Are overweight children more likely to be overweight adults?

Evidence-based answer
Yes. Overweight at any age in childhood increases the risk for overweight in adulthood. The relative risk (RR) ranges from 1.9 to 10.1 and increases as children get older. Not all overweight children become overweight adults, however (strength of recommendation: A, systematic review of consistent prospective and retrospective cohort studies).

Clinical commentary
Take a direct approach to excess weight. For reasons of sensitivity and “correctness,” clinicians often avoid using the term obesity when talking about children. Does our zeal to be polite actually make things worse? Studies show that parents often fail to recognize that their children are overweight. And physicians caring for overweight children often fail to record overweight as a diagnosis in their young patients’ medical records. Failure to document excess weight virtually guarantees that little if any constructive weight-oriented counseling occurs. By refusing to face the issue head-on, we enable denial of this essential point: Overweight children are far more likely to become obese adults. As we have done with tobacco, it’s now time to ask about weight problems in children, advise families about strategies for safe weight management, and assist where needed.

Mark B. Stephens, MD, MS
Uniformed Services Hospital, Bethesda, Md

Evidence summary
The Centers for Disease Control and Prevention (CDC) doesn’t use the term obesity to describe weight in children. Instead, the CDC defines overweight as body mass index (BMI) or weight-for-length for age and sex greater than the 95th percentile. Children above the 85th percentile are called “at risk for overweight.” A national expert panel recently recommended changing “at risk for overweight” to “overweight” and “overweight” to “obese”—the terminology used in this Clinical Inquiry.

Studies find a clear connection
A 2008 systematic review found 25 prospective or retrospective longitudinal studies that examined the risk of overweight in adulthood based on overweight in childhood or adolescence. Studies had to include at least 1 anthropomorphic measurement before age 18 and at least 1 after age 18. The informativeness and validity of the studies were assessed using a standard evaluation tool. Because the review sought to provide results that could be generalized to large populations, it didn’t include studies of specific popula-
Overweight and obese boys are at greater risk of overweight in adulthood than overweight and obese girls.

Risk increases with age
As children, overweight adolescents had a higher risk of being overweight in adulthood. And the association between older age and higher ORs persisted into adolescence. One study found an OR of 17.5 for adult overweight among youngsters who were overweight at 10 to 14 years of age and an OR of 22.3 for adolescents who were overweight at 15 to 17 years.

Boys are at greater risk than girls
The systematic review also revealed sex differences. Two studies showed that overweight or obese boys were not only more likely to be overweight in adulthood than their average-weight peers (OR=15.0 in 1 study; RR=9.8 in the other), but also more likely to be overweight later in life than overweight or obese girls. The girls had an OR of 12.0 for adult overweight in 1 study and an RR of 6.8 in the other.

Recommendations
The American Academy of Family Physicians emphasizes that weight management in childhood is an important goal, but notes a lack of evidence regarding the effectiveness of screening and treating overweight in children. The American Academy of Pediatrics recommends calculating and plotting BMI yearly to identify excessive weight gain.

The United States Preventive Services Task Force, citing lack of evidence for treatment benefit, finds insufficient evidence for or against screening for overweight in children.

References