

HEALTH **BY** CHOCOLATE

radical new recipes & nutrition know-how

Victoria Laine



Foreword by John Robbins

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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

THE LIGHTSIDE... BECOMING “EN-LIGHT-ENED”!

CHOOSING HEALTHFUL CHOCOLATE

The best way to get on the good side of chocolate is to purchase products (like bars and ready-made goodies) that use only premium grade chocolate and only whole food ingredients.

Or, make your own delicious snacks, meals, treats and desserts, like those found in the recipes in Part 2 of this book. You can easily learn to partner quality pure cocoa (including melting-chocolate) with whole food ingredients for optimum nutrition and flavours. The healthiest chocolate products and recipes are those that use whole cacao, cacao nibs and cocoa powder combined with the healthiest added ingredients.

For more guidance on the educated purchasing and healthy consumption of cocoa and chocolate see FROM CACAO BEAN TO CHOCOLATE BAR, and THE HEALTHY CHOCOLATE KITCHEN GUIDE (Part 2).

QUALITY and QUANTITY

Whole food chocolate products are loaded with health building nutrients, so appropriate portions are more likely to satiate with fewer calories, potentially giving us control over how much we consume.

WHAT ARE WHOLE FOODS?

Whole foods and whole food ingredients:

- ▶ are as close to their natural state as possible;
- ▶ have not been highly processed or refined (like white flour and white sugar have), or altered in ways that significantly decrease their nutritional value;
- ▶ have not had anything taken away, or added to them (eg. bran and germ removed from grains, or preservatives added) to decrease their quality;
- ▶ are nutritionally dense and health enhancing
- ▶ include whole grains, legumes, vegetables, fruits, nuts and seeds.

There is clear evidence that a simple, whole food, plant based, balanced diet can prevent and sometimes even reverse heart disease and diabetes. It's exciting to see the healing power of food, along with other healthy habits, reverse type 2 diabetes, high cholesterol and triglycerides, high blood pressure, and obesity using this whole foods diet, often within only a matter of months.

A WORD ABOUT FIBRE...

Animal foods (including eggs and dairy) are devoid of fibre, and plant foods contain varying amounts of fibre. In order to get sufficient daily fibre (a minimum of 35-50 grams), one needs to eat, predominately, a variety of plant foods - whole grains, legumes (beans), veggies, fruit, nuts and seeds.

A WORD ABOUT ENZYMES...

Food enzymes are essential to health. Enzymes are considered “the spark of life”, and are catalysts for vitamins and minerals. Enzymes are available in raw fruits, vegetables, nuts and seeds, and sprouted legumes and grains. Enzymes are destroyed when heated past 118°F. Include a high percentage of raw foods in your diet for optimum nutrition.

QUALITY SWEETENERS

Whole cacao beans and pure cocoa powder are bitter, so the sweetness of chocolate depends on what amount and form of sweetener is added to the cocoa (see Table 1) and THE HEALTHY CHOCOLATE KITCHEN GUIDE (Part 2).

For sufficient energy, most active people require between 55 and 65% of their daily calories from carbohydrate. All carbohydrates (simple or complex), whether from refined sugars or whole food sources, are broken down by digestion into simple sugars that become blood glucose and either act as energy or are stored as fat. However, not all sugars are created equally. So why are we wise to choose “natural sugars” over refined and processed ones? One difference is the micro-nutrient values. Typically, the more processed a food is, the more micro-nutrients and phytochemicals are destroyed, so fewer vitamins and minerals are available, whereas nutrient dense foods naturally retain vitamins and minerals, and possibly fibre and food enzymes.

In these recipes, fruits, nut-meats and seeds provide natural sweetness (in the form of simple and complex carbohydrates), and most provide a good source of dietary fibre. If they are in their raw state, they also have enzymatic benefits needed for many cellular and digestive functions. While some natural sweeteners (eg. honey, maple syrup, agave nectar, brown rice syrup) are not high in fibre, they provide other health building nutrients. If you are diabetic or struggle with blood sugar swings, choose recipes that contain fruits, nuts or seeds over those with fibreless sugars, as both the fibre and the fat help to slow the metabolism of the carbohydrates into the bloodstream. Nuts and seeds are rich in complex carbohydrates that help to keep blood sugar balanced and energy steady.

TABLE 1: NUTRITIONAL PROFILE FOR COMPARISON (100 grams)

	Maple Syrup	Honey	Blackstrap Molasses	Dates	Refined Sugar
Calories	261	304	235	282	387
Fat	0.2 g			0.39 g	
Sodium	9 mg	4 mg	55 mg	2 mg	2 mg
Potassium	204 mg	52 mg	2492 mg	656 mg	99.98 g
Carbohydrates	67.09 g	82.4 g	60.8 g	75.03 g	
Dietary Fibre		0.2 g		8 g	
Protein		0.3 g		2.45 g	
Vitamin A				10 IU	
Vitamin C		0.5 mg		0.4 mg	
Calcium	67 mg	6 mg	860 mg	39 mg	1 mg
Iron	1.2 mg	0.42 mg	17.5 mg	1.02 mg	
Thiamine			0.03 mg	0.05 mg	
Riboflavin		0.04 mg	0.05 mg	0.07 mg	0.02mg
Niacin	0.03 mg	0.12 mg	1.08 mg	1.27 mg	
Vitamin B6		0.02 mg	0.7 mg	0.17 mg	
Folate		2 µg	1 µg	19 µg	
Pantothenic Acid	0.04 mg	0.07 mg	0.88 mg	0.59 mg	
Phosphorus	2 mg	4 mg	40 mg	62 mg	
Magnesium	14 mg	2 mg	215 mg	43 mg	
Zinc	4.16 mg	0.22 mg	1 mg	0.29 mg	
Copper	0.07 mg	0.04 mg	2.04 mg	0.21 mg	
Manganese	3.30 mg	0.08 mg	2.61 mg	0.26 mg	
Selenium	0.6 µg	0.8 µg	17.8 µg	3 µg	0.6 µg
Water	32.11 mg	17.1 mg	28.70 mg	20.53 mg	0.03 mg

U.S.D.A. SR-16

DID YOU KNOW?

Cashews have the lowest fat content of the nut family, and are a good source of many minerals and B vitamins. They are good for muscles and nerves. They spoil quickly, so keep refrigerated.



Tester Comments

“So easy to make and so refreshing.”

“The espresso variation is yummy.”

“Scrumptious, my favourite. Tastes very much like a frosty.”

CREAMY CASHEW CHOCOLATE MILK

More nutritious than commercially pasteurized milks and beverages; nut milks retain their enzymes providing “sparkplug energy”. This family favourite is full of chocolatey richness. You can strain the cashew bits from this recipe or leave them in, creating a funky drink that reminds me of a “bubble tea” concept.

Makes: 3-4 servings

1 cup (250 ml) **raw cashews**
4 Tbsp (60 ml) **maple syrup**
3 Tbsp (45 ml) **cocoa powder**
2½ cups (625 ml) **water** (1 + 1½ cups)

Place cashews, syrup and cocoa powder in a tall glass jar with approximately 1 cup water. Blend well with a hand blender until smooth and creamy, or put ingredients in a blender and process until smooth and creamy.

Add the remaining water and blend well.

Note: If you wish to strain the cashew bits, pour milk through a straining bag or cheesecloth-lined strainer (unnecessary if you like a bit of chewiness in the bottom of your glass).

Serve over ice cubes or refrigerate before serving. Will keep for 2-3 days.

VARIATION

- ▶ **CREAMY CASHEW CHOCOLATE FROSTY**
Using the recipe above add 2 cups (500 ml) ice cubes or for a creamier version, use 2 cups (500 ml) of frozen banana instead of, or as well as, ice cubes. Blend until frosty.
- ▶ **ESPRESSO**
Add 1 tsp (5 ml) ground instant coffee granules.
- ▶ **CHOCOLATE CHAI**
Mix in equal quantities with chai concentrate or sweetened spicy chai tea.

Chocolate is cheaper than therapy,
and you don't need an appointment.

DID YOU KNOW?

Chocolate has long been considered an aphrodisiac, however there is no conclusive scientific evidence. Interestingly, according to a 2006 Redbook survey, 70% of women prefer chocolate over sex. (Globe & Mail, Feb.10th 2007)



Tester Comments

"Wow...this is toooooo good to be true!"

"Oooww yeah!"

"Everything to be loved in this decadent, divine, orgasmic, experience."

PASSION IN A PAN

Yes...this is the healthy version of another popular recipe...and there's nothing less decadent about it. Enjoy the "out of this world" experience, while benefiting from a lot less calories!

Makes: One 9"x 14" cake

Fruit bottom:

3-4 cups

(750-1000 ml)

fresh peaches or strawberries, sliced

(or 2-14 oz cans peaches or pineapple tidbits - reserve juice)

Cake Batter:

1 cup (250 ml)

½ cup (125 ml)

½ tsp (2 ml)

½ tsp (2 ml)

½ tsp (2 ml)

½ cup (75 ml)

whole grain pastry flour

raw sugar (eg. Sucanat™)

baking powder

baking soda

salt

olive oil or melted coconut oil

pure vanilla

1 tsp (5 ml)

¾ cup (150 ml)

fruit juice (or reserved juice from canned fruit)

1 cup (250 ml)

pecans, chopped

pudding:

One of the following pudding recipes - Section 2:

- ▶ **RICH CHOCOLATE MOUSSE**
- ▶ **INSTANT CHOCOLATE PUDDING**
- ▶ **QUICK CREAMY AVOCADO CUSTARD**

Preheat oven to 375°F. Grease the bottom and sides of a 9" x 14" pan. Pour the fruit evenly over the bottom of the pan.

In a large bowl, measure the dry ingredients and stir together. Make a well in the middle and add wet ingredients into the center. Mix until all dry ingredients are moist. Fold in chopped nuts.

Spread the batter evenly over the fruit. Bake for 18-20 minutes until golden brown on top. Cool completely.

Make one of the pudding recipes from Section 2 choices.

Note: RICH CHOCOLATE MOUSSE should be made in advance and allowed to cool completely before spreading on cake, whereas the other two can be made and immediately spread over cooled cake. All are delicious, however Chocolate Mousse is the "richest" (and most decadent) of the three choices.

Spread a thick layer of pudding over cooled cake and decorate, if desired with a layer of dried coconut, fresh strawberries or raspberries, more peaches or any other fruit of your choice, or chopped pieces of a chocolate bar.

VARIATION

- ▶ For an even more decadent dessert, you can also add a layer of SILKY WHIPPED CREAMY TOPPING - Section 2 or commercially purchased Whipped Soy Topping

Chocolate flows in deep dark, sweet waves,
a river to ignite my mind and alert my senses.

DID YOU KNOW?

Raw nuts and dried fruit provide a host of food enzymes, and with ginger as a digestive aid, this healthful “pie-cake” can be enjoyed for celebrations or whenever you want a healthy and decadent treat.



Tester Comments

“This recipe was so simple I read the directions twice to make sure I wasn't missing anything.”

“This was really fast and easy...only 10 minutes. It took me longer to find my cheesecake pan than to prepare it.”

“Great when company drops over, or you need a special dessert fast.”

“This was delicious with tea, not overly sweet.”

CHOCOLATE GINGER PECAN PIE

The ginger version of this is my favourite, but it is great with or without. We get the benefit of the natural sweetness, healthy fat and enzymes in the raw nuts and fruit with enough chocolate to satisfy that desire too.

Makes: 12 pieces

2¼ cups (560 ml)	pecans (reserve ¼ cup whole pecans for garnish)
2 cups (500 ml)	pitted dates (or 1 cup (250 ml) dates and 1 cup (250 ml) raisins)
½ - ¼ cup (125-175 ml)	chocolate chips or carob chips, melted
4-6	large strawberries, sliced (optional)
1-2 Tbsp (15-30 ml)	candied ginger, chopped

In a food processor, grind pecan and date mixture until they form a dough-like mass.

Helpful Hint: Prior to patting the dough mixture into the pan, sprinkle some ground nuts or oat flakes under the pie for easier removal.

Press into a cheesecake pan, pie pan or form with your hands (quickest way) onto a decorative plate.

Melt chocolate - See rules in section ABOUT RECIPES. Mix in the chopped candied ginger or sprinkle over top of pie to decorate. Spread onto pie cake with a knife or the back of a spoon.

Decorate with reserved pecans and fresh strawberries, if desired.

VARIATION

- ▶ Add ½ cup (125 ml) coconut to dough mixture.
- ▶ Substitute dates with other dried fruits.
- ▶ CARMEL PECAN PIE - To make a crust press the basic pie recipe into the bottom of two small or one large pie pan(s). Fill with a layer of CARMEL FROSTING - Section 3 and lay the whole pecans on top.
- ▶ Ginger can be eliminated.

Nine out of ten people like chocolate.

The tenth person always lies...

~John Tullius (1953-)