childhood

2 YEARS (24–35 MONTHS)	3 YEARS (36–47 MONTHS)	4 YEARS (48–59 MONTHS)	5 YEARS (60–71 MONTHS)
<ul style="list-style-type: none"> <li>• Builds tower of 6 cubes</li> <li>• Copies vertical and horizontal lines</li> <li>• Imitates folding of paper</li> <li>• Prints on easel with a brush</li> <li>• Places simple shapes in correct holes</li> </ul>	<ul style="list-style-type: none"> <li>• Builds tower of 9 cubes</li> <li>• Copies circle and cross</li> <li>• Copies letters</li> <li>• Holds crayons with fingers, not fist</li> <li>• Strings four beads using a large needle</li> </ul>	<ul style="list-style-type: none"> <li>• Builds tower of 10 or more cubes</li> <li>• Copies square</li> <li>• Prints simple words</li> <li>• Imitates folding paper three times</li> <li>• Uses pencil with correct hand grip</li> <li>• Strings 10 beads</li> </ul>	<ul style="list-style-type: none"> <li>• Builds 3 steps from 6 blocks, using a model</li> <li>• Copies triangle and star</li> <li>• Prints first name and numbers</li> <li>• Imitates folding of piece of square paper into a triangle</li> <li>• Traces around a diamond drawn on paper</li> <li>• Laces shoes</li> </ul>

Note: The ages are averages; there are individual variations.



# Nutrition

- Nutritional needs vary by age.
  - 1- to 3-year-olds need 1,000 to 1,300 calories a day
  - Appetite becomes erratic during 2<sup>nd</sup> and 3<sup>rd</sup> year of life and caloric needs decrease
  - 4- to 6-year-olds need 1,400 calories a day
- Children are often fed too much salt and sugar.
- Food preferences are somewhat environmental.
- Repeated exposure to a food increases the liking of it.
- Parents are the role model for which types of food a child will like to eat.

# Accidents

- Number one cause of death in early childhood
  - Motor vehicle accidents
- Boys
  - More likely than girls to incur accidental injuries at all ages and in all socioeconomic groups
- Poor children
  - Five times as likely to die from fires
  - More than twice as likely to die in motor vehicle accidents
- High accident rate of low-income children may result in part from living in dangerous housing and neighborhoods.

# QUESTIONS

