

**Revitalize Your Health with the
Healing Power of Probiotics
How Probiotics Can Combat Our Two Greatest Killers:
Cancer and Heart Disease
From Ingo Logé and Fitness Forever**

Saying No to Cancer

The body has a limited number of cells. If one dies, it's replaced with an exact copy of itself in the exact location. The whole body works like that. What happens in cancer is that the cells start to grow uncontrollably, which, by itself, is not bad. The problem is that in addition to growing, they do a number of harmful things: release toxins, disrupt the normal functioning of whatever tissues or organs they happen to be in, and consume a lot of energy.

What causes cancer cells to grow uncontrollably is the mutations that occur at the gene level, and those mutations can occur for several reasons. First, the cells may be attacked by something like a virus, which will attach itself to the normal human cell and then inject its DNA (or genetic material) into the DNA of the normal cell. This can (but does not always) disrupt the normal functioning of the otherwise healthy cell, causing mutation.

How does a mutation happen? Well, everything a cell does-everything-is the result of what its DNA says-or to use our example, by how the letters are arranged. Certain compounds can actually come in and change those letters. Those compounds are what are collectively referred to as mutagens or carcinogens. (There is a minor difference between the two, but it isn't relevant to this discussion.)

When DNA is doing its job, the cell is happy and normal. It divides a limited number of times, and given that, it dies at a predetermined time. All normal cells do this. But as part of this normal functioning-for instance, in replication/duplication-the DNA of the cell has to be "unwrapped," so to speak. (Most DNA is kept tightly packed for a number of reasons, one of which is that the stuff that does the packing actually protects the DNA from carcinogens.)

This unwrapping increases the chance of a bad compound attacking the DNA. The more often the DNA is unwrapped, the more likely it will be attacked and hurt. How well or how poorly it survives depends directly on the sequence of those four letters, which, in turn, can be affected by toxic, mutagenic, and carcinogenic compounds.

So, where do probiotics come in? They actually function in a number of ways. First, they can make substances that will interact with the offensive materials and detoxify them. Second, probiotics can actually take in the toxic materials and process them by various pathways, making them less toxic. Third, probiotics can physically keep out bad bacteria. This is good not just because bad bacteria, such as the infamous E. coli (which is often the culprit in cases of contaminated meat), can produce substances that make us feel sick and can even kill us but also because those same bad bacteria can take what would otherwise be innocuous materials and turn them into carcinogens.

One solution to this problem is to add more good bacteria, which can be done by supplementing with probiotics. This might not be as simple as it sounds, as there are over 400 species (or types) of probiotics in the normal GI tract. To help sort things out, a number of companies have come up with what they believe are the most predominant bacteria normally found in healthy people. Typically, the list includes 10 to 20 different probiotics.

When the probiotics are weakened or dead, they cannot detoxify the noxious compounds and fend off the bad guys. The result is that the bad guys will eventually win. That's why you need to continually supplement your diet with new, fresh, viable probiotics. Make sure that fresh troops are constantly on guard, protecting your health.

Saying No to Coronary Heart Disease

Coronary heart disease (CHD) is caused by a narrowing of the coronary arteries that feed the heart. It's the most common form of heart disease, affecting some 7 million Americans, and it's also the number-one killer of both men and women. Each year, more than 500,000 Americans die of heart attacks caused by CHD.

Many of these deaths could be prevented because CHD is related to certain aspects of lifestyle. Some of the risk factors for CHD, or things that increase your risk of developing the disease, are high blood pressure, high blood cholesterol, smoking, obesity, physical inactivity, diabetes, and stress—all of which can be controlled. On average, having high blood pressure, having high blood cholesterol, or being a smoker doubles your chance of developing heart disease. Therefore, a person who has all three of these risk factors is eight times more likely to develop heart disease than someone who has none. Also consider that being overweight increases the likelihood of developing high blood cholesterol and high blood pressure, and being physically inactive increases the risk of heart attack.

We hear a lot of talk about the different types of cholesterol, and a number of

abbreviations are thrown around, such as HDL (high-density lipoprotein), LDL (low-density lipoprotein), and HDL/LDL (which is simply the ratio of the two).

This is all a lot easier than it sounds. What's important to remember is that the HDLs are the good cholesterol and the LDLs are the bad cholesterol. The bad ones are those that will clog up your arteries, making them hard and constricted.

That is really the crux of the problem. Once flexibility is lost in the arteries, the blood pressure goes up and the optimal levels of blood and other nutrients cannot reach the various parts of the body-including the hardest working muscle of the body, the heart.

Changing your diet to one that is low in fat, especially saturated fat, and low in cholesterol will help reduce your level of blood cholesterol, a primary cause of atherosclerosis. In fact, it's even more important to keep blood cholesterol low after having a heart attack in order to help lower the risk of having another one. Eating less fat should also help you lose weight, and if you are overweight, losing weight can help lower your blood cholesterol. Losing weight is also the most effective lifestyle change you can make to reduce high blood pressure, another risk factor for atherosclerosis and heart disease.

If making lifestyle changes was enough to prevent or control CHD, then medications would never be used. Diet changes, in particular, have been the traditional remedy for bad or high cholesterol, and while diet can make a difference, it doesn't always take care of the situation. The body has the ability to produce its own cholesterol and to do that in rather high amounts when needed. This is a problem for someone who's trying to control his or her cholesterol level by diet modification alone.

What scientists found in the probiotic studies on cholesterol was that when very high doses were used-well over 100 billion live organisms per dose-there was a reduction in blood cholesterol. Even more important, an increase in the ratio of HDL to LDL was observed. And the higher the HDL compared to the LDL, the higher the ratio.

Why is this important? If the LDLs are clogging things up, think of the HDLs as cleaning things out. As mentioned earlier, think of the LDLs as being like little Legos, with connectors that allow multiple cholesterol molecules to bind to each other. The LDLs collect in the arteries and build on one another, slowly clogging things up. The HDLs, on the other hand, are like Legos without connectors. Also, since the HDLs can't bind to other things, they have a kind of "bowling ball" effect and knock out the LDLs from wherever they are grouping. So, if there are many

more HDLs in comparison to LDLs, then fewer LDLs will be able to build up. Remember, the HDLs and the LDLs combine (numerically, not physically) to form the number that's called total cholesterol. It's all rather simple.

We see good results when high doses of probiotics are used. We also see good results when low doses of some of the more acid- and bile-resistant organisms are used. The LR probiotic has been shown to be very acid and bile resistant. It can survive the journey into the intestines, where it can start pumping away on the bile and deconjugating it, resulting in the excretion of the bile. LR has been observed to produce a 38 percent decrease in total cholesterol.

This is stunning, given the so-called one-to-two rule, which states that a 1 percent reduction of blood cholesterol causes a 2 percent lower risk of coronary heart disease. Remember, we're talking about a 38 percent reduction in cholesterol here, so that means that taking LR probiotics can give you at least a 76 percent lower risk of CHD. That is major!

These beneficial effects can be achieved not only by taking high levels of probiotics but also by taking lower levels of some select strains. There are probably many different variants of each strain, each more or less acid and bile tolerant. What you should look for are products that use strains selected by the best technology available, such as DNA fingerprinting and cell-wall structure analysis.

Anyone who is concerned about getting CHD will want to take probiotics, even if he or she doesn't care about all the other ailments discussed in this book. Taking probiotics as part of a healthy diet has been proven to have positive effects on CHD and other related conditions. Visit Our Healthy Links page to find out what the best probiotics to use and get. www.myfiness4ever.com