

OBESITY

Update on the prevalence of high BMI and obesity in the USA

Two studies from the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC) report that the prevalence of obesity in the USA did not increase at the same rate from 1999 to 2008 as it did in the 1980s and 1990s.

Following a relatively stable obesity prevalence from 1960 to 1980, there were "...striking and unexpected increases in the 1980s and 1990s ... across all sex, age and race-ethnic groups," says Katherine Flegal, an author on both papers.

"Surprisingly little is known about the underlying reasons for the previous increases," explains Flegal. Hypotheses include genetic susceptibility to an 'obesogenic' environment (in which relatively cheap and easily available food is teamed with a low requirement for physical activity), a reduction in the prevalence of smoking, and the presence of endocrine disruptors in the environment.

In the latest NCHS studies, data were collected separately for men and women

(5,555 adults aged 20 years or older) and for boys and girls (719 aged from birth to 2 years; 3,281 aged 2–19 years) as part of the National Health and Nutrition Examination Survey 2007–2008. These data were compared with data obtained for the same survey during the period 1999–2006.

For adults, obesity was defined by a BMI of ≥ 30 . For children, the BMI was compared with a reference population matched for age and sex. "Children at or above the 95th percentile of BMI-for-age on the CDC growth charts were considered obese," clarifies Cynthia Ogden, who was also an author on both papers.

From 1999 to 2008, there was a significant linear trend overall in the prevalence of obesity in men, but there were no significant differences observed from 2003 to 2008. For women, there was no significant linear trend for the period 1999–2008. "In addition," explains Ogden, "among both girls and boys there were no significant linear trends in obesity over the

period 1999–2008. There was a significant linear trend in boys at a higher BMI cut-off point ($\geq 97^{\text{th}}$ percentile of BMI-for-age)."

These data suggest that the prevalence of obesity "may have entered another period of relatively small increases," but the authors do not rule out the possibility of future large increases.

Although it is difficult to predict future obesity trends, NCHS will continue to track the prevalence of obesity. As Flegal concludes, "Additional data may shed more light on whether the trends are continuing and at what rate, and what differences or similarities are in these trends across age, sex and race-ethnic groups."

Natalie J. Wood

Original articles Flegal, K. M. *et al.* Prevalence and trends in obesity among US adults, 1999–2008. *JAMA* **303**, 235–241 (2010) | Ogden, C. L. *et al.* Prevalence of high body mass index in US children and adolescents, 2007–2008. *JAMA* **303**, 242–249 (2010)