Cholesterol

Each person has specific toxic exposures along with dietary and genetic weaknesses that are causing their symptoms. Toxic exposures can be inorganic like heavy metals, DDT, VOC's, Radio-active waste and any other chemical-like food additives or pesticides and fertilizers sprayed on the foods. They can also be organic or living organisms like parasites, bacteria, viruses, or fungi. All the different possible combinations make it difficult to accurately address issues unless you have experienced medical professionals mapping through all your different clinical symptoms.

Dr. Marilyn Tucker founded The Vibrant Health Community to do Symptom Mapping to be able to bring a completely personalized plan for each person. When you join the Vibrant Health Community you have your own medical team of doctor, pharmacist and health coach. This Team specializes in Integrative-Complementary Medicine. They will work with your personal physician to bring you to a place of as much natural healing as your body will allow. For those of you that have health issues that require prescription medications, your Team can help introduce natural measures that can reduce the imbalances and complications that inevitably come with prescription medication. This can reduce side effects and possible additional drugs having to be introduced.

Definition

Cholesterol is a soft, waxy substance found in all parts of the body. This includes the nervous system, skin, muscle, liver, intestines, and heart. It is made by the body and also obtained from animal products in the diet.

Alternative Names

Diet - cholesterol

Function

Cholesterol is manufactured in the liver for normal body functions, including the production of hormones, bile acid, and vitamin D. It is transported in the blood to be used by all parts of the body.

Food Sources

In foods, cholesterol is found in eggs, dairy products, meat, and poultry. Egg yolks and organ meats (liver, kidney, sweetbread, and brain) are high in cholesterol. Fish generally contains less cholesterol than other meats, but some shellfish are high in cholesterol.

Foods of plant origin (vegetables, fruits, grains, cereals, nuts, and seeds) contain no cholesterol.

Fat content is not a good measure of cholesterol content. For example, liver and other organ meats are low in fat, but very high in cholesterol.

Side Effects

In general, you have a greater risk of developing heart disease or atherosclerosis as your level of blood cholesterol increases.

Recommendations

More than half of the adult population has blood cholesterol levels higher than the desirable range. High cholesterol levels often begin in childhood. Some children may be at higher risk due to a family history of high cholesterol.

In general, you want your total cholesterol to be less than 200 milligrams per deciliter (mg/dl), because that level carries the least risk of heart disease. The risk for heart disease increases when the level is above 200 mg/dl.

You should also know your levels of high density lipoprotein (HDL, also known as the "good cholesterol") and low density lipoprotein (LDL, or "bad cholesterol"). Talk to your health care provider about what your cholesterol levels mean.

To lower high cholesterol levels:

- Limit total fat intake to 25 - 35% of total daily calories. Less than 7% of daily calories should be from saturated fat, not more than 10% should be from polyunsaturated fat, and not more than 20% from monounsaturated fat.
- Eat less than 200 mg of dietary cholesterol per day.
- Get more fiber in your diet.
- Lose weight.
- Increase physical activity.

The recommendations for children's diets are similar to those of adults. It is very important that children get enough calories to support their growth and activity level, and that the child achieve and maintain a desirable body weight

The following two sample menus provide examples of an average American diet and a low-fat diet.

AVERAGE AMERICAN DIET

- Breakfast
  - 1 egg scrambled in 1 teaspoon of butter
  - 2 slices of white toast
  - 1 teaspoon of butter
  - 1/2 cup of apple juice
- Snack
  - 1 cake donut
- Lunch
  - 1 ham and cheese sandwich (2 ounces of meat, 1 ounce of cheese)
  - white bread
  - 1 teaspoon of mayonnaise
  - 1-ounce bag potato chips
  - 12-ounce soft drink
  - 2 chocolate chip cookies
- Snack
  - 8 wheat thins
- Dinner
  - 3 ounces of broiled sirloin
  - 1 medium baked potato
  - 1 tablespoon of sour cream
  - 1 teaspoon of butter
  - 1/2 cup of peas, 1/2 teaspoon of butter

Totals: 2,000 Calories, 84 grams fat, 34 grams saturated fat, 425 milligrams cholesterol. The diet is 38% total fat, 15% saturated fat.

LOW FAT DIET

- Breakfast
  - 1 cup of toasted oat ring cereal
  - 1 cup of skim milk
  - 1 slice of whole-wheat bread
  - 1 banana
- Snack
  - 1 cinnamon raisin bagel, 1/2 ounce light cream cheese
- Lunch
  - turkey sandwich (3 ounces of turkey)
  - rye bread
  - lettuce
  - 1 orange
  - 3 fig newtons
  - 1 cup skim milk

- Snack
  - non fat yogurt with fruit
- Dinner
  - 3 ounces of broiled chicken breast
  - 1 medium baked potato
  - 1 tablespoon of nonfat yogurt
  - 1/2 cup of broccoli
  - 1 dinner roll
  - 1 cup skim milk

Totals: 2,000 Calories, 38g fat, 9.5g saturated fat, 91mg cholesterol. The diet is 17% fat, 4% saturated fat.

COMPARISON

For the same number of calories, a low-fat diet provides 190 mg of cholesterol, compared to 510 mg of cholesterol for an average American diet.

Because fat is high in calories, the low-fat diet actually has more food than the typical American diet.

CHILDREN

The low-fat diet example is too low in fat for small children to promote good growth. In addition, it may be difficult for them to consume such a large volume of food. Children should have a diet that is closer to 30% of calories from fat. Lower-fat diets may be appropriate in some children. Ask your doctor what is best for your child.

References

Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults. Executive Summary of the Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III). *JAMA*. 2001;285:2486-2497.