

HEALTH MATTERS

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High Cholesterol: What it is and how to treat

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What is Cholesterol?

Cholesterol is a necessary compound in the body. It is needed for the formation of hormones such as estrogen, testosterone and cortisol, and is necessary for the outer membranes of cells and the formation of bile acids. Your body does make cholesterol, primarily in the liver. It is also absorbed from foods we eat, including dairy products, eggs and meats.

Elevated cholesterol is a strong risk factor for heart disease, which is the primary cause of death in the U.S.

In excess, cholesterol can lead to plaque development within the arteries of your body including those of the heart. This can cause the arteries to narrow, resulting in the slowing of oxygen rich blood from reaching the heart. Cholesterol plaques within the wall of the artery can also lead to inflammation, which can lead to an acute blood clot, causing a complete blockage of blood flow and subsequent heart attack.

Types of Cholesterol

A cholesterol or lipid panel includes four components: total cholesterol, low density lipoprotein cholesterol (LDL-c), high density lipoprotein cholesterol (HDL-c) and triglycerides (store fatty acids used as a source of stored energy in the body).

Most cholesterol transported is by LDL. Excess LDL-c and triglycerides can promote cardiovascular disease. HDL-c is considered protective as it aids the transfer of cholesterol from arteries to the liver.

The cholesterol or lipid goals are dependent on an individual's assessed risk for heart and vascular disease. Risk factors such as age, gender, family history, smoking status, and blood pressure are used to help estimate an individual's risk for future cardiovascular disease. The greater an individual's risk for future cardiovascular disease, the lower the LDL-c and non HDL-c targets. Individual goals vary depending on additional heart disease risk factors.

Treatment

To treat elevated cholesterol, lifestyle changes such as diet and exercise are very important. Excess weight can raise your total cholesterol, LDL-c and triglycerides. Losing weight can help lower your LDL-c and triglycerides and raise your HDL-c. Medications may also be needed to lower cholesterol.

The statin drugs (Crestor, Lipitor, etc.) are commonly prescribed for cholesterol lowering. This class is most effective at reducing LDL cholesterol and has been shown to reduce cardiovascular risk.

Statins can mildly lower triglycerides. However, other classes of drugs such as fibrates, omega-3 fatty acids and niacin are more effective for triglyceride reduction. These medications are often used in combination with statins to meet triglyceride and non HDL-c goals.

Omega-3 fatty acids or fish oil can be effective for triglyceride lowering. Currently Lovaza is the only FDA



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approved fish oil preparation for this purpose. Over the counter omega-3 fatty acids are often used, but are not as concentrated as Lovaza, so more pills are often necessary to create an effective dose.

Niacin is currently the most effective cholesterol medication available for increasing the HDL-c. It also lowers triglycerides and LDL-c. Niacin is available over-the-counter, however a prescription formula is often better tolerated. As with any medication it is important that any concern be discussed with your physician, nurse practitioner or physician assistant so that treatment strategies can be discussed, for the best possible outcomes.

Lowering cholesterol is considered a modifiable risk factor for heart disease along with being overweight, smoking, high blood pressure and a sedentary lifestyle. Following a low cholesterol diet, exercise and weight loss can all assist in improving one's lipid profile.

If you would like to learn more, or to schedule an appointment, please call 262-334-3451 or visit westbendclinic.com.

Children as young as 1 may get swimming lessons

The American Academy of Pediatrics (AAP) has issued new policy guidelines calling for children as young as age 1 to receive swimming lessons, depending on how often they are exposed to water and judgments made by parents about their maturity.

The AAP says its existing recommendation had been that most children age 4 and older should learn to swim, but now is “more open” to the idea of classes for younger kids.

The pediatric group says that in the past, it advised against swimming lessons for children 1-3 because there was little evidence that lessons prevented drowning or resulted in better swimming skills.



Also, the AAP says it has been concerned about whether parents would remain vigilant enough about supervising children who had learned

some swimming skills. But it now says new evidence shows that kids age 1-4 may be less likely to drown if they have formal swimming lessons.

The studies showing this are small and don't define what types of lessons might work best, so the AAP says it is not recommending mandatory swimming lessons for all children 4 and younger.

Age for Swimming Lessons: Parents Make the Call

The new guidance calls for parents to decide whether to enroll a child in swimming lessons based on the youngster's frequency of exposure to water, physical abilities, emotional development, and health concerns related to pool-water infections and chemicals.

“Not every child will be ready to learn to swim at the same age,” says Jeffrey Weiss, MD, FAAP, lead author of the policy statement. “To protect their children, parents need to think about layers of protection.”

Still, the statement cites a report from the Eunice Kennedy Shriver National Institute of Child Health and Human Development that swimming lessons do not increase the risk of drowning in 1- to 4-year-olds and may reduce drowning risk in that

age group. A study from China also showed a benefit of formal swimming instruction for the same age group.

One reason for its alteration of previous guidelines, the AAP says, is the emergence in the past few years of new drowning risks, such as inflatable pools that are large, inexpensive, and portable.

Drowning rates have fallen from 2.68 per 100,000 in 1985 to 1.32 per 100,000 in 2006, the AAP says. Still, drowning is the second leading cause of death for children ages 1-19, claiming 1,100 young lives in 2006.

According to the AAP, teenagers and toddlers are at the greatest risk. “From 2000 to 2006, the highest death rates were seen in white boys 0 to 4 years of age and black male adolescents 15 to 19 years of age,” the policy statement says. “In 2008, approximately 3,800 children younger than 20 years visited a hospital emergency department for a non-fatal drowning event, and more than 60% of those children were hospitalized.”

No matter what, children cannot be made “drown-proof,” Weiss says, so all children need to learn to swim and should be supervised very closely by parents and other adults when around water.

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