

Foreword by John Robbins

It may surprise you to learn that chocolate is actually good for you. But it's true. There is a growing body of credible scientific evidence that chocolate contains a host of heart-healthy and mood-enhancing phytochemicals, with benefits to both body and mind.

For one thing, chocolate is a plentiful source of antioxidants. These are substances that reduce the ongoing cellular and arterial damage caused by oxidative reactions. Chocolate is particularly rich in a type of antioxidants called polyphenols. These are protective chemicals found in many plant foods, such as red wine and tea. According to researchers at the University of Texas Southwestern Medical Center in Dallas, the same antioxidant properties found in red wine that protect against heart disease and possibly cancer are also found in chocolate.

The oxidation of LDL cholesterol is a major risk factor in the promotion of coronary disease including heart attacks and strokes. When this waxy substance oxidizes, it tends to stick to artery walls, increasing the risk of a heart attack or stroke. The polyphenols in chocolate inhibit oxidation of LDL cholesterol.

One of the causes of atherosclerosis is blood platelets clumping together, a process called aggregation. The polyphenols in chocolate inhibit this clumping, reducing the risks of atherosclerosis.

People with heart problems are sometimes told to take a baby aspirin a day. The reason is that aspirin thins the blood and reduces the likelihood of clots forming (clots play a key role in many heart attacks and strokes). Research performed at the department of nutrition at the University of California, Davis, found that chocolate also thins the blood, and performs the same anti-clotting activity as aspirin. "Our work supports the concept that the chronic consumption of cocoa may be associated with improved cardiovascular health," said UC Davis researcher Carl Keen. "Cocoa and presumably other forms of chocolate can be part of a healthy diet."

How much chocolate would you have to eat to obtain these benefits? Not that much. According to a study published in the American Journal of Clinical Nutrition, adding half an ounce of dark chocolate to an average American diet increases total antioxidant capacity four percent, and lessens oxidation of LDL cholesterol.

What about the high levels of fat and sugar that we associate with chocolate products? This is certainly a concern. Nearly all of the calories in a typical chocolate bar, for example, are sugar and fat. But the primary fat in chocolate is stearic acid, and as far as fats go, it's not bad. It is a saturated vegetable fat, but unlike most saturated animal fats, stearic acid acts in the body much like the monounsaturated fat in olive oil. Monounsaturates have a neutral effect on cholesterol.

Watch out for milk chocolate, though, because it contains added butterfat which raises cholesterol, and it also contains cholesterol. (Cocoa butter, on the other hand is a vegetable fat, and so contains no cholesterol.) Milk chocolate has another disadvantage, too. It has less of the antioxidants and other beneficial chemicals than dark chocolate does.

Carob has a reputation as a more healthful substitute for chocolate. But in fact carob bars typically have more sugar than chocolate bars. One study at the University of Texas actually found carob bars to be five times more likely to cause tooth decay.

Most of us eat chocolate because we love the flavor, but chocolate is legendary as well for having effects on the mind. In fact, chocolate is so well known for its remarkable effects on human mood that some scientists consider it a psychoactive drug. Chocolate is the richest known source of a little-known substance called theobromine, a close chemical relative of caffeine. Theobromine, like caffeine, and also like the asthma drug theophylline, belong to the chemical group known as xanthine alkaloids. Chocolate products contain some caffeine, but not nearly enough to explain the attractions, fascinations, addictions, and effects of chocolate. Chocolate addiction may really be theobromine addiction.

Other substances with mood elevating effects are also found in chocolate. One is phenethylamine, which triggers the release of pleasurable endorphins and potentiates the action of dopamine, a neurochemical associated with sexual arousal and pleasure. Phenethylamine is the chemical released in the brain when people become infatuated or fall in love. Another is anandamide (from the Sanskrit word “ananda,” which means peaceful bliss). A fatty substance that is naturally produced in the brain, anandamide has been isolated from chocolate by pharmacologists at the Neurosciences Institute in San Diego. It binds to the same receptor sites in the brain as cannabinoids - the psychoactive constituents in marijuana, and produces feelings of euphoria.

If that weren't enough, chocolate also boosts brain levels of serotonin. Women typically have lower serotonin levels during PMS and menstruation, which may be one reason women typically experience stronger cravings for chocolate than men. People suffering from depression so characteristically have lower serotonin levels that an entire class of anti-depressive medications called serotonin uptake inhibitors (including Prozac, Paxil, and Zoloft) have been developed that raise brain levels of serotonin.

All this probably makes chocolate sound like a fabulous food, but please try to be aware of the fat and sugar in any chocolate products you might eat. Do I eat chocolate? Yes. Almost every day. Although after what I have learned about child slavery in the cocoa trade, I have a policy to eat only organic and/or fair trade chocolate. And I believe that anyone who eats chocolate should know about the current issue of child slavery in cocoa production. My article on this subject, titled “**Is There Slavery In Your Chocolate,**” can be seen at http://www.foodrevolution.org/slavery_chocolate.htm.

May your life be full of healthy pleasures.

John Robbins, author

Healthy At 100, Diet For A New America,

The Food Revolution, and many other bestsellers

Foreword by Sally Errey

One of my missions in life is to help people feel good about food again. With most of our nutrition education coming from biased media advertisements it can be difficult to truly understand and make healthy choices. Finally, with Health By Chocolate, we have fantastic whole food recipes and ideas, supported by solid science, to make indulging in rich dark chocolate one of the most nutritious things to do each day! Now, eating quality chocolate is no longer a weakness but a strength!

Childhood, for most North Americans, is filled with sugary treats and junk food indulgences. The sight of a toddler's face covered in chocolate ice cream incites delight in all observers. Sadly, as we age the sweetness of these moments are lost to the reality of disease and illness. As adults we begin depriving ourselves of pleasurable foods in our quest for health and wellbeing. Fortunately, in this book, nutritionist Victoria Laine transforms this attitude of depravity into one of maturity. With recipes filled with nutrient rich ingredients that make delicious versions of the traditional, unhealthy variety, Victoria brings sweet indulgence back into a balanced diet.

The benefits of whole, natural unprocessed foods have been commented on for years and they are an integral part of my personal healthy eating plan and the fundamental basis for my own recipes and cookbooks. By combining everyone's favourite pleasure food, chocolate, with whole foods (which are loaded with beneficial nutrients, including phytochemicals, which help to prevent dis-ease and sustain us in a way processed foods never will) Victoria has created recipes that bring nourishment to both body and soul.

Life is hard. You endeavour to live each day without regrets. And on your deathbed you may wish you had laughed more, worried less, eaten better; but now, thanks to Health by Chocolate, it is doubtful that you will think, "I wish I had eaten less chocolate!"

Sally Errey, R.H.N, R.N.C.P.

Nutrition Consultant, speaker, and best selling author of
Staying Alive! Cookbook for Cancer Free Living
Rooibos Revolution - Recipes for Nature's Healing Tea