

# Dr. Marlene's NATURAL HEALTH CONNECTIONS



VOLUME 8 | ISSUE 09

A PUBLICATION OF PRIMAL HEALTH

## CONTENTS

How Insulin Works .....	2
How Things Go Wrong.....	3
Insulin and Weight Gain.....	3
Insulin and Type 2 Diabetes.....	4
Insulin and Other Health Risks .....	4
The Right Exercise .....	5
The Right Diet.....	5
Vitamin C: Essential Facts.....	6
Important: Your Waist-to-Height Ratio.....	10
Best Exercise To Beat Insomnia.....	11
Should I Buy a Vibration Machine?.....	12

## Insulin: The Secret Door to Good Health

**Insulin is a hormone that makes the difference between good health and many common conditions — from prediabetes, diabetes, and high blood pressure to weight gain, cholesterol, arthritis, and dementia. Yet, most people are not aware of its role.**



You may wonder: How can one hormone play a role in so many health issues? Before I answer that question, I want to address another one my new patients often ask after I explain the role of insulin: Why haven't I heard about this from my doctor?

The fact is, insulin is perhaps the most overlooked predictor of future health or disease. It drives high blood pressure, high blood sugar, heart disease, diabetes, dementia, and more. Years or decades before these conditions are diagnosed, elevated insulin signals trouble — when there's ample time to prevent or reverse damage. That's why I call it the secret door to good health.

Testing insulin requires only a blood test. But it is not typically done until diabetes or prediabetes has developed — after the fact.

Why? I can only speculate, but here's what I know: Following a healthy diet and lifestyle is the way

to get and keep insulin at healthy levels. But most doctors aren't trained in nutrition, let alone how to counsel people to adopt healthier diets and lifestyle habits.

Today's system is designed to measure specific health markers, such as cholesterol and blood pressure, and to prescribe drugs when these are elevated. It's a highly profitable system.

Insulin doesn't fit this model. If a patient with elevated insulin is not prediabetic or diabetic, there is no drug for this situation. Today's healthcare system doesn't allow time for doctors to help patients make the right changes. And insurance plans don't cover such services, except in those who seriously ill (and then the recommendations are not optimal). This simply doesn't make sense.

**IN THE NEXT ISSUE:  
Exercise Myths and Facts**



## How Insulin Works

As we digest food, sugars and starches are converted into blood sugar. Then, insulin is released by the pancreas to enable the blood sugar to be absorbed and used throughout your body.

In one sense, insulin works somewhat like a dispatcher, directing where the fuel goes and how it's used. As blood circulates after we've eaten, it delivers blood sugar to various cells. But the cells don't

automatically absorb the blood sugar; there's an intermediate step performed by insulin.

The cells have receptors — which work like doors — but they don't open by themselves. Insulin works like a key that unlocks those doors, enabling our cells to take in and use the blood sugar to generate energy.

To maintain energy, the cells in our bodies require a stable fuel supply. Insulin performs additional functions to provide such a steady flow of energy.

Insulin signals the liver to convert some of the blood sugar into glycogen, a storage form of blood sugar. Glycogen is stored in the liver and skeletal muscles and is used as a back-up source of fuel when necessary: while we sleep, fast, or perform intense physical activity.

Any excess of blood sugar is stored in another form: body fat. More precisely, the liver converts extra blood sugar into triglycerides, a type of fat molecule.

The triglyceride molecules don't fit through the "doors" of fat cells; they are broken down into smaller

particles that enter the fat cells and are then reassembled once inside each cell.

This is pretty technical, I know, so here's a recap:

- Blood sugar is an instant source of energy after we eat.
- Glycogen is a back-up source in the liver and skeletal muscles. It's easily accessible when needed.
- Fat cells contain additional back-up fuel, in the form of triglycerides. The fuel in this reservoir is harder to access but can provide more fuel for a longer period.

To give you an idea of how these sources work together, I like to compare them to different types of fuel on a fire:

- The blood sugar after eating would be like newspaper, burning very quickly.
- The glycogen from the liver and muscles would be like twigs that burn easily but last longer than newspaper.

### Dr. Marlene's NATURAL HEALTH CONNECTIONS

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## How Type 2 Diabetes Is Misunderstood

If I weren't a trained health professional, I would think of type 2 diabetes as a blood-sugar disease: Someone has high blood sugar and is diagnosed with the condition. But blood sugar doesn't rise to unhealthy levels for no reason.

Type 2 diabetes is a hormonal disease — it's triggered by a malfunction of the hormone insulin. Type 1 diabetes, where the pancreas produces little or no insulin, is recognized and treated as a hormonal disease. Other hormonal diseases — an underactive or overac-

tive thyroid, for example — are clearly defined as a hormonal problem, and the hormone is measured and addressed.

Strangely enough, type 2 diabetes is not viewed this way, and insulin malfunction goes undetected for many years before the disease is diagnosed. This leads to much unnecessary suffering from diabetes, heart disease, obesity, and other ills.



- The triglycerides from body fat would be like logs that take some time to catch fire. But once they start to burn, they keep a steady fire going much longer.

A note about triglycerides: These fat molecules also circulate in the blood. They are tested at the same time as cholesterol; together, these tests are called a “lipid panel.”

While it’s normal for some triglycerides to be in the blood, high levels are unhealthy. The same steps that help to bring insulin to healthy levels will also improve triglyceride levels.

## How Things Go Wrong

The processes I described above are a normal part of healthy function. Things start to go wrong when insulin rises too high.

After we eat, it’s normal for levels to rise and then drop to the pre-meal level within a couple of hours. How much insulin rises depends on how much blood sugar rises; the higher the levels of blood sugar, the higher the insulin.

After a low-carb meal or snack, the rises are mild, like a gentle wave. But after a meal or snack that delivers an overload of carbs, the rise is steep: a sharp spike like a tall mountain peak.

If such a high peak happens rarely, it shouldn’t cause problems. But if it’s repeated often, as is common with today’s diets, it triggers several non-optimum situations:

**After the peak:** Blood sugar levels can drop too low, making you feel tired or “hangry,” meaning hungry and irritable. Or, you might experience brain fog. This is also a time when you might crave something sweet or starchy, even

though your body doesn’t really need more fuel at that moment.

### When the pattern continues:

Frequent peaks in blood sugar and insulin mean that production of insulin is working overtime. And eventually, insulin levels will remain elevated.

Your body comes to expect an overload of carbs, which produce an excess of blood sugar, so it chronically maintains a higher level of insulin. This damages blood vessels and organs and increases risks for all of today’s common chronic diseases, including heart disease, diabetes, dementia, and others.

Rather than solving the carb problem, high insulin leads to a worse one: insulin resistance.

**Insulin resistance:** Once insulin resistance has started to develop, cells literally begin resisting the action of insulin. When insulin

arrives at a cell “door,” it isn’t able to unlock it as easily as it should to let blood sugar into the cells.

Eventually, even extra insulin can’t get cells to absorb all the blood sugar. That’s when levels of blood sugar begin to be chronically elevated. Along the way, insulin resistance is causing damage to arteries and organs.

## Insulin and Weight Gain

Insulin is designed to protect the body from starvation. But when there’s too much of it, insulin promotes fat storage and suppresses the burning of body fat for energy. Elevated insulin also increases levels of estrogen in both women and men, and estrogen is designed to maintain fat stores.

Bottom line, too much insulin leads to weight gain and makes it difficult, if not impossible, to lose weight. When insulin levels drop, weight loss becomes possible.

## About Dr. Marlene

Dr. Marlene Merritt’s passion for natural medicine is fueled by her drive to help others and by her own experience of overcoming a debilitating heart condition, diagnosed at the age of 20. A competitive cyclist at the time, she suddenly began experiencing severe chest pains. Forced to quit the sport, she suffered from fatigue and chest pain for another 15 years, despite doing everything that conventional, Western medical doctors told her to do.

And then, the tide turned. A physician trained in naturopathic healing recommended a whole-food vitamin E supplement. A week after starting the supplement regimen, her energy began to return, and the pain began to disappear.

Dr. Marlene is a Doctor of Oriental Medicine, has a Master’s degree and is board-certified in Nutrition, and is board-certified in Functional Medicine. She is certified in the Bredesen MEND Protocol™, a groundbreaking method of addressing Alzheimer’s disease, and is a Proficiency Diplomate in the Shoemaker CIRS protocol for treatment of mold-related illness. She is the author of *Smart Blood Sugar* and *The Blood Pressure Solution*, and co-author of *The Perfect Sleep Solution*. After 31 years in private clinical practice, she now focuses on writing and educating health professionals and consumers to reach more people and positively impact their health.



Studies have observed weight gain when type 2 diabetics begin injecting insulin. One study showed an average gain of 6 to 20 pounds in the first year of insulin therapy,<sup>1</sup> and it can be greater.

Although thin people can develop type 2 diabetes, most who do are overweight or obese. When they are prescribed insulin injections, their weight problem intensifies, and the insulin shots don't always succeed in lowering blood sugar enough. So, the dose is increased.

This happens because the cells are insulin-resistant, and just flooding them with more insulin doesn't solve the resistance problem. In addition, the diet typically recommended to people using insulin shots is far too high in carbs, and that worsens the situation.

Among people who are not diabetics, high insulin also promotes weight gain, which, in turn, multiplies risk for diabetes and the internal damage associated with it.

For 15 years, one European study followed more than 10,000 people who were not diabetic at the outset.

It found that people who had some genetic risk for type 2 diabetes were six times more likely to develop the disease if they were obese, compared to those with the same genetic risk and a normal weight.<sup>2</sup>

In the same study, people who did not have a genetic risk for diabetes were eight times more likely to develop the disease if they were obese, compared to those with a similar genetic risk and a normal weight.

### Insulin and Type 2 Diabetes

To recap the pattern of insulin malfunction: First, insulin rises. Then, after a while, insulin resistance develops, where cells do not respond to insulin as they should, and insulin levels rise even more. Eventually, even increased levels of insulin can't overcome the insulin resistance, and blood sugar rises.

The initial rise in blood sugar — a fasting blood sugar over 100 mg/dL but not above 120 mg/dL — is diagnosed as prediabetes, indicating

higher risk for diabetes. Diabetes is diagnosed when blood sugar is above 120 mg/dL.

According to the CDC, one in three Americans has prediabetes; after age 65, nearly half do. But only two in ten know that they have the condition.

In the case of actual diabetes, more than 11 percent have the disease; up to 95 percent of those cases are type 2. Among these, one in five people are unaware of their condition. Yet, they are facing high risk for complications, such as peripheral neuropathy, vision deterioration, heart disease, kidney disease, and earlier death.

For decades, there has been evidence that elevated insulin and insulin resistance occur up to 20 years before type 2 diabetes develops.<sup>3,4</sup> Performing only blood-sugar tests can create a false sense of security because they will not reveal whether insulin is elevated, or its dangers.

### Insulin and Other Health Risks

Elevated insulin increases risks for heart disease in more ways than one. It prevents sodium from being excreted as it normally would be, and higher sodium levels raise blood pressure.


Elevated insulin also turns LDL ("bad") cholesterol into a deadly form. In an earlier newsletter issue about cholesterol, listed in the chart on the left, I described how not all LDL is harmful. LDL particles can be large and buoyant, and these are not harmful. But they can also be small and dense, and these LDL particles lead to arterial plaque that can block arteries or rupture and create a deadly clot.

## Related to This Topic

These are some earlier issues of this newsletter that address related topics:

Related Topic	Volume	Issue	Title
A Healthy Diet	7	1	My Low-Carb Diet — Fine-Tuned
Healthy Fats	4	11	Healthy Fats: Deadly Myths and Life-Saving Facts
Healthy Meat	3	2	The Diabetic's Guide to Eating Meat
Healthy Carbs	3	6	The Diabetic's Guide to Eating Carbs
Blood Pressure	6	5	Blood Pressure Control: What Matters Most
Cholesterol	8	7	Big Cholesterol Myths Debunked
Diabetes	5	12	Top 20 Diabetes Questions Answered

Access these online by logging in to [www.NaturalHealthConnections.com](http://www.NaturalHealthConnections.com).



It's well established that diabetes increases risk of heart disease. But evidence also shows that elevated insulin promotes atherosclerosis in people who don't have diabetes.<sup>5</sup>

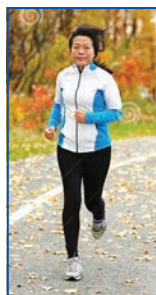
Insulin resistance also correlates to reduced cognitive function and higher risk for Alzheimer's and other types of dementia.<sup>6</sup>

Other conditions associated with elevated insulin and insulin resistance include fatty liver disease, faster aging, premature death, polycystic ovarian syndrome, and liver, colorectal, pancreatic, and breast cancers.<sup>7</sup>

Two key factors reverse elevated insulin and override insulin resistance: the right diet and exercise. And both are essential.

## The Right Exercise

Exercise increases sensitivity to insulin — this reverses insulin resistance. In fact, exercise is the only thing that can override insulin resistance.<sup>8</sup>



Exercise also uses up glycogen stored in muscles. This way, more blood sugar can be stored again (as glycogen) in the muscles, instead of continuing to stay in the blood, where it's harmful.

However, it's vital to do the right kind of exercise. It has to be movement that makes the muscles work hard enough to use stored glycogen.

If you go for a leisurely walk, your muscles aren't working very hard, so they don't need to dip into the reservoir of glycogen for energy. But if you start walking quickly upstairs or up a hill, or you run or move in some other way that speeds up your breathing, you start burning the glycogen that's

stored in your muscles. Weight training also burns stored glycogen — if you challenge muscles enough. Making the muscles work harder is what triggers the usage of glycogen. You can do this with weights or resistance bands, but it needs to be done correctly.

I often see people in the gym lifting light weights. They are capable of lifting heavier ones, but they're not trained how to do so. If you are not familiar with how to use weight equipment safely while pushing yourself, it's best to find someone knowledgeable to coach you at the start. And honestly, it's a lot easier with weight machines in a gym, because they are designed to make you work targeted muscles.

## The Right Diet

There is plenty of evidence, in addition to my own years of experience with patients, that the right diet for healthy levels of insulin and blood sugar is one that restricts carbohydrates.<sup>9</sup> But diets that are "low-carb" are often too difficult to maintain and may contain unhealthy processed foods with various additives.



The approach I recommend limits only those carbs that are the chief sources of carb overload — not others. For example, every vegetable contains some carbs, but I've yet to meet anyone who overloaded on carbs by eating too many carrots.

On the other hand, potatoes and corn are major sources of excess carbs. They're in so many products, from fries to all sorts of chips and other snacks made from either

vegetable. So, they need to be limited but not necessarily excluded.

Foods made with grains also contribute to an excess of carbs. Think pizza crusts, big burger and sandwich buns, giant muffins, and endless versions of cereals, breakfast bars, cookies, cakes, and grain-based snacks.

One word of warning: Many people assume that "low carb" means high protein. It doesn't. If you eat too much protein, it can be broken down into blood sugar and contribute to elevated insulin. Earlier newsletter issues, listed on page 4, explain my diet in detail. I encourage you to check them out.

## A Final Word

In today's sedentary and carb-overloaded environment, it takes a bit of planning and diligence to eat a healthy, low-carb diet and follow an effective exercise program. But once you've worked out how to make the changes in a way that fits your taste and lifestyle, it becomes a new normal. And the rewards are more than worth the effort.

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# Vitamin C: Essential Facts



Does the mention of vitamin C make you think of oranges? Or of supplements with bright pictures of oranges on the package for times you have a cold? These are popular associations with the vitamin, but they don't represent its true value or best sources.

Don't get me wrong: I'm not arguing with the fact that oranges are a good source of vitamin C. They are, but I don't recommend relying on them for the nutrient.

One orange contains between 70 and 90 milligrams of the vitamin. Given that the daily recommended amount is 90 milligrams for men and 75 milligrams for women, it would seem that an orange per day might fit the bill. But an orange also contains 18 grams of carbs. One cup of orange juice (8 ounces) contains 124 milligrams of vitamin C — and 26 grams of carbs.

I often get asked why I recommend counting and limiting carbs from fruit. Fruit naturally contains sugar, and the sugar is more concentrated in fruit juice. The fact that this sugar comes from a natural source doesn't change how it works in your body. It triggers harmful spikes in insulin and blood sugar, just like cake or ice cream. The large quantity of sugar causes the problem, regardless of its source.

Of course, fruit also provides beneficial nutrients. But non-starchy vegetables also provide vitamin C and many other powerful nutrients without the sugar. I encourage you to take a look at the chart on the right. You can use the list as a reminder to vary your vegetables and perhaps try some new ones.

## What Vitamin C Does

Vitamin C is essential for multiple functions, such as a healthy immune system that helps us resist infections.<sup>1</sup> It protects against pathogens in two ways: by enhancing resistance on a cellular level and by strengthening “epithelial barriers.”

These barriers are the skin, respiratory tract, and digestive tract. They're technically described as “epithelial” because they are all made of epithelial cells, meaning cells that have tight junctions to prevent pathogens crossing the barrier.

The skin protects against pathogens entering from the outside. The respiratory and digestive tracts protect against pathogens that we inhale, eat, or drink from

penetrating the barriers to invade the rest of the body.

On a cellular level, vitamin C helps eliminate bacteria, enhances levels of antibodies that fight infection, and aids in controlling inflammation and histamine levels.

Vitamin C also enhances the production and maintenance of collagen, which acts like a “glue” to support strong, healthy tissue. This helps to maintain the skin and other epithelial barriers and promotes

## Vegetable Sources of Vitamin C

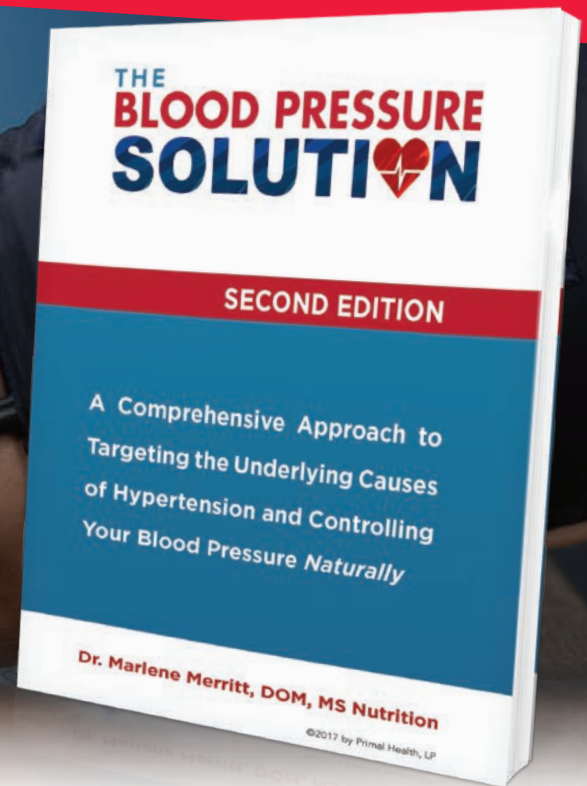
These are good, low-carb food sources of vitamin C:

Food	Serving Size	Vitamin C Content (mg)
Bell Peppers	1 cup	117
Broccoli	1 cup	101
Brussels Sprouts	1 cup	97
Cauliflower	1 cup	55
Kale	1 cup	53
Cabbage	1 cup	52
Bok Choy	1 cup	44
Turnip Greens	1 cup	39
Beet Greens	1 cup	36
Mustard Greens	1 cup	35
Collard Greens	1 cup	35
Swiss Chard	1 cup	32
Tomatoes	1 cup	25
Spinach	1 cup	18
Asparagus	1 cup	14
Sea Vegetables	1 tablespoon	12
Green Beans	1 cup	12
Fennel	1 cup	10
Carrots	1 cup	7
Parsley	1 tablespoon	5
Thyme	1 tablespoon	4

Although taking some vitamin C in a multivitamin is good for nutritional insurance, it doesn't replace the need to eat a variety of vegetables.

*(Continued on page 8)*

# Get Dr. Marlene's Best-Selling Book... **Blood Pressure Solution!**



**Dr. Marlene has been sounding the alarm about dangerous blood pressure drugs for the last 15 years — and offering a safe, natural alternative.**

She has worked with hundreds of patients who were suffering high blood pressure—many were taking two, three, even four medications and going through awful side effects...

Just like Kathleen Kelly, whose ankles swelled up from the prescription blood pressure drugs she was taking. She also suffered an awful cough from using Lisinopril. By the time she read Dr. Marlene's best-selling book, **Blood Pressure Solution**, Kathleen's doctor had her on three blood pressure medicines combined—and her blood pressure was still high!

"My patients are always surprised to see how easy it is to use my natural Blood Pressure Solution," said Dr. Marlene. "The diet is not restrictive. Many of the foods you thought were taboo are perfectly ok—like steak is ok, butter is ok, natural sea salt is ok, even several carb foods are good. Part of the solution is to get good fats into your diet."

After reading **Blood Pressure Solution**, Kathleen made simple lifestyle changes found in the book and began to see immediate results...

**“***My blood pressure came down right away...I just feel great. I'm ecstatic. I go around telling everybody I found the fountain of youth. I have much more energy now. My concentration and focus are better. I can walk around my block without getting winded anymore. I am 100% off my medication.***”**

Did you see that? Kathleen reports she is 100% off her medications. And so can you!

Yes! You too can be off these anti-hypertensive drugs... maintain blood pressure in the normal range... and feel good again!

Dr. Marlene Merritt's **Blood Pressure Solution** is working for people all across America. And she believes it can work for you, too. Here's how...

Dr. Marlene originally developed her unique solution for her patients at the Merritt Wellness Center in Austin, Texas. And after seeing just how successful it was for people in her own community—she decided to put her entire natural solution, with step-by-step guidance, into an easy-to-use book called, **Blood Pressure Solution**.

This is a comprehensive approach to targeting the underlying causes of hypertension and controlling your blood pressure naturally.

Dr. Marlene's book has been sweeping the country with over 330,000 copies sold in the U.S., and even 32,000 copies shipped overseas.

So, are you ready to bring your blood pressure back to the normal range? Gain more energy? Drop a few unwanted pounds? And feel better than you have in years, just as Kathleen did?

Great! Get your copy of Dr. Marlene's best-selling book, **Blood Pressure Solution** today! Go to the website listed below, and you'll see a complete review of the book, watch videos from people just like Kathleen and order your copy of **Blood Pressure Solution**!

**Get Your Copy Today! Go To:**  
**[www.PrimalLabs.com/BPS](http://www.PrimalLabs.com/BPS)**

(Continued from page 6)

healthy gums, blood vessels, tendons, ligaments, teeth, bones, and muscles.

A study in the United Kingdom looked at vitamin C levels and muscle mass in more than 13,000 middle-aged and older people. Researchers found that those with the highest blood levels of vitamin C had less age-related muscle loss, which is vital for healthy, independent aging.<sup>2</sup>

As an antioxidant, vitamin C neutralizes free radicals, which are both byproducts of our ongoing energy production and harmful molecules in air pollutants. Vitamin C is a nutrient that can help protect against harm from pollutants.<sup>3</sup>

## How to Benefit

I've seen many people take huge doses of vitamin C in supplements, but I don't recommend this.

When vitamin C was identified and isolated by Hungarian scientist Albert Szent-Györgyi in 1937, he also found that isolated vitamin C does not work the same as vitamin C in food. While accepting the Nobel Prize in Physiology or Medicine for his discovery, he told a story about a friend who had a deadly bleeding disorder. Isolated vitamin C did not help, but eating whole Hungarian peppers, from which he had extracted vitamin C, relieved the bleeding. (Hungarian peppers are similar to our sweet red peppers.)

The difference in effectiveness was attributed to flavonoids — additional nutrients in the peppers that are not present in isolated vitamin C. When we consume vitamin C in foods, we also consume flavonoids, a family of nutrients that work synergistically with the vitamin.

There are thousands of flavonoids in foods.<sup>4</sup> As an example, a study of one flavonoid — rutin — found that it helps protect against bacterial and viral infections, allergies, diabetes, high blood pressure, high cholesterol, and cancer.<sup>5</sup> But this doesn't mean you have to go searching for individual flavonoids.

In Australia, researchers recently tracked flavonoid intake and health among more than 120,000 people for over a decade. They found that the greatest benefits came from consuming the widest variety of flavonoids from foods. This helped prevent type 2 diabetes, heart disease, cancer, and neurological diseases.<sup>6</sup>

Different flavonoids work in different ways. For example, some help lower blood pressure and others

reduce harmful inflammation. Colors of fruits and vegetables stem from different flavonoids, so eating a variety of colors will provide a variety of flavonoids, as well as vitamin C.

For nutritional insurance, you can take a multivitamin with 100% of the Daily Value (%DV) of vitamin C, preferably with flavonoids. Most important, eat a variety of vegetables. Aim for a combined total of 250 mg of vitamin C daily from all sources. Higher doses of vitamin C can aid recovery from illness.

## A Brief History of Severe Vitamin C Deficiency

Scurvy is a painful and deadly disease caused by severe deficiency of vitamin C. Symptoms include extreme fatigue and weakness, spongy gums, loose teeth, swollen arms and legs, easy skin bruising, and deadly internal hemorrhaging. A lack of vitamin C leads to a breakdown of collagen, a major factor in this extreme deterioration of connective tissues throughout the body.



For centuries, sailors on long voyages were plagued by the disease because there were no food sources of vitamin C on the ships. These are a few historical highlights:

Scurvy was first recorded in Egyptian medical scrolls 3,500 years ago.

Between the 16<sup>th</sup> and 18<sup>th</sup> centuries, scurvy killed an estimated two million or more sailors — more than storms, shipwrecks, combat, and all other diseases combined.

In 1747, a British Royal Navy surgeon discovered that citrus fruits could prevent and cure the disease. Once ships started carrying citrus fruit, scurvy no longer struck sailors. But it took nearly 200 more years to identify the component in citrus fruit that made the difference.

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# TAKE COLLAGEN PEPTIDES FOR Smooth and Comfortable Aging



When you're young, you have collagen galore. You can run, jump and bend with ease. But as you age you steadily lose it. And then you begin to have problems.

Starting at age 25, you lose 1% to 2% of your collagen each year. And at the same time your body's natural collagen production steadily declines.

By the time you're 55 or 60, your levels are significantly reduced, and you're making very little new collagen.

This shortfall sets the stage for the ailments we associate with aging—achy joints, weak bones and muscles, stiff arteries, and wrinkled and sagging skin.

Low levels of collagen can also cause leaky gut and digestive issues. That's because the lining of your intestines rely on collagen for structural integrity. The same is true for your arteries.

## Why you need more collagen

Collagen is essential to your mobility, your muscle strength, and your joint comfort. It's also the key to smooth and flexible arteries. Youthful looking skin. Stronger hair and nails. And a healthy digestive system.

In fact, it makes up 75% of your skin. 80% of your ligaments. 90% of your tendons. 67% of your cartilage. And 30% of your bones.

Think of it as the glue that holds everything together. If you don't have enough, the whole system starts to break down.

Fortunately, there's an easy way to get the replacement collagen you need every day.

## Introducing Primal Labs *Collagen Peptides*.

This high-collagen nutritional supplement is unflavored and mixes easily in water, tea, juice, soup and, of course, smoothies.

Each serving of **Collagen Peptides**...

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Primal Labs **Collagen Peptides** is ideal for replacing the collagen you've lost. **And right now, you can try our superior product at 20% off with a 100% money back guarantee.**

Please try Primal Labs **Collagen Peptides** risk-free for 60 days and see for yourself just how great the benefits are!

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# Important: Your Waist-to-Height Ratio

One of the benchmarks you can use to see how healthy you are is the waist-to-height ratio. It's a good predictor of risk for type 2 diabetes, heart disease, and other health issues related to being overweight.

The ratio is a better assessment of health risk than body weight because measuring only weight doesn't take into account whether an individual has a lot of body fat — which is unhealthy — or weighs more because they have a lot of muscle and are healthy.

Abdominal fat, especially fat you can't pinch because it lies deep under the skin, is also a known risk factor for type 2 diabetes, heart disease, and other ills. Also, someone can be “skinny fat,” with a normal weight and a visible belly.

This has been known for some years but a new study found another health risk that the waist-to-height ratio might predict: heart failure.

## The New Study

In Sweden, researchers measured waist-to-height ratios of 1,792 people between the ages of 45 and 73. One third of participants had normal blood-sugar levels, one third had elevated levels but were not diabetic, and one third had diabetes.<sup>1</sup>

Waist-to-height ratios of those in the study, who all had some degree of abdominal fat, were at least a bit above the healthy level of 0.5; they ranged from 0.52 to 0.61.

Researchers tracked these people for more than 12 years and found that those with the highest ratio had nearly three times the risk of heart failure as those with lower ratios. The study also showed that even slight differences in the ratio had a significant impact on risk.

The most common cause of heart failure is accumu-

lation of plaque in arteries, which reduces blood flow and can cause a heart attack. Other causes include high blood pressure, irregular heart rhythm, heart valve disease, and infections that damage the heart.

High insulin and blood sugar trigger abdominal fat as well as overall weight gain. If your waist-to-height ratio is above a healthy range, the two main things that can change it are following a low-carb diet of whole foods and getting regular exercise. These will always improve the situation, no matter where you start.

One important finding to keep in mind from the recent study: Small differences in waist-to-height ratio have a significant impact on health, so any improvement is well worth the effort.

## How To Calculate Your Waist-to-Height Ratio

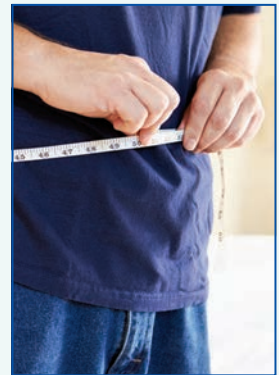
All you need is a tape measure. Here's how to find your ratio:

- Measure your height and waist in inches.
- Divide your waist by your height.

A healthy ratio is 0.50 or lower. Here are some examples:

Waist: 35 inches  
Height: 70 inches  
**Divide 35 by 70 = 0.50.**  
**This is a healthy ratio.**

Waist 36 inches  
Height: 64 inches  
**Divide 36 by 64 = 0.56.**  
**This is not a healthy ratio.**



# Hearing Aids Reduce Dementia Risk

Using a hearing aid has lowered risk of dementia during the next 20 years by 61 percent among people who were diagnosed with hearing loss before the age of 70.<sup>2</sup> But only 17 percent of American adults with

moderate to severe hearing loss use hearing aids, according to a recent study led by Boston University. Not using a hearing aid when needed leads to loss of brain cells.

Prices for hearing aids have

dropped since they became available over-the-counter, and hearing tests are available online. In addition, insurance sometimes covers professional hearing tests, even if it doesn't cover the cost of a hearing aid.

1 Jujic, A., et al. "Waist-to-height ratio predicts heart failure incidence." Presented at Heart Failure 2025, a scientific congress of the European Society of Cardiology, May 18, 2025. 2 Francis, L., et al. "Self-Reported Hearing Aid Use and Risk of Incident Dementia." JAMA Neurol. 2025 Aug 18. doi: 10.1001/jamaneurol.2025.2713. Online ahead of print.

# Are Social Media Ads Tricking You?

When you watch television, the ads are obvious. But when scrolling through social



media posts, it can be difficult to identify the ads because they blend in with other content. That's the conclusion of a European study that tested the ability to differentiate between the two in a group of 152 people who routinely used Instagram.

When study participants realized a post was really an ad, they were less likely to continue looking at it. But many were shocked to learn how often they mistook ads for

regular posts, and felt tricked.<sup>1</sup>

In the United States and other countries, regulatory bodies require disclosure if a post is sponsored or if the creator received a financial incentive to post about a product or service. But the disclosures are easy to overlook.

## Identifying Ads

“Sponsored” may be written in small type. An influencer may have received a free product as incentive to post a review, and even though they may mention that fact, it's easy to miss.

In the study, participants concluded that posts are more likely

to be ads when their design is exceptionally polished — professionally produced — or have a “shop now” button.

On posts by companies, brand names or logos are usually visible. But on posts by influencers, sponsorship may be disclosed only in a hashtag or a “read more” section and are harder to identify.

The next time you're scrolling through posts that interest you, it's good to be mindful of which ones are regular posts by people sharing information and which are paid for by companies trying to sell you a product or service.

# Best Exercise To Beat Insomnia

A recent study broke new ground by identifying the best types of exercise to reduce insomnia. Researchers reviewed earlier trials and compared how different types of exercise affect sleep.<sup>2</sup>

Tai Chi was found to be especially beneficial because it produces improvements both in the short and long term. In Tai Chi, the combination of meditative movement, breath control, and physical relaxation has a calming effect on the nervous system, reduces “mental chatter” and anxiety, and lowers chronic inflammation. The practice also helps to reset circadian rhythms and improves memory and overall mental function.

Yoga and walking or jogging produce similar sleep benefits. In the studies, these exercise programs were followed for between 4 and 26 weeks.

Other types of aerobic movement, weight training, or various combinations of weight training and aerobic exercise did not produce the same types of sleep-related benefits.

Keep in mind that numbers from studies are averages. Each of us is unique, and what's most

important is to do what works for you. That said, if you need to improve your sleep, the types of exercise identified in this study are good ones to try.



## Sleep Changes

This is how sleep changed, on average, with the top 3 types of exercise for better sleep:

Time	Tai Chi	Yoga	Walking or Jogging
Time to fall asleep decreased by:	25 minutes	30 minutes	25 minutes
Time to get back to sleep after waking up during the night reduced by:	Over 30 minutes	55 minutes	Over 30 minutes
Total time spent sleeping during the night increased by:	50 minutes	110 minutes	50 minutes

1 Hübner, M., et al. “Blending in or standing out? The disclosure dilemma of ad cues of social media native advertising.” *Front. Psychol.* 2025 Aug 12. DOI 10.3389/fpsyg.2025.1636910.  
2 Bu, Z.-J., et al. “Effects of various exercise interventions in insomnia patients: a systematic review and network meta-analysis.” *BMJ Evid Based Med.* 2025 Jul 15;bmjebm-2024-113512. doi: 10.1136/bmjebm-2024-113512. Online ahead of print.

# Q&A

**Q:** I've read that lectins harm your digestive system. What are they, and should I avoid them?

— *Roberta P.*

**A:** Lectins are proteins found in many foods and aren't always problematic. I've found that gluten intolerance and other food sensitivities are more common. Stress and alcohol can also trigger problems with digestion.

Lectins are concentrated in the bran and germ of grains, and in legumes. When grains are refined to make white flour and white rice, the bran and germ are removed, and most of the lectins are also deactivated in the process.

In the case of legumes, the lectins are in the skin, which you can't remove. But there is a way to avoid difficulties digesting them.

Soaking, sprouting, or fermenting both whole grains and legumes deactivates the lectins. These traditional techniques, used throughout history, continue to work well.

Soaking oats overnight is popular today. And you might remember that sourdough bread, in which the sourdough starter kicks off fermentation, became all the rage during pandemic lockdowns. For legumes, soaking them before cooking reduces lectins.

As with any food, we each have individual reactions. In addition, the quantity of any grains or legumes that we eat makes a difference in our ability to digest them.

**Q:** I liked using a vibration machine at a gym, but now I live too far away to keep going. I'm thinking of buying a similar one to use at home to improve my circulation. What do you think?

— *Len C.*

**A:** The type of vibration machine you used at a gym likely costs a few thousand dollars, so that's a big commitment. While using one is beneficial, it doesn't replace the need for a well-rounded exercise regimen.

When your body feels the vibration, muscles contract and work a bit harder, and the muscle contraction improves circulation. Balance and bone density can also improve.

Before making a big investment in any exercise equipment, I suggest taking into account that a basic exercise regimen should include aerobic movement that raises your heart rate and weight or resistance training for all the major muscle groups.

Walking is a good way to improve circulation because it works large muscles in your legs. As these muscles contract, circulation gets a boost. You can also give your heart a good workout by varying your walking pace: as fast as you can for a minute or a block, alternating with a normal pace for a few minutes or a few blocks. Aim to get yourself out of breath multiple times.

Any type of recreational sport you enjoy that gets you breathing harder, such as pickleball or tennis, is a good activity to pursue. Sports have the added benefit of involving other people, so there's a social aspect that enhances health as well.

As an alternative to a vibration

machine, I suggest trying an indoor mini-trampoline, also called a "rebounder." It costs much less than a professional-grade vibration plate and will give you an aerobic workout and improve circulation. It's also good for bone density and balance. Some mini-trampolines have a rail to hold onto.

With any type of exercise, the full benefits come from doing it consistently. If you enjoy using a specific piece of equipment at home, can afford to buy it, and feel that it will keep you motivated to stick with a regular regimen, it may be worth a significant investment.

By the way, I realize that there are cheap vibration plates — around \$100 or less. But the type of vibration is not identical to the machines found in gyms, nor are they as sturdy. So, the experience and benefits are not likely to be the same.

That said, before buying any exercise equipment, check reviews and make sure the return policy is clear and fair — just in case.

## Do you have a question for Dr. Marlene?

Send your health-related questions to [drmarlene@naturalhealthconnections.com](mailto:drmarlene@naturalhealthconnections.com). Please include your first name and the initial of your last name. Although she cannot answer each question directly, Dr. Marlene will select a few in each newsletter and will address other questions and concerns in articles in future issues. Answers are intended for educational purposes only and should not be viewed as medical advice. If you need help with your subscription or have questions about Primal Health supplements, email [support@primalhealthlp.com](mailto:support@primalhealthlp.com) or call 877-300-7849.