**SOCIOLOGICAL SCIENCES**

**HYPERCHOLESTEREMIA DIFFERENT TYPES AND HOW TO PREVENT**

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**Introduction:** Hypercholesterolemia is an important precursor to many cardiovascular, cerebrovascular, and peripheral vascular diseases. A document carried out via way of means of the American Heart shows approximately 33 percentage of the U.S. population with high levels of cholesterol, in line with 2019 information from the Centers for Disease Control and Prevention (CDC).

**Aim of work:** The aim of this work is to differentiate between types of hypercholesterolemia, the most common features and how to prevent it.

**Materials and methods:** Many studies were made about the high privilege of this disease nowadays, and based on many articles the study was made.

**Discussion and preventions:** High cholesterol is extra common in adults than youngsters, however youngs also may have this condition. According to the 2020 Circulation report:

- 7% of youngs aged between 6 and 19 have overall high cholesterol level.

- 38.2% of adults 20 and older have excessive overall cholesterol.

We differ also familial hypercholesterolemia that is a genetic sickness that reasons excessive LDL (bad) levels of cholesterol. Last statistical study in 2020 shows a proportion of 1/200 to 1/250 around the world for this disease. Familial hypercholesterolemia may account for approximately 5% of all annual coronary heartdisease in Americans below the age of 60. An envisioned 90% or extra of humans who've familial hypercholesterolemia have not been recognized with this condition.

A lipid profile additionally typically measures triglycerides. Having a excessive triglyceride stage can also growth your threat of coronary heart disease.

Having high level of blood cholesterol is especially due to ingesting fatty food, now no longer workout enough, being overweight, smoking and consuming alcohol. Factors you could manipulate — such as inactivity, weight problems and a dangerous diet.

Medical situations that may cause dangerous levels of cholesterol include: chronic kidney disease, diabetes, HIV/AIDS, hypothyroidism, lupus...

Cholesterol tiers also can be worsened with the aid of using a few varieties of medicines you will be taking for different health problems, such as: acne, cancer, high blood pressure, irregular coronary heart rhythms, organ transplants.

**Factors that may growth your threat of dangerous levels of cholesterol include:**

- Poor diet, eating an excessive amount of saturated fats or trans-fat can bring about dangerous levels of cholesterol. Saturated fat is observed in fatty cuts of meat and full-fats dairy products, trans fat are frequently observed in packaged snacks or desserts.

- Obesity. Having a frame mass index (BMI) of 30 or extra places you prone to excessive ldl cholesterol.

- Lack of exercise. Exercise enables increase your frame's HDL, the good cholesterol.

- Smoking. Cigarette smoking may decrease your stage of HDL cholesterol.

- Alcohol. Drinking an excessive amount of alcohol can growth your overall cholesterol stage.

- Age. Even younger youngsters can have dangerous cholesterol. As you age, your liver turns into much less capable of remove LDL cholesterol.

Lifestyle modification in the beginning then medications if needed can help, some recommendation to prevent or to bring your cholesterol levels into line:

- Healthy diet:

The best way to lower your cholesterol is reducing your intake of saturated fat and trans fat. The American Heart Association recommends limiting saturated fat to less than 6% of daily calories and minimizing the amount of trans fat you eat.

Try a heart-healthy diet emphasizes fruits, vegetables, whole grains, poultry, fish, nuts and no tropical vegetable oils, while limiting red and processed meats, sodium and sugar-sweetened foods and beverages.

To be smarter about what you eat, pay more attention to food labels. Know your fats, knowing which fats raise LDL cholesterol and which ones don’t is key to lowering your risk of heart disease. Cook for lower cholesterol. A heart-healthy eating plan can help you manage your blood cholesterol level.

-Becoming more physically active:

Physical activity is important. At least 2 hours of moderate-intensity exercises a week is enough to lower both cholesterol and high blood pressure. Lots of options available: brisk walking, swimming, bicycling or even yard work can fit the bill.

- Quitting smoking:

Smoking and vaping lowers HDL cholesterol. Worse still, when a person with unhealthy cholesterol levels also smokes, risk of coronary heart disease increases more than it otherwise would. Smoking also compounds the risk from other risk factors for heart disease, such as high blood pressure and diabetes.

By quitting, smokers can lower their LDL cholesterol and increase their HDL cholesterol levels. It can also help protect their arteries.

Nonsmokers should avoid exposure to secondhand smoke.

-Also if lifestyle modification alone didn’t work the statins are usually the first hypercholesterolemia treatment used. Statins help reduce LDL levels by blocking a specific enzyme that's necessary to produce cholesterol. Along with lowering LDL cholesterol, statins help prevent hardening of the arteries, which reduces the chances of a heart attack or stroke.

**Conclusion:** Hypercholesterolemia is a huge problem facing nowadayspopulation, and it behooves us as health care professionals to get more patients on efficacious therapies like statins which are cost-effective since they are now largely generic.

Unhealthy lifestyle factors and change in traditional dietary pattern are positively associated hypercholesterolemia.

High blood cholesterol is a major risk factor for heart disease, and heart disease is the leading cause of death in the United States. Population health approaches have attempted to reduce the prevalence of hyperlipidemia through screening and by increasing public awareness of high cholesterol and strategies for reducing it.