THE PROGRAM FOR HEART HEALTH

the wellnesswatchersmd team and
kerry friesen, m.d., medical director

WellnessWatchersMD™
The Medical Doctor's Program to Support your Healthy Changes.

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BCM Direct LP., 245 Nassau Street, Princeton, New Jersey 08540

To our wives, husbands, children, and families –
to everyone who wants to live a longer, healthier, happier life,
and everyone we all want to live longer, healthier, happier lives for.

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CHAPTER 1

DON'T HAVE A HEART ATTACK

Can we be brutally honest here? You're reading this because you don't want to have a heart attack. We created WellnessWatchersMD because we don't want anybody to have a heart attack. So we're starting out, both literally and figuratively, together on the same page.

We don't want to scare you, even though it's a good idea to be afraid of some things. But there's a better idea than being afraid. It's doing something about it, so you never have to be afraid again. That's what the WellnessWatchersMD program is for. This program will show you exactly how you can lower your cholesterol, and prevent or even reverse heart disease.

Nobody wants to have a heart attack. Yet more Americans die of heart disease than any other cause. More than 500,000 of us every year. Fifty-eight of us in the last hour. And according to the American Heart Association, more than 12 million of us have been diagnosed – heart attacks just waiting to happen.

Yet the solution is simple. It's simple because the cause of most heart disease is well known. It's our modern lifestyle.

The cause of nearly all heart disease is our modern lifestyle. And believe it or not, the solution can be quite enjoyable. In the following chapters, we'll show you the way to:

Lower Your Cholesterol – Along with hypertension, high cholesterol is a leading predictor of heart attack. The trick is to do it naturally – without dangerous prescription drug side effects. We'll show you how.

Eat Well – with no complicated diets, no deprivation! It's easy to make healthy food choices when you know a few simple secrets – and you may find you enjoy eating even more, knowing you could be adding years to your life.

Supplement Wisely – Let's face it – most of us are never going back to our ancestors' heart-safe, all-natural diet. So we need to take the right vitamins and anti-oxidants, Plus, we show you a new class of food supplement that actually prevents cholesterol absorption.

Exercise Regularly – Maybe you've tried to get enough cardiovascular exercise before, but found it difficult to stick with your program. We'll tell you about a breakthrough that makes starting and keeping up a new exercise program easy and fun.

Reduce Your Stress – Discover the most common source of stress, and watch it melt away in waves of relaxation. (Hint: the most common source is not work, relationships, or money.)

How important is reducing your cholesterol? The National Institutes of Health conducted the first research to discover whether lowering cholesterol levels reduces heart attack risk. The NIH recruited 3,800 volunteers with cholesterol levels of 265 or more, and helped half of them lower their cholesterol a mere 8.5%. Nonetheless, the lower cholesterol group had a 24% lower death rate, a 19% lower heart attack rate, 20% less angina, and 21% fewer bypass surgeries.

In other words, it's important to lower your cholesterol.

If you are not taking prescription medications now to lower your cholesterol and blood pressure, there's a good chance that you will never need to – if you follow the recommendations in this book.

If, on the other hand, you are already taking prescription medications such as statin drugs like Lipitor, Zocor, or Crestor, and you follow our recommendations, there's a good chance that your physician may reduce your dosage, frequency, or even discontinue. It's happened for many others, and it could happen for you.

CHAPTER 2

CHOLESTEROL, HEART DISEASE, AND MODERN LIFE

What is heart disease? Atherosclerosis, the scientific name for heart disease, occurs when plaque builds up in the arteries.

Arteries are the "pipes" that carry blood from the heart to all the organs of the body, including the heart itself. Plaque is mainly cholesterol, plus white blood cells, muscle cells, and certain fibrous tissues. Plaque clogs and damages the arteries.

When cholesterol clogs the arteries that supply the heart itself with blood, it causes the chest pain called angina. When one of these arteries is completely stopped up, the blood supply to the heart muscle (myocardium) stops, causing a myocardial infarction, or heart attack.

Certainly all this meets anyone's definition of a disease. But this can be misleading. When we think of a disease, we tend to thing of something that's caused by germs, for which the cure is taking medicine. Or, if the disease has already progressed too far, we think of a remedy like surgery.

But atherosclerosis isn't caused by any germ. Instead, it's caused by changes in the way we live, brought about by changes in society and technology over the last 200 years. That's actually good news, because what has been caused by changes can be reversed by changes.

Science and medical research have shown that heart disease can be reversed through proper nutrition, supplementation, exercise, and reducing stress. In later chapters we'll show you just what to do in each of these vital areas.

But now let's look a little more deeply into the causes of high cholesterol, high blood pressure, and heart disease. This is the one commonly fatal disease we can actually prevent – and even reverse – by simply doing a few important things differently.

How can this be? While genetics, age, gender, and even race are factors in heart disease, they mainly affect our vulnerability to it, by making some of us more predisposed than others.

The real culprit is lifestyle – our modern way of living. Our wonderful bodies adapted for millions of years to environments that were very different from the environments where we raise, feed, and exercise them now.

We were made for hard work like hunting and gathering, wandering far and wide over all kinds of wild terrain, defending ourselves from predators and strangers, carrying all we needed for survival with us or finding it along the way, making and breaking camp every night and morning.

In a word, our bodies we made for exercise. We need it. However, we spend most of our time sitting and riding, not walking and running. But without enough exercise, our muscles get smaller, our hearts get weaker, and our health declines.

We were made for picking wild berries, not picking up something at the drive-through. What's more fresh than wild fruit you've just twisted from its stem, or wild leaves you've just plucked from a branch? Our ancestors' bodies might not even recognize half of what we eat as food.

One of the most common foods today didn't even exist then. Americans eat nearly half a pound of this substance every day – over 150 pounds a year – yet it doesn't grow naturally anywhere on this whole green planet. Never has, and never will. We're talking about refined sugar.

And when we ate meat then, it was wild game, lean as we ourselves were from running around in the woods and fields all day. Not much saturated fat, to say the least.

Another big difference between the conditions our bodies were adapted for and the conditions we find ourselves in now is that originally, our environment was just that – the natural environment. We spent most of our time interacting with features of nature.

Nowadays we spend most of our time interacting with other people – each other – in unnatural environments created by still other people - strangers. And let's face it, getting along with each other and a constant stream of strangers is stressful.

Stress is one of the main causes of heart disease, and other people are the main cause of stress. Coworkers and bosses, family members and friends, strangers on the road and in the store – we're all crowding each other too much all the time, and it's hard on the nerves for everyone.

Other factors that contribute to heart disease can all be related to the stresses of dealing with other people in this modern world we've created. Would those of us who smoke tobacco, drink too much, or chronically overeat – maybe even all three – would we be doing any of these things if our personal relationships weren't so stressful?

But we have a choice. Not the choice of going back to the way things used to be - only a horrendous catastrophe could precipitate that.

Our choice is between accepting these modern conditions as an excuse, or doing something for ourselves and our families to counteract their effects. These

conditions don't have to win over us. We can win over these conditions.

All we need is the tools and the knowledge to use them. Decades of research have developed the tools. And the knowledge is now in your hands.

We each get to ask ourselves, "Do I want a great excuse for dying too young, or do I accept this challenge?"

CHAPTER 3

CHOLESTEROL LOWERING DRUGS AND THEIR SIDE EFFECTS

The top question from people who call us on the CholesterolWatchers customer service line is, "Will I be able to stop taking [prescription drug] with these awful side effects?" (CholesterolWatchers is a program similar to WellnessWatchersMD, specifically for people concerned about cholesterol.)

If you too are wondering the same thing, please read this section carefully.

Some of the best selling prescription drugs in America are the cholesterol-lowering statins drugs people call us about. Drugs with names such as Lipitor, Zocor, and Crestor.

Nobody seriously contests whether these drugs work. In fact, they appear to lower cholesterol quite effectively. The problem is, they lower cholesterol at quite a significant cost.

The way these drugs reduce cholesterol is literally by interfering with normal liver function - by hindering the action of an enzyme called 3-hydroxyy-3-methylglutaryl coenzyme A (HMG-CoA), which is why they're also called HMG-CoA reductase inhibitors.

It's important to understand this. These drugs don't prevent the liver from doing anything it's not supposed to do. If we eat too much of the wrong kinds of fats, exercise too little, and continue our stressful thinking patterns, a normal, healthy liver produces too much cholesterol. These drugs punish the liver for our own bad habits.

This can result in a wide range of side effects from these drugs. Liver toxicity is common, producing jaundice, a yellowing of the eyes and skin. In addition patients can experience severe gastrointestinal disturbances, uncomfortable rashes, blurred vision, muscle weakness, and inflammation of the muscles.

Sometimes these side effects are fatal. In August of 2001, a popular statin drug was recalled after it was linked with 31 deaths from rhabdomyolysis, a disease which causes irreversible muscle breakdown. Public Citizen, a Washington, D.C. consumer group, states that other statin drugs have killed another 81 Americans.

Perhaps worst of all is these drugs' potential damage to the very organ they

are advertised and promoted to protect – the heart. The heart can be one of the muscles attacked by rhabdomyolysis. This might have something to do with the fact that deaths among people on cholesterol lowering drugs were an astonishing 46% higher than the control group in one study reported by researchers in Finland.

To those in the know, this isn't really so surprising. According to a 1998 article in the *Journal of the American Medical Association*, prescription drugs are the fourth leading cause of death in the United States. And this was not an article about drug misuse by patients. According to the medical establishment's own most trusted organ, prescription drugs *taken exactly as prescribed by physicians* cause the deaths of more Americans each year than AIDS, automobile accidents, or cancers of the breast or prostate.

One reason for this may be that hindering the action of HMG-CoA reduces one of the body's most important substances, coenzyme Q10 (CoQ10).

CoQ10 is essential for energy production at the cellular level. Statin drugs reduce CoQ10 levels by as much as 40%. This means that less energy is available for the muscles to translate into activity. The heart itself is a muscle, called the myocardium. It is the most active muscle in the body.

The heart is your busiest muscle, with the highest energy needs. Several studies have shown that lower levels of CoQ10 and lower levels of heart function go hand in hand. A heart straining to pump nourishing blood through cholesterol-clogged arteries is a heart that needs more energy, not less.

Of course, statins do play an important role in medicine. For example, according to Dr. Arlene Donar, Medical Director of Cholesterol Watchers, cholesterol levels of 400 to 500 or more due to genetic disorders cannot be brought down to safe levels by nutrition and supplements alone. However, she feels that for many patients "the risk of taking a drug with the potential to cause liver damage before attempting a nutritional and supplementation approach seems risky." And many other physicians agree.

What should you do if you have been prescribed atorvastatin, simvastatin, lovastatin, pravastatin, or any of the other statin drugs? (These are the technical names for Lipitor, Zocor, Mevacor, and Pravachol respectively.)

There's new hope for you. In the next chapter we'll discuss a natural alternative which lowers cholesterol without any of the above side effects – in fact, with no side effects whatsoever. A proprietary blend of these natural plant sterols (trade name Cholesterblock), together with appropriate diet and lifestyle changes, can reduce the need for cholesterol lowering drugs.

In more than one case, a doctor has learned about Cholesterblock from one patient and begun recommending it to others. Perhaps you yourself heard about it from your physician. If not, please discuss your concerns and share

information with your doctor as an informed consumer.

Meanwhile, please do not reduce or discontinue any prescription drug without your doctor's approval. When the cause of your high cholesterol is removed, the effect will be removed and your cholesterol levels will come down naturally. Until then, it's important to follow your medical practitioner's advice.

CHAPTER 4

PLANT STEROLS: THE MIRACULOUS "CHOLESTEROL CHAMELEON"

Imagine a harmless natural substance that looks just like cholesterol to the body. If this substance were present in the digestive system, the body could absorb it instead of cholesterol. Your body could then break down this substance and use it just like any other natural, healthy food.

Over the last decade, dozens of clinical studies have documented the existence of just such a miraculous "cholesterol chameleon" – plant sterols.

In fact, plant sterols have been shown to reduce the amount of cholesterol absorbed from food by 40% or more – with no debilitating drug side effects. Naturally occurring in many foods, most notably in soybeans, plant sterols can safely lower your cholesterol - no matter what you eat.

Unfortunately, it's not easy to get enough plant sterols from the food you eat to reduce your cholesterol. For example, you could drink more than three full glasses of soy milk, or shovel in two and a half pounds of tofu, or even choke down 12 sticks of soy margarine every day – and you still wouldn't get enough plant sterols.

Plant sterols have not been available in the clinical dosages required to achieve cholesterol lowering until recently. However, a proprietary blend containing sufficiently high concentrations of plant sterols is now marketed under the trade name Cholesterblock.

In 1999, at the University of British Columbia (American Journal of Medicine 107 (1999) p. 588-94) a review of 16 of the most comprehensive studies with 86 references of using plant sterols to lower total cholesterol and LDL found that bad cholesterol (LDL) was lowered on average by 13%. The impact on LDL was far greater than that on HDL (good cholesterol.) Thus, overall cholesterol was reliably decreased, and the ratio of good cholesterol to bad cholesterol was consistently increased.

Plant sterols have been thoroughly tested for safety, and received a straight-A safety report card. They have been the subject of numerous high dose (up to 25g/day) long term clinical trials to assess their effects on blood cholesterol levels. Over 1800 people in total have participated in these safety studies, and

absolutely no adverse effects have been reported.

So, why hasn't everyone heard about this remarkable breakthrough? It's an unfortunate fact that the giant multinational pharmaceutical companies, with their billion-dollar marketing and distribution budgets and well-heeled lobbyists, control vast majority of the information that the public receives about health solutions. Their interest is in promoting expensive patented chemical substances. They don't want you to know about a natural (i.e., not patentable) agent for lowering cholesterol. It wouldn't be good for their business.

All the same, the Food and Drug Administration has approved the use of plant sterols for cholesterol reduction. And the list of prestigious organizations recommending the use of plant sterols to achieve healthy cholesterol levels includes:

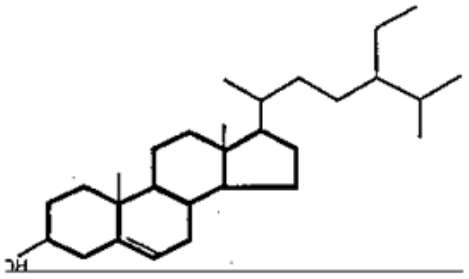
- National Cholesterol Education Program
- National Heart, Lung, and Blood Institute
- British Heart Foundation
- American Medical Association (AMA)
- American Heart Association (AHA)
- National Institutes of Health (NIH)
- American College of Cardiology.

Thus, although it's still difficult to find clinical dosages of plant sterols, even in vitamin shops and natural food grocery stores, it appears that the "best kept secret" in cardiovascular health won't be a secret for more than a few years longer.

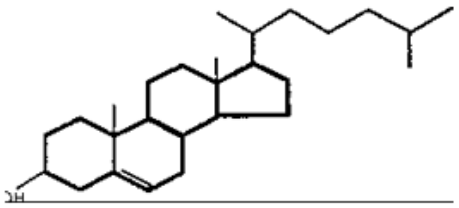
Meanwhile, have you begun to wonder how the "miraculous cholesterol chameleon" works to reduce your cholesterol?

The explanation is really quite simple. Cholesterol, as the name indicates, is an organic substance of the type "sterol." Plant sterols play a role in plants similar to that of cholesterol in mammals. When you look at the chemical diagrams of cholesterol and a plant sterol called beta-sitosterol, you can see why the body so easily takes one for the other:

<u>Cholesterol</u>



Beta-Sitosterol (a plant sterol)



Plant sterols act in two related ways to safely lower the absorption of cholesterol by 40 percent of more.

The co-precipitation of cholesterol and plant sterols. In the intestine, cholesterol is found in solution with other fats. When the concentration of plant sterols reaches a critical level in the intestine, the body naturally precipitates similar substances such as cholesterol from the solution. In other words, the body washes out the excess cholesterol to maintain the desired ratio of sterols, monoglycerides and fatty acids. Hence the greater the amount of plant sterols, the greater the amount of cholesterol is precipitated from the intestine.

The competition for space in mixed micelles. Micelles are very efficient detergent-structures that solubilise the lipids secreted in the small intestine. In the process of absorption, cholesterol and other substances in the micelles are transported from the lumen of the small intestine across the intestinal mucous and into the lymph. As there is only limited capacity in the micelles, compounds with similar structures to cholesterol such as plant sterols, can compete with cholesterol for this space. Thus, a high plant sterol intake results in less and less cholesterol in the mixed micelles, and thereby decreases absorption of cholesterol from the intestine.

If you skipped the rather technical discussion above and came here to the end looking for the plain-English summary, here's what you want to know:

"You simply can't get enough plant sterols."

You need to consume at least 1200 mg. per day of plant sterols in order to receive the cholesterol-lowering benefit. The average dietary intake of plant sterols in the American diets is between 200 mg. - 400 mg. per day. Even strict vegetarians are only at the high end of this range, far below the optimum levels.

Although people who eat a lot of fresh fruit and vegetables do get some plant sterols every day in their normal diet, it's not enough to cause a significant blood cholesterol lowering effect. Cooking oils, legumes, and some seeds such as

sunflower and sesame are good sources, while other vegetables and fruits contain slightly lower amounts, but achieving optimum levels is virtually impossible without a potent supplement.

Dr. Donar recommends that you take at least 1200 mg. plant sterols per day in capsule form with meals. Combined with a healthy diet, this will lower cholesterol absorption as part of the digestive process.

CHAPTER 5

SUPPLEMENT WISELY TO GET IMMEDIATE RESULTS THE FIRST DAY

Of all the things you can do to improve your cardiovascular health, taking the right vitamins and supplements is the one thing you can do today that can give you immediate results - today.

That's why, even if you don't change anything else, you must do the following three things now:

Protect your arteries with a cholesterol-lowering agent.

Fight damage by free radicals in the blood and cells with anti-oxidants.

Replace missing nutrients with the right vitamins.

Eating wisely, getting plenty of cardiovascular exercise, and reducing your stress are all vitally important, but it takes time to make these changes, and it takes time for their effects to build up.

But while you're still working toward a diet low-cholesterol diet, you also can reduce the absorption of the cholesterol that's in your foods today, by taking a plant sterol supplement such as Cholesterblock today.

We don't mean to imply that getting enough of the right vitamins, anti-oxidants, and cholesterol-lowering plant sterols is more important than nutrition, exercise, and stress reduction.

And we certainly would never say that supplementation is a good substitute for improved eating, exercise, and stress patterns.

However, it may be some time before you reduce or eliminate all saturated fats, trans-fatty acids, processed foods, simple carbohydrates, and caffeine from your diet. In fact for most of us, the best we'll ever be able to do is cut back on these things.

But while we're working toward our optimum levels, vitamins can supply the missing nutrients, and anti-oxidants can control and reduce the damage caused by the less healthy food choices we may still be making.

Dr. Donar recommends that all her patients take a daily multi-vitamin and

mineral supplement. This ensures that you are getting a sufficient dose of the chief vitamins and minerals known to be beneficial to your health.

Make sure that your daily multi-vitamin contains anti-oxidants such as vitamins C, E, beta-carotene, and selenium. You also want potent doses of the B-complex vitamins, needed for healthy arteries, brain and central nervous system. Add to these the essential minerals, such as calcium, chromium, copper, iron, magnesium, potassium, and zinc, at a bare minimum.

Here's a good list to compare with the product labels you find in your local vitamin shop or natural food grocery store:

Beta-Carotene	4000	I.U.
Vitamin A	6000	I.U.
Vitamin D	400	I.U.
Vitamin C	150	mg.
Vitamin E	100	I.U.
Vitamin B-1 (thiamine)	25	mg.
Vitamin B-2 (riboflavin)	25	mg.
Vitamin B-6 (pyridoxine)	25	mg.
Vitamin B-12	100	mcg.
Niacinamide	100	mg.
Pantothenic Acid	50	mg.
Biotin	300	mcg.
Folic Acid	800	mcg.
Choline	25	mg.
Inositol	25	mg.
Calcium	25	mg.
Magnesium	7.2	mg.
Zinc	15	mg.
Copper	2	mg.
Iron	10	mg.
Manganese	5	mg.
Iodine	150	mcg.
Selenium	200	mcg.
Chromium	200	mcg.
Molybdenum	150	mcg.

In addition, Dr. Donar recommends that you "supplement your supplement" with additional levels to bring you total daily intake to:

Vitamin C	1500	mg.
Vitamin E	800	I.U.
Alpha-Lipoic Acid	100	mg.
Co-Enzyme Q10	200	mg.
Bioflavanoids		

Vitamin B6	75	mg.
Vitamin B12	150	mcg.
Fish Oil	1000	mg.

Why is proper supplementation so valuable? We've already discussed the importance of plant sterols to reduce cholesterol absorption in the previous chapter.

Vitamins and other supplemental nutrients are important for another reason. Even if you never eat out, never eat fast food, and never consume prepared convenience foods at home, there's no guarantee that you're getting all the nutrients you need. Even a well-balanced diet with plenty of whole foods is subject to variations in soil mineral content from one region to the next. And vitamins and minerals are inevitably depleted by storage and processing in our modern distribution chain. Add to this the unavoidable damage caused by cooking itself, and there are bound to be gaps in anyone's nutritional intake. For this reason, Dr. Donar suggests that you take a daily vitamin and mineral supplement to fill the gaps, whatever they may be.

One of the vitamins, B3 (or niacin) is a proven cholesterol fighter. Niacin lowers triglycerides, lowers LDL (bad) cholesterol, and raises HDL (good) cholesterol levels.

Many of the items on the above two lists are antioxidants. Vitamin C, vitamin E, and beta-carotene are good examples. You need high levels of antioxidants to prevent and combat the damage caused by free radicals.

Without going into too much scientific detail, a free radical is an atom or group of atoms with one or more unpaired electrons, and therefore unstable and highly reactive. Free radicals are aggressive chemicals which "steal" electrons from organic molecules in the body, causing permanent destruction. Free radicals have been shown to play a significant role accelerated aging and the development of degenerative diseases such as atherosclerosis.

The role of free radicals in heart disease is well established. Not only do they damage the arteries, they oxidize LDL cholesterol, which enables it to contribute to plaque build-up.

According to an article in Lancet published in 2001, those with the lowest levels of vitamin C were twice as likely to die from heart disease as those with the highest levels. This held true for both men and women.

Similar findings have been published with regard to vitamin E and beta-carotene. It has even been proposed by some researchers that heart disease risk can be assessed by measuring antioxidant levels.

One study indicated that merely 100 I.U. of vitamin E per day lowered the risk of death from heart disease by nearly 40 percent. Another study showed that patients taking 400-800 I.U. of vitamin E daily had an astounding 75 percent

fewer heart attacks than those who received only a placebo. (Apparently, participating in controlled studies can also be quite hazardous to one's health.)

Other critically important antioxidants are selenium and Coenzyme Q10.

Finally, let's discuss fish oils. While saturated fats are considered pro-inflammatory because they stimulate the release of inflammatory chemicals, Omega 3 fats are natural COX-2 inhibitors and therefore anti-inflammatory. Numerous studies have demonstrated that omega 3 fatty acids lower total cholesterol levels, reduce LDL and platelet aggregation (clumping). Fish oil specifically has been shown to lower triglyceride levels and raise HDL (good cholesterol).

After all the jokes when we were children about cod liver oil and how horrible it tastes, research has established the facts. Consuming fatty fish such as cod and salmon decreases heart disease risk, due to the effects of omega-3 fatty acids. Your body does not produce any omega-3 fatty acids on its own, so you need to get them from either your diet or supplemental sources. (We recommend gel capsules for the absence of flavor.)

CHAPTER 6

EATING WELL FOR LIFELONG HEART HEALTH

You probably already know the essentials of a heart-healthy diet. For most of us, the problem isn't knowing which foods to eat and which to avoid.

The standard advice is well-known:

Reduce saturated fats by lowering red meat consumption and butter intake.

Reduce trans-fatty acids by cutting down on "artificial" processed foods.

Eat less refined sugar and processed foods, including processed grains like white pasta and white bread, and cut back on starchy foods like potatoes.

Eat more fish, especially fatty fish like salmon.

Eat plenty of natural food – such as whole grains, fresh fruit, and vegetables.

However, most of us don't need more information about what to do or why. We already know what changes we need to make. But we don't know how to make them.

What most of us need to know is how to make these changes, and how to make them permanent. So in this chapter, we're going to focus mainly on easy ways to make your diet healthier, even in today's world of rushed meals from chain outlets and drive-through meal stops.

We start with something you can do today that will give you an immediate, positive benefit. It's this: Every time you're hungry, eat an apple before you eat whatever it was you were hungry for.

You will be amazed at what a huge difference you can make just by developing this one little habit. You'll feel better almost immediately, and other positive changes you can't see or feel will begin at once.

Notice that we said "eat an apple *before*…" Not, "eat an apple *instead of*…"

This valuable tip combines two important principles. By eating an apple, you satisfy some of your hunger with a natural food that's high in healthy fiber and vitamins. It's good for your digestion, and you get a nice energy boost from the natural fructose sugars in the fruit. Almost as importantly, by eating your apple *before* and not *instead of*, you avoid setting yourself up for feelings of deprivation.

And when it comes to diet and lifestyle changes, feelings of deprivation are the cause of most failures.

After you eat the apple, you may not want to eat the less healthy snack you might usually consume without much thought. If so, you haven't denied it to yourself – you just don't want it now. There's no feeling of deprivation. You know you can still have it later, though if you stick with this concept, you'll probably want to eat another apple first.

If you do still want your usual snack, you'll probably want less of it, because the apple has already taken up some of your appetite. Simply by satisfying your appetite with the right kind of food first, you've begun eating a healthier diet without depriving yourself of a single thing.

Try this "apple trick" before meals, too. Chances are, you'll find it has an unexpected additional benefit. In one test, 346 people who ate an apple before each meal every day lost an average of 20 pounds in just 12 weeks – without doing anything else differently from the control group.

So if you want to lose some weight – and most Americans do – this tip brings quite an added bonus. Just keep a basket of apples at work, a bag of apples in your car, a supply at home – and you're set.

You feel good about eating this way, because you know you're taking good care of yourself. Fruits and vegetables are also rich in bioflavanoids. These flavanoids are anti-inflammatory and anti-oxidative helping to protect LDL and other fats in our bodies from oxidative damage. They are also high in B- vitamins including folic acid, B6, B12, thiamin, riboflavin, niacin, vitamin C, vitamin A, calcium, magnesium, zinc, and selenium – all of which are needed for maintaining good heart health.

You can apply the same concept to naturally fold in additional healthy food choices. Start with purified or natural spring water. Before you eat the apple, drink some water. Often, we feel hungry when we're actually thirsty – the body simply wants the water content of the food. See if you can get your water intake up to seven or eight 8-ounce glasses per day. This will also increase the benefits of all the added fiber in your naturally changing diet.

Do you enjoy red meat? You don't have to deprive yourself. Just start by adding some other healthier foods. If you eat fish for dinner two or three times a week and poultry two or three times a week, you'll automatically be eating red meat just once or twice – a huge improvement over the average American's consumption.

Get the idea? Don't focus on stopping your less-than-healthy habits at first. Why set yourself up for feelings of deprivation and the inevitable failures that follow?

Instead, give yourself plenty of permission to enjoy your life – and make it a

longer, even more enjoyable life by adding lots of nutritious whole foods, fresh fruits, and vegetables to your diet – *before* you eat the other things you like, not *instead of* eating the other things you like.

Just remember "*before* instead of *instead of*." It's easy, and it feels great. Try the apple trick first, and then keep going with other good things.

Now, let's spend a little time on what's good for you, what's not, and why.

In the average American's diet, various kinds of fat supply 34 percent of the total energy. Typically this breaks down to 12 - 15 percent saturated fat, 12 - 15 percent mono-saturated fat, and 4 - 8 percent poly-unsaturated fat. In addition, transfat (not technically classified as a fat) makes up about 7 percent of the average diet.

Fats take much of the public blame for heart disease. Although this is not without cause, it is often misunderstood. However, some facts are beyond debate.

When researchers want to study atherosclerosis (hardened, clogged arteries) in laboratory animals, they uniformly use a time-tested procedure, proven over decades of research to reliably produce damaged, clogged-up arteries again and again. Have you already guessed what it is?

To produce atherosclerosis in lab animals, all you need is saturated fat. No saturated fat, no atherosclerosis. Lots of saturated fat, plenty of atherosclerosis. It's that simple. Really.

However, not all fats are created equal. In addition to *saturated* fats, which we'll discuss in more detail in a moment, there are:

Poly-saturated fats are generally good for heart health.

Mono-saturated fats have minimal impact.

What's more, recent studies show that the ratio of poly-unsaturated fats to saturated fats may be as important as the overall consumption of saturated fats. Other recent studies also make it clear that transfat has all the negative impacts of saturated fat with the additional slew of its own.

The primary role that dietary fats play in the development of cardiovascular disease is the modulation of plasma lipoprotein (LDL & HDL) concentrations.

When we eat foods high in saturated fats a reaction occurs resulting in the release of chemicals from our cells. These chemicals, prostaglandins, leukotrienes and thomboxanes, are responsible for inflammation and platelet stickiness. Platelets are small cells that clump together and adhere to damaged areas in our arteries. They are all part of the COX-2 pathway. Anyone who takes or has taken an aspirin a day or drugs like Plavix does so to inhibit this pathway. They are known as COX-2 inhibitors. Inflammation and increased platelet stickiness along with elevated cholesterol levels and high LDL (bad cholesterol) are the ingredients that make up "plaque." Plaque build-up eventually leads to the

clogging and blockage of arteries.

In countless studies run over the last few decades, Saturated Fat and cholesterol have shown the most consistent association with CVD mortality.

In one study, called the Seven Countries Study, saturated fat intake was studied in 12,000 men from 16 populations. This was the first study to show a strong correlation between saturated fat intake and heart disease mortality.

It showed a correlation of 0.84 between high saturated fat intake and cardiovascular disease. In other words, a diet high in saturated fat made it 84 percent more likely that a person would suffer from heart disease. And this correlation held up through 25 years of follow-up

Another study compared the consumption of several dietary variables between the years 1954 to 1965 with heart disease mortality data for men and women about 20 years later, from 1971 to 1973.

This table sums up some of the highlights:

A high intake of:	*Increases (decreases) heart disease incidence by:*
Butter	54.6 %
All dairy products	61.9 %
Eggs	59.2 %
Meat and poultry	56.1 %
Sugar and syrup	67.6 %
Grains, fruit and vegetables	-63.3 % *(decrease)*

While everybody seems to know that fat consumption is a problem, fewer people realize the role that processed and refined sugars play in raising our cholesterol to unhealthful levels.

To understand this role and its powerful negative impact, we need to familiarize ourselves with the concept of "glycemic load."

Basically, our bodies have the ability to quickly break down carbohydrates into glucose, the simplest form of sugar. Some carbohydrates break down more easily, and elevate blood glucose levels more quickly. The more readily a food raises blood glucose levels the higher its glycemic index, or glycemic load.

Blood sugar levels rise accordingly, which signals the pancreas to release the hormone insulin. It is necessary for insulin to enter most cells before glucose can be taken up into those same cells to be used for energy.

Which foods have the highest glycemic load? The simplest carbohydrates, for the simple reason that, being simpler, they're easier to break down. White sugar and alcohol are the simplest carbohydrates. Processed grains like pasta and white rice, and starchy foods like potatoes come next. Whole grains and fresh vegetables provide the most complex carbohydrates – with some important exceptions we'll come back to.

For now, the important thing to understand is that if you, like most Americans, have a high daily intake of simple carbohydrates, this causes blood sugar levels to rise, overtaxing blood sugar controls and raising insulin levels. Increased insulin levels are associated with elevation in total cholesterol, LDL and triglycerides (stored fat).

Carbohydrates with a high glycemic load elevate triglycerides and small-dense LDLs, while reducing HDL cholesterol.

In addition, studies also show a strong and statistically significant positive association between dietary glycemic load and concentrations of C-reactive protein.

C-reactive protein found in the blood is a marker for inflammation, meaning its presence indicates a heightened state of inflammation in the body. Laboratory evidence and findings from clinical and population studies have shown a strong link between inflammation levels and the presence of heart disease.

So it's not surprising that high levels of C-reactive protein consistently predict new coronary events. In fact, scientific studies have found that the risk for heart attack in people in the upper third of C-reactive protein levels is twice that of those whose C-reactive protein is in the lower third.

What's more, other recent studies suggest that higher levels of C-reactive protein may increase the risk that an artery will re-close after it's been opened by balloon angioplasty.

On the other hand, complex carbohydrates are broken down into glucose more slowly, resulting in a more controlled release of insulin. Complex carbohydrates have a number of added advantages for heart health protection.

Another benefit of complex carbohydrates: they are high in fiber content. Fiber has the ability to bind to bile, the majority of which is made up of unwanted cholesterol. Fiber helps move this bile along, enabling your gastrointestinal system to rid itself of these fats as well as other waste materials and toxins.

Before we move on to the nutritional recommendations, let's take a look at one more danger source in the modern food supply: *transfats*.

Transfat is not a natural substance, but it acts like the most dangerous saturated fat. Until recently, transfats didn't have to be shown on food labels, which allowed the labels on many packaged foods to appear far more healthy than they actually are.

In clinical research, transfatty acids raised LDL (bad) cholesterol at least as much as did saturated fat, at but had no effect on HDL (good) cholesterol. Saturated fat raises levels of both kinds of cholesterol. In other words, transfat is even worse than saturated fat for your cholesterol levels and ratios.

There is also evidence that increased trans fatty acid consumption, in

contrast with consumption of saturated fat, increases plasma concentrations of lipoprotein(a), one more risk factor for heart disease.

And yet another study showed that a high intake of trans fatty acids increases the concentration of C-reactive protein, a marker of inflammation.

So, what is this transfat stuff, and how do you avoid it? Transfat is used to make solid fats from fats that are normally liquid at room temperature. This is far less expensive than using saturated fats, such as butter and lard, which are already a solid at room temperature.

Using transfat can make a product label look more healthy. For example, one of the most common shortenings used for industrial baking and confections is an industrial soy shortening. Sounds healthy right? Soy is good for you.

But one product we looked at contained 42 grams of transfat per serving. Saturated fat was only 19 grams, monosaturated fat was 71 grams, and polyunsaturated fat was 5.4 grams. In the past, that was all that would show up on the nutritional facts. But it would be far better for your body if this product contained 61 grams of saturated fat.

But you can start avoiding all these modern nutritional traps today.

Simply begin using your own variations of the "apple trick" to add more and more healthy food choices to your diet based on the information above, and gradually you will find that you have:

Decreased:	*While you have increased*:
Red meats	Fish and white meat poultry
Hamburgers and hot dogs	Veggie burgers and dogs
Whole eggs	Egg whites only
Dairy products	Low fat or non-fat dairy products
Butter, lard, other saturated fats	Olive oil, canola oil, flax seed oil
Sugar, candy, cookies, ice cream	Fruits and whole grain foods
Fried foods, fatty snack foods	Vegetables, legumes, salads

One last diet tip for now from Dr. Arlene Donar: Become a smart label reader! Most snack foods contain partially or totally hydrogenated vegetable oils and trans-fatty acids. Simple carbohydrate snack foods are not only loaded with sugar and calories but are often deficient in proper nutrients, "empty calories". They are also the main sources of hydrogenated oils and trans-fatty acids that have been implicated in coronary artery disease. These fats have been shown to raise LDL (bad cholesterol), lower HDL (good cholesterol) and interfere with the body's ability to use fats properly.

Follow these tips, and chances are that without much effort at all you will find that you have lowered your cholesterol, triglycerides, blood pressure, and weight. In other words, all you can lose is stuff you want to lose anyway.

CHAPTER 7

THE EXERCISE SECRET THAT MAKES "STICKING WITH IT" EASY

Though civilization goes back several thousand years, for most of this time most of us have been farmers – and not the kinds of farmers we see today with all their big tractors and machines. We literally scraped our existence out of the dirt with our fingers and a few crude tools.

Before that, we were wandering nomads. If we felt like having meat for dinner, we had to run after it.

In a word, we humans were made to get lots of exercise.

Exercise all day long, every day.

When you look at it this way, it's an amazing miracle that we actually need so little exercise now in order to stay healthy. Because all we really need is 40 minutes of exercise three times a week.

And yet, for most of us, that sounds like a lot.

If you don't get enough exercise, chances are you fall into one of two groups.

Either there's some form of exercise you enjoy, and you have a hard time getting around to it. Or, you don't like to exercise. Either way, the remedy is the same. It's just going to be more fun for the first group. At first.

Why only "at first"? This might be hard to believe if you're someone who says you don't like exercise now. But it's a fact that the more we exercise – up to a point – the more we enjoy it. Whatever you think, your body has a mind of its own. And your body wants plenty of exercise.

You might feel sore and achy at first, especially if you haven't exercised in awhile. But stick with it just a little longer, and you'll start to feel high. We promise. The reason is endorphins.

Endorphins are a kind of hormone that makes you feel relaxed and happy. The reason opium and its derivatives such as heroin have been so popular over the centuries is that they mimic the functioning of endorphins.

And exercise releases endorphins.

In addition to the mood elevating effects of endorphins, exercise reduces your stress. The reasons is simple. Physical activity burns up stress secretions such adrenaline, promoting a more relaxed state of mind.

So get into your sweats, get up your heart rate, and get ready to feel good!

(Now, a word from one of our more sedentary staffers: "That was disgusting, wasn't it? But look, it doesn't matter whether we like to exercise or not. We really need to do this for the health of our bodies. One study found that heart disease is four times more likely in sedentary workers than in physically active workers. And we apologize for repeating this, but the truth is that you will feel great.")

Seriously, though, for anyone who needs additional motivation, here's just a short list of the benefits you can enjoy from a small amount of regular exercise:

- Weight loss
- Stabilized mood (Do you know any depressed exercise nuts?)
- Higher brain function from increased circulation
- Deeper, more restful sleep
- Improved muscle and skin tone
- Enhanced self image
- Increased self-confidence
- Higher sexual energy
- Reduced stress
- Lower cholesterol
- Lower blood pressure
- Lower risk of heart disease
- Lower risk of heart attack
- Years added to your life

In three words, it's worth it.

Your heart is a muscle. Like any muscle, it can be in better condition or worse. Exercise makes it better. The stronger your heart, the more blood it can pump. The more blood it can pump, the lower its rate when you are at rest. Lower your heart rate by 20 beats per minute – say, from 80 to 60 – and you save 1,200 heart beats in the first hour. That's over 10 million fewer heartbeats per year. And if you think that will make your heart last longer, you're absolutely correct.

What's more, a heart that can pump more blood at a slower rate has more time between the beats to absorb blood for itself. In other words, making your

heart stronger gives it a chance to make itself even more strong and healthy.

That's all the time we'll spend for now on why you should exercise. Either you already wish you had more time for it, or you wish you didn't have to, but know you should.

So what kind of exercise to do, and how much?

Any exercise that elevates your heart rate to your target level is fine. Dancing, aerobics, some kinds of yoga, running, swimming, bicycling, etc. – it's all good. As long as you elevate your heart rate to your target level for about 40 minutes, three days a week, you'll be doing yourself and your heart immeasurable good. Of course, if you haven't exercised in awhile, start with lower rates and shorter periods, and then build up gradually.

Your target heart rate for exercise depends on your maximum heart rate, which depends on your age.

A simple formula for finding your maximum heart rate is to subtract your age from 220 if you are male, or subtract your age from 226 if your are female. Thus, if you're a 45-year-old man, your maximum rate is 175 beats per minute. If you're a 45-year-old female, your maximum rate is 181 beats per minute.

Next multiply your maximum heart rate by 0.7 and 0.8 to find your exercise target zone. Thus, a 45-year-old man with a maximum rate of 175 has an exercise target zone of 70 to 80 percent of that, or 122 to 140 beats per minute.

The easiest way to find your heart rate is to check the carotid artery. Put your index finger on the soft spot between your collar bone and the hinge of your jaw, count the beats for six seconds, and multiply by ten. Or for more accuracy, count for a longer period and use a smaller multiplier.

Exercise at least three times a week, and don't exercise more than six times a week. (Rest is important, too.)

So now you know what kind of exercise to do – the kind you like the best, or dislike the least. You know how to tell if you're doing enough. And you know how to avoid doing too much.

All we need now is the exercise secret that makes sticking with it easy. And here it is.

If you're like most people, knowing you should exercise and wanting to exercise are two very different things. Research shows that many people who exercise long-term keep at it because they have learned to want to exercise, rather than exercising just because they have to.

The key to maintaining an exercise program is "intrinsic motivation." In other words, if you're doing an activity because you enjoy it, you're more likely to continue that activity than someone who is only doing it for the rewards they expect.

Of course, it's not a mistake to want increased cardiovascular health. It's just

that a reason like this isn't likely to keep you exercising for the rest of your life.

So how do you get "intrinsic motivation" if you don't already have it?

Research has shown that people are more likely to engage in regular exercise if they do it with a partner. The likelihood that you will continue exercising increases if your relationship with your exercise partner is important to you in other social contexts.

Just to make the point, imagine that you have begun a regular exercise program with your boss or mentor, someone who has the power to influence your career success. How often do you think you would just forget to show up, or suddenly realize you have something else more important to do?

Or imagine that your exercise partner is an extremely attractive person of your favorite type, and that your relationship is relatively new. Do you think you would ever be likely to knock off early while he or she is still going strong?

As you can see, part of the key is combining exercise with social pressure and relationship pleasure in order to set up the support you need to continue. It's a very rare person who is not already intrinsically motivated by these two powerful forces.

Studies have demonstrated that married couples who voluntarily begin a supervised fitness program are less likely to drop out than the married men and women who join without their spouses. In fact, half of married people who join fitness programs alone end up dropping out.

If you're married, it's a good idea to engage your spouse in all aspects of your healthy heart program, including regular exercise. This way, you build the support you need for the lifestyle changes you need to make into your most important relationship. This way you're not only promoting your own goals, you're promoting each others' health and well-being, providing yourselves with yet one more strong motivation to continue.

If you're not married, partner up with a relative, friend, or business associate. One reason this helps is that it's simply much easier to feel enthusiastic about doing anything when you do it with someone you "intrinsically" enjoy being with.

Now let's get to the real heart of the matter. The real reason you haven't been able to keep up exercising in the past. And it's simple. Whatever we believe about how we should be, the fact is that for most of us, making an agreement with ourselves alone is not enough to make a significant change.

Especially where there's contrary pressure from others, which leads to the next point.

Because as much as it's a fact that most of us simply aren't very good at keeping agreements with ourselves alone, it's just as much a fact that most of us do a terrific job of keeping our important agreements with others. In fact, this

drive is so strong that you can probably give several examples of sacrifices you've made, times you've kept agreements others at a cost to yourself.

So the secret to starting an exercise program you'll stick with is to harness this powerful force that already exists in you. Make your agreement part of an important relationship. Make your agreement with someone important to you, who makes the same agreement with you, and you'll succeed.

You'll go on for the sake of that other person when you might not continue for your own good alone. They'll do the same for you. Your relationship will become stronger and more important, making it an every more powerful force to keep you going.

IMPORTANT NOTE: Consult your physician before beginning any exercise program, especially if you know or suspect that you have heart disease.

CHAPTER 8

THE SECRET OF INNER PEACE (WE'RE NOT KIDDING!)

When people talk about stress, they usually mean one of two things:

A "stress" is an external situation.

The "experience of stress" is an internal situation.

People tend to confuse these two meanings, and talk about both kinds of stress as if they were the same thing. But becoming aware of the difference can make life much more enjoyable and healthy.

We can't eliminate the external situations we call stresses. In fact most of the stresses you can name will always be there, no matter what.

Traffic? Other people's insensitivity? Financial pressure? Politics?

Wrongheaded children? That situation at work? The players might change, but there will always be a situation. You might get some relief in one area, but in no time another area flares up in crisis. The list of situations goes on forever, and while the forms they take may change, the situations themselves go on forever, too.

Notice the way you are feeling right now. After reading the above paragraph, you may be taking shorter, more shallow breaths, feeling more tension in your muscles, even feeling annoyed or anxious at all these reminders.

You might find it irritating to have to hear all this stuff about stress yet one more time. You may have suddenly remembered something that needs to be taken care of right away. If any of this applies to you, you are experiencing the second meaning of stress, the internal situation.

On the other hand, after reading the same paragraph, you may well be laughing at the truth of it all. If so, you have an advantage when it comes to stress management.

The same external situation that would cause some other people to experience dangerous internal stress has provoked in you the relieving response of laughter, and your experience of stress and tension has actually gone down.

The good news is that people who tend to respond more the first way can learn how to respond more the second way. This has been well-documented in many studies and experiments. There are many tried-and-true techniques that have worked for countless others, and these techniques can work for you. If

you've tried some of them before and they haven't worked in the past, they will work now once you understand the secret to making them work.

It's very simple, and it takes about one minute to understand. But you can spend a lifetime exploring its mind-boggling ramifications. In fact, the benefits of this secret spin out endlessly.

But that's the relaxing, healthy good news, and we have some stressful, extremely bad news to go over with you first. It's this:

Virtually everything your physiology and psychology does while you experience internal stress is bad for your cardiac health. Any time you get angry, fearful, anxious, or excited, your nervous system stimulates your adrenal glands to secrete three hormones: adrenaline, noradrenaline, and cortisol.

These hormones get to work raising your heart rate, constricting your blood vessels, increasing your blood pressure, raising your blood glucose levels, and increasing the secretion of – you guessed it – cholesterol.

It all comes back to the cause we discussed in the second chapter – our modern lifestyle. Our body was made to respond to physical danger with a battery of extreme reactions. Now we find ourselves responding to mainly psychological stimuli with the same extreme physical reactions.

The body reacts as if it needs more energy to fight or flee a threat, producing cholesterol that is not needed to increase energy production in the muscles. The excess cholesterol remains like sludge in a river bed, clogging the arteries and heart.

Research has provided plenty of examples. One study tracked cholesterol levels in forty accountants who were forced to meet stressful deadlines at specific times of the year. Predictably, the most strenuous work periods coincided with the highest levels of cholesterol. Similar studies have documented the same findings.

Interestingly, a study done in Massachusetts for the Department of Health, Education and Welfare, discovered that the best predictor for heart disease was job dissatisfaction – ahead of traditional risk factors such as smoking, high blood pressure and diabetes.

We could continue, but the point has probably been made. Stress kills. We can't afford to be complacent about it. We can't afford the mental laziness that equates external and internal stress. We have to learn to separate the two.

There will always be external stresses. We have to learn how to interrupt the internal response as quickly as possible. When a stressful external situation occurs, we need to learn a new response and employ it.

It's literally a matter of life and death: We have to learn how to relax.

Did it strike you as a little bit funny, the way we combined "it's literally a matter of life and death" and "we have to learn how to relax" into one

thought?

If so, that's a good start!

We could write a whole book on learning how to relax and maintain your own inner peace no matter what is going on around you. But that won't be necessary. Your local bookstore probably has a shelf full of them already. There are many techniques, all well documented, and many programs that have proven their effectiveness and worth.

As with choice of activity for your exercise program, it almost doesn't matter which relaxation technique you choose, as long as it's one you like and that makes sense for you.

What does matter is knowing the secret for making these techniques really work for you. And the secret is simply this:

Wait. We can't tell you yet. This is so simple that you might find it hard to believe. So please prepare yourself. Get ready to hear something very simple and surprising.

After you hear it, you will still need to learn an employ a good relaxation technique, but you will have new power to do that successfully, even if you found that difficult before.

This will take so little time to tell you that, if your mind is going as fast as it probably does most of the time, you might read right past it without realizing what we've said.

So get ready, slow down, and be prepared to read it at least twice.

All set? Okay, here we go. It's this:

The secret of inner peace is simply a matter of priorities.

Either you put your inner peace ahead of other things, or those other things come before your inner peace.

As we've already seen, "if it isn't one thing it's another." There's always something you have to experience before you can feel peaceful and relaxed, until you put feeling peaceful and relaxed ahead of all those other things.

It's a matter of priority.

"Priority" simply means what we do prior to other things, what we do first.

When a stressful external situation occurs, our automatic response is our automatic priority.

Make it your priority now to learn a new, peaceful automatic response.

Meanwhile, until your new, peaceful response does become automatic, make it your priority to interrupt your old, habitual stress response with your new relaxation technique.

Don't waste time stressing about how persistent your stress response habit seems to be. Just replace it as quickly as you can. Over time you will find that your relaxed feeling returns more and more quickly. And you will be amazed at

how soon it does become automatic to keep your sense of humor and stay fairly relaxed.

You will also be surprised at some of the changes in your environment which can result. We tend not to realize it, but the ways we respond to external situations when we respond from internal stress tend to escalate the same external situations, leading to even more internal stress.

But the responses we make when we are feeling relaxed and peaceful tend to have the opposite effect. Situations calm down instead of going from bad to worse. The volume of those external stresses seems to decrease all by itself.

It may feel urgent to respond the old, stressed-out way. Learn to recognize that the sense of urgency is itself a symptom of stress.

Stress always feels urgent.

But, have you ever seen a person respond calmly to a dire emergency?

Perhaps you've done this yourself. Maybe you can remember a time when you suddenly found a strong quiet reserve so that you could do whatever needed to be done.

Put your inner peace first, and let all your important life situations be handled from this same strong, quiet place within you. You can almost eliminate stress by making it your first priority to remain peaceful and relaxed.

Whenever you have to deal with something important, you rise to the occasion. Whenever something becomes truly urgent, you drop everything else and take care of that.

Just do the same thing with your inner peace. Take care of your inner peace as if your life depended on it.

Because now you know that, in fact, it does.