

Diets to Prevent or Treat Obesity

Obesity is a serious health problem that impacts many children and adolescents. Today, obesity is defined using the body mass index (BMI), which incorporates both the child's weight and height (calculated as weight in kilograms divided by height in meters squared). Obesity is defined as having a BMI of greater than the 95th percentile.

Obesity affects all major organ systems, including the skeletal, muscular, endocrine, gastrointestinal, reproductive, cardiovascular, and pulmonary systems. Complications of obesity in children can be both life threatening and life ending. For these reasons, many families consider diets to prevent or treat obesity.



WHAT ARE SOME POPULAR DIETS TODAY?

THE DASH DIET. The DASH diet was developed as a "Dietary Approach to Stop Hypertension" (DASH). Major components include:

- Low-fat dairy (less than 2% fat).
- Fish, chicken, and lean meat.
- Fruits and vegetables.
- Nuts, whole grains, and legumes.

An emphasis in this diet is on eating from all of these categories. Eating in this combination is suggested to decrease saturated fat intake and increase calcium, potassium, magnesium, and dietary fiber intake. Early research studies of this diet suggested that the combined diet led to lower blood pressure compared with just increasing fruit and vegetable intake. This diet has also been studied in relation to other diseases related to obesity, such as metabolic syndrome and cardiovascular disease. In this month's *Archives*, a research study of adolescent girls found that eating patterns that were more consistent with a DASH diet led to a consistently lower BMI between the ages of 9 and 19 years.

LOW-CARBOHYDRATE DIETS. These diets include low-carbohydrate/high-protein diets (Atkins and protein-sparing modified fast [PSMF]) and low-glycemic index diets (South Beach). Major components include:

- High protein intake.
- Low carbohydrate intake (some include an initial restrictive phase in which carbohydrate intake is severely restricted).
- Some restrict fats, others do not.

These diets are highly restrictive in what can and cannot be eaten. As a result, it may be difficult for children or adolescents to follow these diets for very long. Dietary experts have reviewed these diets and found that there are many gaps in our understanding of how these diets work and whether they are healthy in the long term. Because of the lack of consensus among health professionals about low-carbohydrate diets, using these diets to manage weight is controversial. It is particularly controversial to use these diets in children or adolescents because they are still growing and need a variety of nutrients and foods.

In conclusion, while children and adolescents who are severely overweight may benefit from diets, "fad" diets should be viewed with caution. When considering a diet change for your child or adolescent, it is important to remember that the diet should provide a model of appropriate eating for the rest of their lives rather than a "quick fix."

Healthy eating contributes to overall healthy growth and development, including healthy bones, skin, and energy levels, and a lowered risk of dental caries, eating disorders, constipation, malnutrition, and iron deficiency anemia.

FOR MORE INFORMATION

Centers for Disease Control and Prevention
<http://www.cdc.gov/healthyYouth/nutrition/index.htm>

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