



### MANAGE YOUR CHOLESTEROL WITH NATURAL SUPPLEMENTS!

By Dr. Bo M. Nielsen

Do you cringe at the mere mention of cholesterol? Many of us do because we have been made to believe that cholesterol is the devil in disguise. But is it *all* evil?

In this newsletter issue find out all about cholesterol, what is fact and what is fiction, and which supplements can help you maintain healthy levels.

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### WHAT IS CHOLESTEROL?

Cholesterol is a fatty substance produced by our liver that is an essential component of cell membranes. It plays an important role in intracellular transport, cell signalling and nerve conduction, and is vital for the production of bile acids, steroid and sex hormones, and vitamin D.

If you thought cholesterol was all bad, ponder on this: we are alive thanks to cholesterol. A general misconception is that all cholesterol is bad and that elevated levels mean a sure ticket

to heart disease; but in reality what is relevant to our health is not the total quantity of cholesterol in our blood but rather the type. Before going into detail about why high cholesterol levels may not necessarily be unhealthy, it helps to gain an understanding about the different types of this substance.

Cholesterol is transported in the blood by special molecules called lipoproteins. The main ones consist of:

#### Low-density lipoprotein (LDL)

This is what we refer to as "bad" or "unhealthy" cholesterol. Excess amounts of LDL cholesterol in the blood can accumulate in the inner linings of arteries. Along with other substances, such as calcium and cellular waste products, this plaque becomes deposited in artery walls causing hardening and narrowing of blood vessels (atherosclerosis). Eventually, if any artery is sufficiently blocked and/or a blood clot forms, a heart attack or stroke could result.

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### High-density lipoprotein (HDL)

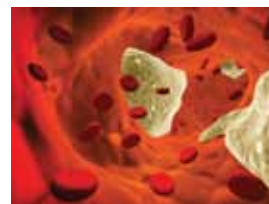
This is also known as "good" or "healthy" cholesterol because it binds to and removes excess LDL cholesterol. It then takes it back to the liver, where it is eliminated from the body.

Research shows that having a high HDL level lowers the risk of heart disease and helps protect against heart attack, stroke and blood clots.

### Triglycerides

These fats are transported in our blood by very-low-density lipoproteins (VLDL). Triglycerides, like LDL cholesterol, accumulate in artery walls and increase the risk of atherosclerosis and heart disease.

## HOW MUCH CHOLESTEROL IS TOO MUCH?



Most international heart associations recommend the following cholesterol levels:

TOTAL CHOLESTEROL	
Optimal	Less than 5.0 mmol/L
Borderline high	5.0 - 6.0 mmol/L
High	More than 6.0 mmol/L
Optimal for those at risk of heart disease	Less than 4.5 mmol/L

LDL CHOLESTEROL	
Optimal	Less than 3.0 mmol/L
Borderline high	3.0 - 4.0 mmol/L
High	4.0 - 5.0 mmol/L
Very high	More than 5.0 mmol/L
Optimal for those at risk of heart disease	Less than 2.5 mmol/L

HDL CHOLESTEROL	
Low	Less than 1.0 mmol/L for men Less than 1.3 mmol/L for women
Borderline low	1.3 - 1.5 mmol/L
Optimal	More than 1.5 mmol/L

TRIGLYCERIDES	
Optimal	Less than 1.7 mmol/L
Borderline high	1.7 - 2.2 mmol/L
High	2.3 - 5.6 mmol/L
Very high	More than 5.6 mmol/L

### High total cholesterol not necessarily unhealthy

Does this come as a surprise to you? The logic is quite simple: you can have high total cholesterol, but if it is due to your HDL being high, this is not unhealthy. If, however, your total cholesterol is high due to a high LDL level and a

low HDL level, this can lead to an unhealthy situation. Even more important for determining heart disease risk is the ratio between the different types of cholesterol.

**HDL/LDL:** divide your HDL by your LDL. Ideally the ratio should be above 0.3.

**Total cholesterol/HDL:** divide your total cholesterol by your HDL. The optimal ratio is 3.5:1 or less.

**Triglycerides/HDL:** divide your triglycerides by your HDL. Ideal ratio is 2 or less.

## WHAT CAUSES HIGH “UNHEALTHY” CHOLESTEROL?

There are various contributing factors including:

**Diet:** Contrary to what many people believe, research shows that dietary cholesterol has very little effect on blood cholesterol - most of our cholesterol comes from our liver's production. What we mean here is that it is not the total amount of cholesterol we eat from food that influences our blood cholesterol levels, but rather the mix of fats in our diet and the type of fat we eat.

Ultimately, we need to eat fats that raise our HDL levels and lower our LDL levels. The types of fat we want to steer clear of are trans fats or hydrogenated fats that are found in many processed and pre-packaged foods such as: pastries; cakes; biscuits and cookies; margarine; crackers; candy; and soup. Carbohydrates and sugars should be eaten in moderation as

the body converts excess amounts into triglycerides and LDL cholesterol. On the other hand, polyunsaturated and mono-unsaturated fats, particularly those which contain omega-3, help to raise our HDL levels and keep a healthy mix of fats in our blood. These can be found in fatty fish, olive oil, avocados, walnuts, cocoa and peanut oil. We can complement a healthy and varied diet with specific dietary supplements, such as omega-3 fish oil, grape seed extract and coenzyme Q10 that help maintain desirable cholesterol levels.

**Obesity:** Generally, people who have a body mass index (BMI) over 30 have higher LDL and lower HDL blood cholesterol levels.

**Exercise:** Lack of physical exercise can increase LDL cholesterol and decrease HDL cholesterol.

**Smoking:** Because smoking causes damage to artery walls, LDL cholesterol and triglycerides are able to stick more easily to their linings. Smoking can also increase the risk of blood clots and lower HDL levels.

**Underlying medical conditions:** High blood pressure and high blood sugar (diabetes) also damage arteries, allowing fatty substances to deposit quicker. Kidney and liver disease as well as hypothyroidism (underactive thyroid) can cause high LDL cholesterol levels.

**Familial hypercholesterolaemia:** Sometimes following a healthy lifestyle cannot keep high cholesterol at bay. This mostly happens in the case of familial hypercholesterolaemia, an inherited condition in which the body cannot eliminate LDL cholesterol from the blood.

## DOCTOR'S NATURAL SUPPLEMENTS CAN HELP YOU MAINTAIN HEALTHY CHOLESTEROL LEVELS!

### WHAT DO STUDIES SAY ABOUT GRAPE SEED EXTRACT AND CHOLESTEROL?

Numerous studies show that grape seed extract has a positive effect on maintaining healthy cholesterol levels. Researchers believe that the high concentration of antioxidants found in grape seed, such as resveratrol, helps reduce LDL cholesterol build-up and prevents its oxidation and damage to arteries. A study published in the Journal of Nutrition found that supplementation with grape seed extract lowers blood levels of triglycerides by 15% and lowers LDL cholesterol levels significantly.

#### Grapavin Special Offer Package!

Doctor's Natural Grapavin, which contains grape seed extract with extra resveratrol, may help you regulate your cholesterol levels.

Try our special package consisting of Grapavin, Multi-vitamins and Multi-minerals for a special price of £52.50 - 1 month's supply!



Purchase this special offer from our website: [www.doctorsnatural.co.uk](http://www.doctorsnatural.co.uk) or call one of our health advisors on 0207 043 1256 for more information.



## Walnuts and dark chocolate regulate cholesterol levels



Walnuts are jam packed with omega-3 fatty acids. Studies show that eating walnuts regularly improves the ratio between HDL and LDL cholesterol. According to a study, just 28 grams of walnuts a day results in a 10% decrease in LDL cholesterol levels. Didn't think delicious treats could be healthy? Think again because eating 99 grams of dark chocolate a day helps lower your LDL and raises your HDL cholesterol levels.

### WHAT DO STUDIES SAY ABOUT FISH OIL AND CHOLESTEROL?

Omega-3 from fatty fish helps maintain healthy cholesterol levels. Regularly eating fish helps lower LDL cholesterol and triglycerides and raise HDL cholesterol. Realistically, few people eat fish at least three times a week, so supplements of omega-3 rich fish oil are a perfect complement to maintain a healthy heart.

**Omega-3 Offer Package!**  
Extra Strength Omega-3 Fish Oil, Multi-vitamins and Multi-minerals for a special price of **£34.00** - 1 month's supply!



**Purchase this special offer from our website: [www.doctorsnatural.co.uk](http://www.doctorsnatural.co.uk) or call one of our health advisors on 0207 043 1256.**

### WHAT DO STUDIES SAY ABOUT Q10 AND CHOLESTEROL?

Coenzyme Q10 is vitamin-like antioxidant that has a host of health benefits including keeping our heart healthy. Recent studies show that Q10 also benefits our cholesterol levels. A study from Germany found that after only two weeks of supplementation with Q10, LDL cholesterol levels are lowered by 12.7%.

**Q10 Offer Package!**  
Q10 100 mg, Multi-vitamins and Multi-minerals for a special price of **£39.50** - 1 month's supply!



**Purchase this special offer from our website: [www.doctorsnatural.co.uk](http://www.doctorsnatural.co.uk) or call one of our health advisors on 0207 043 1256.**

### SAVE OVER 20% WITH OUR COMPLETE HEART SUPPORT AND CHOLESTEROL PACKAGE!

Support your heart health and help regulate your cholesterol levels with our exclusive package containing Grapavin, Omega-3 Fish Oil, coenzyme Q10, Multi-vitamins and Multi-minerals all for an incredible price of **£67.00** a month!



**Purchase this exclusive package from our website: [www.doctorsnatural.co.uk](http://www.doctorsnatural.co.uk) or call one of our health advisors on 0207 043 1256 for more information.**

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