

Puberty is the time during which sexual and physical characteristics mature. Precocious puberty is when these body changes happen earlier than normal.

CAUSES, INCIDENCE, AND RISK FACTORS

Puberty usually begins between ages 10 and 14 for girls, and ages 12 and 16 for boys. Some African American girls may start puberty earlier, around age 9.

The exact age a child enters puberty depends on a number of factors, including family history, nutrition, and gender.

Often there is no clear cause for precocious puberty, but some cases are due to changes in the brain, genetic problems, or certain tumors that release hormones. These conditions include:

- Congenital adrenal hyperplasia
- Disorders of the testicles, ovaries, or adrenal glands
- Hypothalamic hamartoma
- McCune-Albright syndrome
- Tumors that release a hormone called hCG

SYMPTOMS

In girls, precocious puberty is when any of the following develop before age 8:

- Armpit or pubic hair
- Beginning to grow faster
- Breasts
- First period (menstruation)
- Mature outer genitals

Some evidence suggests that it may be normal for these changes to occur as early as age 7 in Caucasian girls and age 6 in African-American girls.

In boys, precocious puberty is when any of the following develop before age 9:

- Armpit or pubic hair
- Growth of the testes and penis
- Facial hair, often first on the upper lip
- Muscle growth
- Voice change (deepening)

SIGNS AND TESTS

Blood hormone levels, CT scan of the brain or of the abdomen and MRI of the brain or of the abdomen are often used to diagnose the problem.