

Dr. Marlene's NATURAL HEALTH CONNECTIONS

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The 90-Day Program to Relieve Arthritis

How to use supplements, diet, and exercise to live pain-free without taking arthritis drugs for the rest of your life.

Osteoarthritis is the most common condition that causes disability, but shockingly, its triggers, mechanisms, and remedies are widely misunderstood. In conventional medical circles, it's considered a "wear and tear" disease, which doesn't make sense.

There are arthritis-free, active 80-year-olds who run half-marathons, but many people who retire from a desk job need a joint replaced. Where is the wear and tear in sitting at a desk? And why can the seniors keep running?

The faulty theory expects a human joint to work the same way as a tire: Once it's worn, it can't be fixed and must be replaced. But unlike tires, your joints are made of living tissue that is capable of repairing itself.

Drugs won't do it. In addition to having dangerous side effects, they accelerate damage. Even then, many of my new patients find that drugs only dull some of the pain, rather than eliminating it. But the program I'll describe alleviates symptoms *and* stimulates joint repair.

How long will it take? During the first 90 days, you can get significant relief from symptoms, and the process of ongoing damage can be stopped or slowed. In addition, repair will have begun, and you will be on your way to regaining health in your joints.

The same program works for both osteoarthritis and rheumatoid arthritis. And, it works for other joint issues, such as lingering pain from a sprained ankle or other injury that has turned into a chronic condition.

Achieving Complete Recovery

The underlying changes that lead to arthritis occur over a long period of time, rather than suddenly. Complete healing also takes time. But relief from symptoms can be experienced rapidly.

Sometimes, the solution can be a simple dietary change. One of my patients had persistent tennis elbow for years. He had seen various specialists, with no resolution. I gave

him a battery of tests that he hadn't had before and discovered that he was gluten-intolerant. Once he stopped eating gluten, his tennis elbow quickly disappeared, and he got back in the game. (Gluten isn't always an issue. See *How Gluten Can Cause More Than 30 Health Conditions* in Volume 2, Issue 3, of this newsletter.)

Not all cases resolve with one simple change, and it's impossible to predict exactly how you will react. It depends upon your overall

physical condition and the degree of damage in your joints. But my program will always produce significant improvement.

In rare instances, a specific joint can be degenerated beyond repair, when no cartilage is left to cushion bones. But most often, repair is a realistic and attainable goal.

Why Arthritis Hurts

Out-of-control inflammation is the big reason why a joint hurts. But inflammation is not always bad.

As an example of good and bad inflammation, let's take a common injury like a sprained ankle. Right after the impact, it gets swollen and inflamed — that's a good thing because it's a sign that your body is working to heal the injury.

You put ice on the ankle, keep your weight off it, and the swelling starts to go down in a few days or so. If you're in good shape, the inflammation and pain will die down and healing will continue. The ankle will take months to fully heal but meanwhile, it will feel closer and closer to normal, eventually regaining its pre-injury state.

This normal healing process can go awry if the initial inflammation doesn't calm down, as it should. And then, instead of helping your ankle to heal, it will start to cause damage in the tissues of the ankle joint, the pain will persist, and it may get worse with time.

Arthritis doesn't mean an afflicted joint was injured in a single, obvious moment, like the sprained ankle. But the process is the same: Something set off a cascade of excessive inflammation that is lingering and damaging the joint — and it hurts.

Why Drugs Aren't a Long-term Solution

Prescription and over-the-counter arthritis drugs, such as ibuprofen and Celebrex, are nonsteroidal anti-inflammatory drugs. They're usually referred to as NSAIDs — pronounced “en-saids.”

As their name conveys, NSAIDs reduce inflammation. They block specific enzymes that produce inflammatory substances. The problem is, they block them so severely that they also cause side effects, from drowsiness and fluid retention to stomach ulcers and bleeding. (See *Arthritis Drug Dangers*.) And, the drugs stop the body's own healing mechanism.

NSAIDs can be helpful in the short term — to get over the initial pain of a sprained ankle, for example. But they become dangerous when taken continually for a longer period of time. And all too often, they are taken for years.

How Arthritis Drugs Prevent Healing

The therapeutic inflammation that occurs right after you sprain an ankle is the first step in the human body's innate healing process. The next step is production of resolvins, substances that shut down the initial inflammatory reaction, relieve pain, and direct the healing process.¹ If resolvins aren't turned on, the injury-related, elevated inflammation continues and becomes chronic.

Your body makes resolvins from omega-3 fats, the healthy fats found in fish. However, NSAIDs stop resolvins from being produced, so the initial inflammatory reaction continues, damaging tissues and perpetuating pain.

Dr. Marlene's NATURAL HEALTH CONNECTIONS

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Arthritis Drug Dangers

These are some examples of over-the-counter and/or prescription nonsteroidal anti-inflammatory drugs (NSAIDs) used to treat arthritis:

- Aspirin
- Celecoxib (Celebrex)
- Diclofenac (Cambia, Cataflam, Voltaren-XR, Zipsor, Zorvolex)
- Diflunisal
- Etodolac
- Ibuprofen (Motrin, Advil)
- Indomethacin (Indocin)
- Ketoprofen
- Ketorolac
- Nabumetone
- Naproxen (Aleve, Anaprox, Naprelan, Naprosyn)
- Oxaprozin (Daypro)
- Piroxicam (Feldene)
- Salsalate
- Sulindac
- Tolmetin

How NSAIDs Work

These drugs block enzymes that produce prostaglandins, which are inflammatory compounds. Prostaglandins promote inflammation that we need for healing, but the inflammation also causes pain and fever. NSAIDs reduce pain and fever by blocking inflammation.

Why They Cause Side Effects

The inflammatory prostaglandins also have protective effects. They support healthy blood clotting and protect the lining of the stomach from acid. When NSAIDs block production of prostaglandins, they also inhibit their protective functions and cause adverse effects.

NSAID Dangers

A British study looked at risks of prescription NSAIDs in older people, typically over the age of 65. It found that from first use, the drugs increase risk for stomach bleeding, heart attack, and stroke, and have been responsible for about one in three hospital admissions for adverse drug events. With ongoing use, the study also found:²

- Taking NSAIDs increases risk of a stomach or intestinal bleed 3–4 times, depending upon the drug.
- When NSAIDs are combined with corticosteroids, bleeding risk increases 12-fold.
- When combined with spironolactone, a diuretic, bleeding risk increases 11-fold.
- When combined with antidepressants in the Prozac class, bleeding risk increases 7-fold.
- Among people taking NSAIDs, more than 1 in 5 gastrointestinal bleeds are fatal.

- NSAIDs double the risk of hospitalization for heart failure.
- The drugs more than double the risk of kidney injury in the next 30 days.
- Among adults with allergies, between 5 and 10 percent experience significant deterioration after taking NSAIDs.

Other side effects can include:

- Constipation
- Decreased appetite
- Diarrhea
- Dizziness
- Drowsiness
- Fluid retention
- Headache
- Higher levels of blood sugar among diabetics
- Increased blood pressure
- Kidney failure
- Liver failure
- Nausea
- Prolonged bleeding after injury or surgery
- Rash
- Vomiting

Acetaminophen: A Different Type of Drug

The generic ingredient in Tylenol, acetaminophen is not an anti-inflammatory drug. It doesn't reduce swelling of a joint. How it works, exactly, is not known, but it raises your pain threshold so that you don't feel pain as much. It reduces fever by affecting the part of the brain that regulates temperature.

Acetaminophen is recognized for being toxic to the liver. Just one dose above the daily maximum of 4 grams can cause dangerous liver toxicity and can be deadly.

- Acetaminophen causes more than half of all cases of acute liver failure in the United States.
- Only 36 percent of adults with acetaminophen-induced liver failure survive without a liver transplant.³

It shouldn't be taken for more than ten days without medical direction and supervision. However, many people do take it on an ongoing basis. Other side effects can include skin reactions, headaches, and kidney damage.

Drug Dangers Revealed after FDA Approval

We expect drugs to be safe once they receive FDA approval, but that doesn't always turn out to be the case. Some popular prescription NSAIDs, such as Vioxx and Bextra, were designed to reduce risk of stomach bleeding. However, they were taken off the market more than a decade ago, after data emerged that they increased risks for heart attacks and strokes.

The FDA then required that all NSAIDs carry a warning about these increased risks. Celebrex, which works in a similar way to Vioxx and Bextra, remained on the market.

When NSAIDs are continually taken for arthritis, they are suppressing the ability of your body to make resolvins. Yet, these are the very substances your body needs to calm the inflammation and pain and help joints to heal.

Did You Know?

The amount of pain experienced with arthritis is not directly linked to the amount of damage in joints, but to the amount of inflammation.⁴

How to Turn on Your Internal Healing System

You can't take resolvins in a pill, but you can take things to restore your own ability to produce them. Fish oil is the richest source of omega-3 fats that are the building blocks of resolvins, but it won't work if you're taking NSAIDs.

If you take NSAIDs, the first step is to stop, and start taking about 4 grams of fish oil daily. Occasionally, the drugs can cause a rebound effect, where pain is worse than it used to be. If you can get through the first few days without the drugs, it will get easier.

For an extra boost to your own resolvins production, take aspirin with fish oil.⁵ I suggest taking a baby aspirin (81 mg) daily. Studies have found that this combination increases resolvins production more than fish oil alone.

Take fish oil daily with some food, and then take the aspirin. Do this for 90 days and then continue only the fish oil. This should restore your internal production of resolvins. If you don't tolerate aspirin well or prefer not to take it, just take the fish oil, which has

been shown to provide relief from arthritis on its own.

If you take medications to thin blood, you will need to work with your doctor, as both aspirin and fish oil also thin blood. It doesn't mean you can't do this program, just that it's important that your doctor knows what you're taking and can adjust the dosage of blood thinners as needed.

The Unique Quality of Aspirin

You might be wondering why I'm recommending aspirin, which is an NSAID. Surprisingly, aspirin with fish oil has the unique quality of enhancing production of resolvins rather than suppressing it. The reason why isn't clear, but it's a helpful mechanism that's been validated by several groups of researchers, from Harvard and other universities.

Does this mean that aspirin has no risks? No. And I'm not saying that everyone should take aspirin in this case, but it's an option. A baby aspirin is the lowest dose, and you won't be taking it forever — just long enough to reboot your own resolvins system.

You can even take the baby aspirin every second day. And as I said, you can take only the fish oil if you'd rather not take aspirin.

The Bigger Picture

Resolvins are powerful natural pain relievers and healing substances, but the resolvins boost I just described is only part of my arthritis program. I've been using a sprained ankle to illustrate how inflammation can get turned on, but an ankle sprain isn't what triggers most cases of arthritis.

Many things in your life can generate and perpetuate the inflammation that leads to all forms of the disease. To heal, you will need to address those that are applicable to you.

As you might expect, the food you eat can either decrease or increase inflammation, as can too much or too little exercise. If you're overweight, there's constant, extra stress on your joints. And fat, especially around the abdomen, generates chronic inflammation.

Diabetes makes arthritis more severe and is also largely influenced by your diet and exercise habits. Food intolerances and low-grade infections — inflamed gums, a decayed tooth, or a urinary tract infection — can also contribute to inflammation and need to be treated.

Adequate sleep is also essential for your body to produce normal, healthy levels of growth hormone. It will help to preserve and repair the cartilage that cushions your joints.

You can't address all these things at once, but if you take it step by step, you can end up with much healthier joints. There are also herbs and other supplements that can help, in addition to fish oil. But if you rely on these without changing inflammation-promoting habits, the supplements will be fighting an uphill battle.

An Anti-Arthritis Diet

An anti-arthritis diet is anti-inflammatory, and it's different from the way most people eat in a few basic ways. It consists of fresh, rather than packaged foods; it's low in sugar and starchy carbs; and

it contains healthy fats that calm inflammation, rather than refined ones that promote it.

Most of the oils in packaged foods and on supermarket shelves promote inflammation (see *Which Fats to Eat or Avoid*). Switching to those that are anti-inflammatory will help calm excess inflammation and heal arthritis.

Sugar and starch raise blood sugar and insulin. When insulin levels are high, the hormone promotes inflammation that underlies arthritis. It's the same mechanism that leads to diabetes, a disease that worsens arthritis. For a simple way to reduce carbs to healthy levels, see *The Guide to Healthy Eating* in Volume 1, Issue 8, of this newsletter.

If you strive to replace packaged foods with freshly prepared ones and use my guide, you'll get onto the right path. Sugar, starch, and unhealthy oils are overabundant in our food supply, so it takes a bit of planning to make changes. But it's quite realistic and will help to heal your joints.

How Exercise Fights Arthritis

If you don't use a muscle, it loses strength and shrinks. This is a major reason why people become frail late in life. If you work a muscle enough, to a point where it's slightly injured from the stress, it will repair itself and get stronger. This is how effective exercise builds and strengthens muscles, at any age.

Joints follow a similar pattern, although they aren't made of muscles. Joints connect bones, with cartilage providing cushioning on the end of each bone. The cartilage

is wrapped in a membrane — the synovial membrane — and there's a cavity between the sheaths of cartilage that is filled with synovial fluid, which lubricates the joint.

In arthritis, there is inflammation and loss of cartilage. This reduces the amount of cushioning between bones, and eventually the bones can literally rub against one another. In rheumatoid arthritis, the immune system attacks joints, as though they were invaders. In addition to degrading cartilage, inflammation also causes a thickening of the synovial membrane, which makes the joint stiff and can lead to it becoming deformed.

While too much inflammation in a joint causes pain and damage, an optimum amount is necessary to stimulate repair and keep the joint strong and flexible. When exercise creates the right amount of stress, it produces enough inflammation to stimulate repair. Without exercise, the repair process isn't initiated,

and the joint deteriorates, much like muscles in a frail person. This is why sedentary people can get osteoarthritis, the so-called "wear and tear" disease.

The right amount and intensity of exercise depends upon the individual, but it should involve different types of movement. For some people, walking a block takes significant effort at first, while others can go several miles with ease. Resistance exercises can be done using your body weight, resistance bands, or weights. Stretching is also beneficial. If you suffer from chronic pain, exercise in a pool is a good place to start.

Herbs that Provide Relief

Throughout history, herbs have been used medicinally and more recently, many have been validated by studies. Herbs can be anti-inflammatory, much like drugs, but they work in a gentler way and don't cause the same side effects.

About Dr. Marlene

Dr. Marlene Merritt's passion for natural medicine is fueled by her drive to help others, and her own experience of overcoming a debilitating heart condition, diagnosed at the age of 20. A competitive cross-country cyclist at the time, she suddenly began experiencing severe chest pains. Forced to quit the sport, she suffered from extreme fatigue and constant 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 in Nutrition, and is an Applied Clinical Nutritionist. She is Board Certified in Bariatric Counseling, and certified in the Bredesen MEND Protocol,TM a groundbreaking method of reversing Alzheimer's disease. She sees patients at the Merritt Wellness Centers in Austin, Texas, and Santa Fe, New Mexico, trains health practitioners nationwide, and is the author of *Smart Blood Sugar* and *The Blood Pressure Solution*.



A drug uses a synthesized substance to force a dramatic change in a specific internal process in the human body. For example, NSAIDs almost completely block specific enzymes that produce inflammation while the anti-inflammatory action of an herb is much subtler.

Which Fats to Eat or Avoid

All the fats in the first list are found in packaged and fast foods, and all except cottonseed oil are also on supermarket shelves. Some are probably in your kitchen.

We've been told for years that these are healthier than butter or lard, but they aren't. These oils are refined and promote inflammation. They work in the opposite way to anti-inflammatory fats and reduce their effectiveness.

Avoid any "hydrogenated" fat and these oils:

- Corn oil
- Vegetable oil
- Canola oil
- Soybean oil
- Safflower oil
- Sunflower oil
- Cottonseed oil

Anti-Inflammatory Fats

Replacing the inflammatory fats above with the anti-inflammatory ones below will help your joints to heal.

Eat these:

- Extra virgin olive oil
- Coconut oil
- Avocado oil
- Walnut oil
- Butter
- Lard

Other Anti-inflammatory Fats

Meat that is grass-fed or wild; chickens that are pasture-raised; fatty fish such as wild salmon, sardines, mackerel, and herring; and avocados, nuts, and seeds contain healthy omega-3 fats that calm inflammation.

An herb contains many different substances. It takes longer to produce an effect because it reduces inflammation more gradually, by affecting multiple internal systems. A drug is a bit like a tsunami, whereas an herb is more like gentle waves.

These are some of the top herbs and supplements that reduce inflammation, relieve arthritis pain, and promote healing of joints. Take the amount recommended on the product.

Boswellia: It reduces inflammation and can help to restore healthy joint structure. In a study that compared boswellia with a prescription NSAID, the herb took two months of daily use to relieve pain and stiffness, while the drug took only one month. But those who took the herb were pain-free for a month after they stopped taking it; pain returned as soon as the drug was stopped.⁶

Turmeric: Numerous studies have found that supplements of the whole turmeric root or extracts of curcumin, its active ingredient, relieve arthritis pain, sometimes as well as a drug.⁷ Supplements can contain whole turmeric root, which I prefer, or curcumin extracts.

White Willow Bark: With patients whose arthritis pain was too severe to stop taking prescription pain relievers, I've had them take this herb daily for 3 to 4 weeks and often, they've been able to discontinue the drugs. Willow bark has been used for centuries. Aspirin contains a substance similar to one of the many components in white willow bark but unlike aspirin, the herb isn't harmful if taken long-term.⁸

Glucosamine Sulfate and Chondroitin Sulfate: Both can help to restore cartilage and structure of joints. Some studies have found no benefit when a different form of glucosamine was used, so make sure to use the sulfate form. They can be taken together, or either can be taken alone.⁹

Other Arthritis Triggers

For some people, taking all the steps in the basic program doesn't produce enough relief, or there's some improvement and then progress stalls. Sometimes, there are underlying health issues that need to be addressed by a health practitioner but more often, one of the following situations can be provoking hidden inflammation and blocking progress.

Food intolerances are a possible problem. Gluten, in wheat, barley, rye, and in many packaged foods as a food additive, is one common culprit. Nightshade vegetables are another. They contain solanine, a substance that not everyone can tolerate. Common nightshades include white and red potatoes, tomatoes, eggplant, bell peppers, chili peppers, cayenne pepper, paprika, and goji berries.

Lectins are another possible arthritis trigger but are less well known. They're substances that some plants use as a defense system, because they can be toxic and discourage animals from eating the plants. Lectins are in the seeds and hulls of plant foods, including all whole grains (but not refined grains) except millet and sorghum; brown rice; soy foods that aren't fermented; corn and all types of corn foods, including popcorn; seeds; peanuts; cashews;

The Basic 90-Day Program

Diet, exercise, and supplements work together. The 90-Day program is intended to be a time during which you change your habits to turn on your internal natural healing processes and reduce inflammation.

To maintain the benefits and enable your joints to continue healing after 90 days, keep eating an anti-inflammatory diet, exercise, get enough sleep, and avoid any foods you know you don't tolerate well.

For 90 days:

Take one step at a time but do take all the steps. Start with the fish oil and sleep, and then add the rest.

1. If you take NSAIDs, stop taking them. Or, if you've just experienced an acute pain episode, take them only until the heightened pain subsides, and then go to the next step.
2. Start taking 4 grams of fish oil daily. Take it with food, to avoid digestive upset.
3. As an option, also take a baby aspirin (81 mg).
4. Give yourself enough time to get a good night's sleep.
5. If you don't currently exercise, start going for a walk every day, or at least on most days.
6. If you need more relief from pain or other joint discomfort, take boswellia or other supplements I've described. Each one works in a different way, so you can take one or more as well as fish oil. But make sure to do the rest of the steps.
7. If you know you're sensitive to gluten or other ingredients or foods, avoid them.
8. Familiarize yourself with which foods are pro- or anti-inflammatory.
9. Take a notebook and divide the page into two columns: anti-inflammatory foods and pro-inflammatory foods.
10. Look through your kitchen cupboards, pantry, and fridge, and list what you have, putting each food in the appropriate column.
11. Look through your pro-inflammatory list and pick a few items you can replace with anti-inflammatory versions. For example, if you have pretzels, chips, or cookies for snacks, you could replace these with nut butter (without additives) and some celery, or jerky that's organic or made without chemical additives.
12. Make a shopping list that's realistic and includes replacing some of your pro-inflammatory staples with anti-inflammatory ones.
13. Go shopping and stick to your list.
14. Prepare meals that are anti-inflammatory. If you need culinary inspiration, search for some new recipes online. This is a learning process.
15. The next time you need to buy food, repeat steps 9 through 12, until your kitchen is stocked with mostly anti-inflammatory foods.
16. Start adding some resistance exercise.
17. Continue improving your diet and taking your supplements.

Once you've been doing this for 90 days, discontinue aspirin if you've been taking it. Try reducing the amount of fish oil and see how you feel. If your joints feel worse, go back to the higher dose. Explore some new ways to exercise and prepare anti-inflammatory meals, and your joints should continue to get healthier.

and all beans and quinoa, unless they're pressure cooked.

The other common block to progress is a different source of hidden inflammation: low-grade, persistent infections. Common ones include urinary tract infections or infected gums or teeth.

Where to Start

If you suspect you can't tolerate a certain type of food, be strict about avoiding it for a few weeks. If you feel better, continue to avoid it. Sometimes, even a tiny bit of an offending food can trigger significant inflammation. And then, it will sabotage your other efforts.

If you suspect an infection, get it taken care of first. If you feel some occasional discomfort in your mouth, see a dentist right away, as any infection will perpetuate inflammation and joint pain.

Otherwise, get started on my 90-day program to restore health to your joints.

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Micronutrient rejuvenates stiff joints in just 7 days



If your knees, hips or joints are aching, chances are good it's due to too much inflammation.

Now, you can get rapid relief with a unique, highly targeted form of **Boron** called FruiteX-B®. This patented ingredient is nature-identical to the boron found in fruits, vegetables and certain beans.



Now, get better relief than from glucosamine and chondroitin.

In double blind clinical study, 60 people with knee discomfort got 220 mg of FruiteX-B® boron or a placebo daily for 14 days.

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collagen ingredient called **UC-II® collagen**, which has been shown to “reprogram” a faulty immune response that can cause activity-related joint pain.

In one study, people suffering from moderate to severe pain due to exercise took 40 mg of UC-II collagen or 1500 mg of glucosamine and 1200 mg of chondroitin. Overall, people taking UC-II improved on the WOMAC pain scale by 39% which was 19% better than glucosamine-chondroitin.¹³

In another study, healthy people taking UC-II were able to exercise longer before experiencing pain than the placebo group and significantly improved range of motion.¹⁴

TriFlexarin® also includes selenium to reduce joint tenderness and a blend of ginger, turmeric and boswellia serrata to reduce occasional joint swelling and inflammation.

“**TriFlexarin**® is great. You feel relief quickly after taking it. I highly recommend it.”

—Georgianna



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—J. Sanders, CA



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The Hidden Dangers of Kale and Other Produce

In recent years, kale has skyrocketed in popularity as a healthy “super-food” because it’s rich in nutrients, such as vitamins A, C, and K, and a variety of minerals. And, it’s low in calories. But unless you eat organic kale, it’s also a top source of pesticides, as are many other popular vegetables and fruits.

Each year, the nonprofit Environmental Working Group (EWG) analyzes thousands of tests of pesticide levels in conventional (not organic) fruits and vegetables. The tests are done by the USDA, on more than 40,000 samples of produce from grocery stores nationwide. EWG organizes the results in a usable way, ranking produce by pesticide levels, from the most to the least contaminated.¹

The Latest Ranking

This year’s test results show that there are 225 different toxins, and 70 percent of conventionally grown fruits and vegetables contain pesticide residues. These are some of the most toxic ones:

Strawberries: Pesticide residues were found on 99 percent of conventionally grown strawberries, with as many as 23 different pesticides on one strawberry. Bifenthrin, a possible carcinogen, was on 29 percent of samples.

Spinach: By weight, conventionally grown spinach is the most pesticide-saturated vegetable (kale is a close second). One neurotoxic bug killer that’s

banned in Europe, permethrin, was found on 76 percent of spinach. DDT was found on 41 percent of samples. Although it’s been banned for years, DDT persists in soils and is absorbed by spinach.

Kale: Residues of at least two pesticides were found on more than 92 percent of conventionally grown kale, and some kale contained residues from as many as 18 different pesticides. Nearly 60 percent of samples contained Dacthal (DCPA), a possible carcinogen that can harm the thyroid, liver, lungs, and kidneys, and is banned in Europe.

Apples: They’re ranked as the fifth-leading pesticide source and we eat a lot of them: an average of 10 pounds of raw apples per year, per person. In addition to any pesticides used during the growing season, conventional apples are sprayed after harvest with diphenylamine, to prevent skin discoloration during storage. The chemical, a possible carcinogen that is banned in Europe, was found on more than 80 percent of conventionally grown apples. It’s also in 36 percent of applesauces that aren’t organic.

If you’re wondering if washing or peeling will remove pesticides, it won’t. Before the USDA tests for residues, all fruits and vegetables are thoroughly washed, and peeled where appropriate, just as you would do at home.



EWG’s 2019 Dirty Dozen



Buy organic versions of these 12 fruits and vegetables, the top sources of pesticide residues. (Most toxic listed first.)

- | | |
|-----------------|--------------|
| 1. Strawberries | 7. Peaches |
| 2. Spinach | 8. Cherries |
| 3. Kale | 9. Pears |
| 4. Nectarines | 10. Tomatoes |
| 5. Apples | 11. Celery |
| 6. Grapes | 12. Potatoes |

EWG’s 2019 Clean Fifteen

Conventional versions of these are not guaranteed to be pesticide-free, but more than 70 percent of samples tested contained no residues, and only 6 percent contained residues of two or more pesticides. These would be least important to buy organic. (Least toxic listed first.)

- | | |
|----------------------|---------------------|
| 1. Avocados | 9. Kiwis |
| 2. Sweet corn | 10. Cabbages |
| 3. Pineapples | 11. Cauliflower |
| 4. Sweet frozen peas | 12. Cantaloupes |
| 5. Onions | 13. Broccoli |
| 6. Papayas | 14. Mushrooms |
| 7. Eggplants | 15. Honeydew melons |
| 8. Asparagus | |

Get Shopping Tools

For information on more fruits and vegetables and to get EWG’s free Healthy Living App, visit www.ewg.org.

¹ Environmental Working Group. “EWG’s 2019 Shopper’s Guide to Pesticides in Produce.” www.ewg.org.

Fitness Predicts Lifespan After Age 70

If you're physically fit, you feel and function better, but there's more to it. After age 70, your fitness level is a better gauge of how long you're likely to live than standard medical markers, such as blood pressure, cholesterol, diabetes, and smoking status.

Researchers at Johns Hopkins School of Medicine in Baltimore analyzed exercise stress tests (done on a treadmill under medical supervision) of more than 6,500 people who were age 70 or older. And then, they looked at how many had survived about 10 years later. There was no correlation between the standard medical markers and how long individuals



lived. However, the most fit were more than twice as likely to be alive, compared to the least fit.¹

Other research shows that regardless of your current physical shape, it's never too late to start a fitness regimen. If you haven't been doing any exercise, you can check with your doctor if you need to take any special precautions. But I doubt that you'll hear any objections to a daily walk, or some exercise in a pool if you suffer from chronic pain or have difficulty walking.

Stay Mentally Sharp with Mushrooms



Eating mushrooms can help to prevent mental decline, technically called "mild cognitive impairment," according to a recent study of seniors in Singapore.² The phrase describes forgetfulness and decrease of other mental faculties to a greater extent than seniors normally experience, but not to a disabling degree in everyday life. It isn't dementia but a more subtle form of neurological decline.

Researchers found that among people age 60 and older, routinely

eating about three-quarters of a cup of cooked mushrooms, twice a week, reduced the odds of mild cognitive impairment by 50 percent. The mushrooms people ate in the study were common ones: white button, oyster, shiitake, golden, or canned or dried mushrooms.

Mushrooms contain a compound called ergothioneine, which acts as an antioxidant and anti-inflammatory. Earlier research found that people with cognitive impairment have low levels of this nutrient, which may protect against neurological degeneration.

I don't view any one food or nutrient as a cure-all. But mushrooms can certainly be part of a healthy diet.

Doctors' Shocking Lack of Nutrition Education

If you've read a few books about nutrition in the course of your life, you may have spent more time studying the subject than most doctors did in medical school. A recent article in the American Medical Association journal, *JAMA*, pointed out that in four years of medical school, only 19 hours, on average, are spent on nutrition, and it doesn't include what doctors need to know to help their patients. Instead, those few hours focus on biochemistry and deficiency diseases that are not typical concerns today, such as scurvy. Graduate training in medical specialties doesn't help because it includes little or no nutrition training.³

Medical guidelines for diabetes and heart disease call for dietary changes as a first line of treatment, for good reason. Most cases of these diseases could be prevented with a healthy diet and lifestyle. But doctors simply aren't trained to provide this type of care.

Hopefully, things will change, but it won't happen overnight. Meanwhile, it's up to you to keep informing yourself and investing some time and effort to prepare fresh vegetables, meats, fish, and healthy fats in ways that appeal to your and your family's taste buds while providing nourishment that keeps you healthy for years to come.

1 Whelton, S.P., et al. "Fitness and 10-year Risk of Mortality Among Adults ≥ 70 Years Old at the Extremes of Cardiovascular Disease Risk Factor Burden: The Fit Project" American College of Cardiology's 68th Annual Scientific Session. March 16, 2019. 2 Feng, L., et al. "The Association between Mushroom Consumption and Mild Cognitive Impairment: A Community-Based Cross-Sectional Study in Singapore." *J Alzheimers Dis.* 2019;68(1):197-203. 3 Devries, S., et al. "Nutrition Education in Medical School, Residency Training, and Practice." *JAMA.* 2019 Mar 21. doi: 10.1001/jama.2019.1581. [Epub ahead of print]

The Most Thrilling Way to Eat Healthy!

Feel your taste buds come alive...



If you like eating healthy, but hate bland and boring foods, you'll be excited to hear this...

For dinner tonight, you could be eating fiery garlic chicken and broccoli...and then wake up tomorrow to a delicious ham and sweet potato breakfast scramble...only to pack a scrumptious lunch of shrimp and cashew stir fry.

These meals are **delicious** and **nutritious**, and most important, they're **"perfect"** for healthy blood sugar and healthy blood pressure.

You see, we hired a professional nutrition planner with a degree in culinary arts to create hundreds of complete meal plans. And all of them **adhere to the healthy eating formula** of 65% healthy fats, 25% protein, and 10% carbohydrates.

We call it **Perfect Meal Plans** because they take the guesswork out of healthy eating.

This inexpensive service provides weekly meal plans that include recipes, shopping lists, and online support. You don't need to be a good cook. You don't need any special tools. Just follow the weekly meal plan, and you'll soon be losing weight, sleeping better, have more energy and living a healthier life.

Jack from Columbus, Ohio says:

"In the last year, I've lost about 33 pounds, my A1C dropped 0.9 points, and my blood pressure is now running in the 106/68 range. My doctor was very surprised at my results and said they were the best he had ever seen with me (and that's looking back ten years!). I'm excited about this program and plan on continuing it!"

And Katherine from Mobile, Alabama reports:

*"Now I don't have to worry about creating nutritious combinations for my meals, plus I'm saving time every day. I definitely recommend **Perfect Meal Plans** to anyone who wants to save time and eat healthy!"*

With **Perfect Meal Plans**, it's like having your own nutritionist on call 24/7. So, why eat boring meals, when you can eat like kings and queens—and still get the healthy results you want?

And here's the best part! You get tasty, health-improving **Perfect Meal Plans** sent to your email inbox for the low price of just \$9.95. The meals are easy to prepare, they're delicious, and they're perfect for your health. Order today!

Get Perfect Meal Plans for Only \$9.95!

PerfectMealPlans.com/NHC5

For faster service, call 1-888-309-0629

Monday-Friday 7 a.m. to 6 p.m. CST • Saturday-Sunday 8 a.m. to 5 p.m.

Dr. Marlene's

NATURAL HEALTH CONNECTIONS

by Marlene Zuckerman, D.C.

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The Guide to Healthy Eating

A healthy diet is not just about eating the right foods. It's about eating the right foods in the right way. By following a few simple rules, you can achieve a healthy diet that is both delicious and nutritious.

What should I eat and when to eat it? The million-dollar question is: What should I eat and when to eat it? The answer is: Eat what you love, and eat it when you're hungry.

Why is it so hard to eat healthy? It's because the food industry is constantly trying to make us eat more. They use all kinds of tricks to make us eat more, and they're getting better and better at it.

How can I eat healthy and still enjoy my food? The answer is: Eat healthy, and you'll enjoy your food. Healthy food is delicious, and it's good for you. So, eat healthy, and you'll be happy.

Should I eat protein? Yes, you should. Protein is the building block of life, and it's essential for your health. So, eat protein, and you'll be healthy.

Should I eat fat? Yes, you should. Fat is essential for your health, and it's good for you. So, eat fat, and you'll be healthy.

Should I eat sugar? No, you shouldn't. Sugar is bad for your health, and it's not good for you. So, don't eat sugar, and you'll be healthy.

Should I eat salt? No, you shouldn't. Salt is bad for your health, and it's not good for you. So, don't eat salt, and you'll be healthy.

Should I eat alcohol? No, you shouldn't. Alcohol is bad for your health, and it's not good for you. So, don't eat alcohol, and you'll be healthy.

Should I eat caffeine? No, you shouldn't. Caffeine is bad for your health, and it's not good for you. So, don't eat caffeine, and you'll be healthy.

Should I eat anything else? Yes, you should. Eat everything else, and you'll be healthy. So, eat everything else, and you'll be healthy.

and ability to do everything you want to do. It's a healthy diet that is both delicious and nutritious.

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SPECIAL REPORT

Dr. Marlene Zuckerman, D.C.