Fact Sheets for Families Cholesterol: Should you worry about your child's levels?

Cholesterol is known to be a major factor contributing to heart disease and strokes. Research shows that the process of cholesterol buildup in arteries begins in childhood and is related to nutrition habits. In recent years, with a dramatic increase in childhood obesity, pediatricians report a significant increase in the number of children with high cholesterol levels. Some experts think this is a major underreported public health problem. As a parent you need to know if your child is at risk and requires a cholesterol level test.

What is cholesterol?

Cholesterol is a wax-like substance that plays a necessary role in the body such as building of tissue's cell walls, some production of hormones and vitamin D. It is made by the body and is found naturally in animal foods such as meat, fish, poultry, eggs and dairy products. Foods high in cholesterol include liver and organ meats, egg yolks and dairy fats.

Too much cholesterol in the blood can lead to problems. Fat deposits on the walls of the blood vessels can cause hardening of the arteries, heart attacks and high blood pressure.

Which factors contribute to the increased cholesterol level?

Three factors related to family issues are linked to high cholesterol levels:

- 1. Heredity—having a parent with high cholesterol
- 2. Diet—having a diet high in fat, particularly saturated and trans fats
- 3. Obesity—being seriously overweight due to a poor diet and lack of exercise



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When do children need cholesterol screening?

Screening children for high cholesterol is not part of routine blood testing during well-baby checks. However, starting at age 2, a child is at high risk and needs to have cholesterol test if:

- A parent or grandparent had a history of heart disease at age 55 or before.
- A parent has a blood cholesterol level of 240 mg/dl or above.
- The child is overweight.

The acceptable range of total cholesterol for children 2- to 19-years-old is less than 170 mg/dl. A cholesterol level of 200 or greater is considered high and 170-199 mg/dl is regarded as borderline.

How to reduce cholesterol levels

- *Controlling cholesterol begins in childhood.* Childhood is the time to intervene with lifestyle changes to include a healthy diet and plenty of physical activity.
- *Children have different needs.* Those younger than 2 years should not be restricted from foods containing fat or cholesterol. Their rapid growth and development require high-energy intakes from food. After 2 years of age, children and adolescents should gradually adopt a diet that by age 5 contains between 20 and 30 percent of calories from fat.
- *A balanced diet is best.* As children eat fewer fat calories, they should replace those calories by eating more whole-grain products, fruits, vegetables, lowfat milk and other calcium-rich foods, beans, lean meat, poultry, fish, or other protein-rich foods.

Sources and references

National Cholesterol Education Program at https:// www.nhlbi.nih.gov/

American Heart Association at www.americanheart.org

American Academy of Pediatrics (AAP) at www.aap.org