#### WHAT YOU SHOULD KNOW ABOUT HIGH CHOLESTEROL

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# If high cholesterol runs in your family ... your high cholesterol may not be caused by something you're doing. But there may be something you can do.

About 1 in 300 Canadians has a "faulty" gene that leads to naturally high levels of the "bad" cholesterol called LDL-C. The inherited condition is called Familial Hypercholesterolemia, or FH. This puts you at higher risk for thickening of the arteries, heart attack and even death.

The two most common indicators of FH are high cholesterol (LDL) that may not respond to treatment and a family history of early heart disease.

#### Wonder if you inherited high cholesterol, or FH? Now there is an App for that!

Download the CardioRisk Calculator™ App.

Put in your numbers, or use it to talk to your doctor. You will learn pretty quickly whether you have FH and what you can do about it. Try it out: <a href="http://www.circl.ubc.ca/cardiorisk-calculator.html">http://www.circl.ubc.ca/cardiorisk-calculator.html</a>

### If FH is so "common" why haven't we heard very much about it?

For a long time, the treatment for high cholesterol, whether it was inherited or caused by other factors, was pretty much the same: reduce fat in your diet, exercise regularly, and take medication if necessary. And for the past 30 years, pretty much the only medication was a statin. The good news is that statins have worked reasonably well in reducing high cholesterol, whether familial or non-familial.

## So, why is important to know whether your high cholesterol is FH, or not?

A person with FH has very high cholesterol level, even before birth. This means you have a high risk of narrowing or blocking of blood vessels (also known as atherosclerosis). If left untreated, the risk of stroke, heart attack, or heart disease is 20 times greater than the general population. With a healthy lifestyle and treatment, most people with FH can expect to live a near normal life span.

#### What are the two different forms of FH?

The form of FH depends on whether you have inherited FH from one parent, or two.

- Heterozygous FH means you have only one affected gene (one parent affected)
- Homozygous FH means you have two affected (both parents affected).

Homozygous FH requires more aggressive treatment and carries a much higher risk of heart disease.

#### What are the chances of passing FH to your child?

If you have FH, there is a "1-in-2" chance that your child will have FH. Unfortunately, FH is often undiagnosed, undetected, and untreated in children. If both parents have FH, there is an additional "1-in-4" chance of having a child with Homozygous FH. If you have FH, you should have your child tested between two and ten years of age — or as early as possible after that.

FH can cause high levels of LDL-C starting at an early age. In addition to ensuring your child develops healthy eating habits and regular exercise, some children as young as 8 years of age may benefit from medication (usually statin).

#### What are risks if your (bad) cholesterol level remains high?

You already know that individuals living with FH are at higher risk of having cholesterol build up in the blood vessels. Over time, cholesterol-rich plaque in the arteries may harden and limit the flow of oxygen-rich blood to the organs and other parts of the body. The plaque may cause Atherosclerotic Cardiovascular Disease (ASCVD), which includes stroke, heart attack, and damage to peripheral arteries (in the legs).

#### What is the risk of ASCVD if your high cholesterol is not due to FH?

High cholesterol may be due to other factors. The good news is that LDL-C can be lowered. Talk with your healthcare professional about other risk factors that may interact with high LDL-C to affect your overall risk of ASCVD, or heart disease. These include age, sex, smoking, and high blood pressure.

# Feel like you're doing "almost" everything you can, but your cholesterol is still high?

While there is no cure for FH, lifestyle changes can help reduce cholesterol levels including:

- Eating a healthy diet low in fat
- Regular physical activity
- Stop smoking
- Limiting alcohol
- Sustaining a healthy body weight and shape

In addition, medications can lower LDL (bad) cholesterol levels.

- Statins are the most effective medication and the first option for treatment.
- PCSK9 inhibitors are a new class of drugs that lower LDL cholesterol levels.

To learn more and to join our efforts, visit our website at: http://www.heartpatientalliance.ca/