

EARLY PUBERTY

The New Normal?

by Kathleen Barnes

21st-century girls are reaching puberty at dramatically earlier ages than their mothers and grandmothers.



Many American girls today are experiencing budding breasts and pubic hair before they are 7 years old, according to the government's National Health and Nutrition Examination Survey. The threshold age has been steadily falling for decades, with the most dramatic decrease between 1997 and 2011.

A pivotal 2011 study from the University of Cincinnati showed that U.S. Caucasian girls on average entered puberty at 9.7 years old, three to four months younger than the average age reported by University of North Carolina scientists 14 years earlier and much younger than data from the 1960s. Girls of other ethnicities are also entering puberty at earlier ages, but at less dramatic rates.

A 2009 Danish study also showed that their country's girls were developing breasts a full year earlier than those born 15 years earlier.

Burgers, Fries and Sodas to Blame

The rise in childhood obesity is the major culprit in today's lower ages of puberty, according to the 2011 study's lead researcher, Dr. Frank Biro, director of adolescent medicine at Cincinnati Children's Hospital Medical Center. He explains, "Body mass index [BMI] is the overwhelmingly predominant factor in the age at which a girl reaches puberty.

It's become more important than race or ethnicity. Heavy white girls and heavy black girls are all maturing earlier."

Science has long shown that fat tissue produces hormones, including estrogen, that can accelerate the process of puberty, especially early breast development, according to Dr. Louise Greenspan and Julianna Deardorff, Ph.D., authors of *The New Puberty*. Greenspan specializes in pediatric endocrinology at San Francisco's Kaiser Permanente Hospital; Deardorff is a clinical psychologist researching pubertal development at the University of California, Berkeley. They cite one foundational study from the 1980s that showed for every BMI point increase, the age of first menstruation dropped by about one month.

Toxic Soup

Ubiquitous hormone-disrupting chemicals are undoubtedly a culprit in the early puberty epidemic, says Doctor of Naturopathy Michael Murray, of Phoenix, Arizona, who publishes widely on the topic of natural medicine.

Endocrine disruptors that trigger the body to produce excess amounts of estrogen include chemicals in clothing, especially children's sleepwear, furniture and carpets, anything plastic, personal care products, cleaning solvents, glues, dry cleaning chemicals, pesticides, herbicides and non-organic

meat and milk. Collectively, they trigger puberty before its natural time. "There's certainly a link between these persistent pollutants and obesity," Murray observes.

Antibiotics contained in commercial meat and dairy products may be a greater risk than the added hormones, says Greenspan. "Chronic, low-dose antibiotic exposure could affect the body's microbiome [the microorganism colony in the digestive tract], which can lead to obesity and may also influence puberty."

The Stress Monster

"Considerable research now supports the notion that excessive stress early in life can affect the timing of puberty," says Greenspan. Stressors can range from sexual or child abuse to stressful family relationships, low emotional investment on the part of parents or a depressed mother.

"Girls that grow up in homes without their biological fathers are twice as likely to experience early menarche as girls that grow up with both parents," advises Deardorff.

Biro points out that stress is associated with higher levels of cortisol and obesity. Cortisol, the stress hormone, has been directly related to belly fat in numerous studies.

Added Risks

“Early puberty also increases social risks,” says Deardorff. “Girls that develop ahead of their peers have more anxiety, a higher incidence of depression, poorer body image and more eating disorders.”

Research from St. Thomas’ Hospital, in London, reports that reaching puberty early may also increase risks for diabetes and breast cancer later in life, says Biro, the latter “possibly due to greater lifetime exposure to female hormones and the susceptibility of rapidly developing breast tissue to environmental toxins.” Framingham Heart Study results published in the *Journal of Clinical Endocrinology & Metabolism* support earlier studies that found menstruating before age 12 may contribute to a 23 percent greater risk of developing heart disease and 28 percent higher risk of dying from heart attack or stroke.

Parental Strategies

These experts all agree that a clean diet is one of the most powerful strategies to protect young girls. Murray recommends reviewing the Environmental Working Group’s list at Tinyurl.com/EWGDirtyDozen. He says, “If you buy these foods organic, you’ll both avoid hormone-disrupting pesticides and herbicides and give children the protection of antioxidants that can help protect against other toxins.”

Kathleen Barnes is author of numerous natural health books, including [Food Is Medicine](http://FoodIsMedicine). Connect at KathleenBarnes.com.

12 FOODS TO BUY ORGANIC

The Environmental Working Group reports that these foods are the most heavily contaminated with pesticides, so look for organic versions and prioritize them on the family grocery list.

1. Apples
2. Peaches
3. Nectarines
4. Strawberries
5. Grapes
6. Celery
7. Spinach
8. Sweet bell peppers
9. Cucumbers
10. Cherry tomatoes
11. Snap peas (imported)
12. Potatoes

