

GUIDE TO NUTRITION FOR CHRONIC PAIN

What You Eat Can Make a Difference

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WHAT IS CHRONIC PAIN?

Chronic pain is the medical term for pain that lasts more than about three months. The word “chronic” means “long-lasting.”

You feel pain when you break your leg, burn your hand or have surgery. Doctors call this “acute pain” because it happens immediately and goes away with time and treatment. As your injury or surgery site heals, you feel less and less pain.

Chronic pain is different. You have it even after the injury, surgery site or disease heals. This is sometimes because you have a long-lasting condition in the area that was hurt or had surgery, such as with arthritis in a shoulder joint that was injured. It can also happen when your brain continues to get pain messages from nerves. For example, if you lose an arm or leg, you can feel pain where it used to be. The body part is gone, but the pain still exists in your brain. To put it another way, if your brain had a “pain” button, it would still be on even if no one was still pushing it.

You are not alone

Researchers estimate that more than 100 million American adults have chronic pain, so you are not alone. Chronic pain is one of the leading reasons we visit the doctor and take medication. It is extremely common.

Some chronic pain conditions

Conditions that cause chronic (long-lasting) pain include

- **Arthritis**—Inflammation in the joints. **Osteoarthritis** is one type, caused by bone problems. **Gout** is another type, caused by a buildup of crystals in the joint.
- **Endometriosis**—Very painful menstrual periods are caused by problems with the lining of the uterus (womb).
- **Back pain**—Pain in the lower back is common, but pain can happen almost anywhere in the back or neck.
- **Migraine**—A neurological (nervous system) condition. It includes headaches, vision disturbances, sensitivity to light and sounds and other symptoms.
- **Fibromyalgia**—A condition that causes muscle pain, fatigue (tiredness) and other symptoms.

ABOUT CHRONIC PAIN

Chronic pain affects all of you

Pain is not just in your body. It can affect your relationships, your work, your sleep and your mental and emotional health. Pain, especially chronic pain, affects your ability to enjoy life and focus on what you are doing.

Back pain is one example of a physical problem that affects other areas of life. Researchers know that if you have lower back pain, you are four times more likely to feel mental and emotional distress than if you were pain free. You would also be three times more likely to be limited in what you can do each day.

The good news is, making some changes to your daily life can also affect all of you. In this booklet, you will learn how something as simple as what you eat can make a difference in your chronic pain.

THE USUAL TREATMENTS FOR PAIN

If you have chronic pain, you probably know some or all of the usual treatments. The main treatments are:

- **Medication**—From over-the-counter medications such as aspirin, ibuprofen and acetaminophen (Tylenol®) to prescription pain medications.
- **Non-surgical procedures**—Such as injections (shots) and other procedures.
- **Surgery**—An operation to fix a problem that may be causing pain.
- **Physical therapy**—Exercises, stretching and sometimes massage or ultrasound on the painful area.

These treatments can help acute pain, but they might not be effective for chronic pain. Treatments are not working well if your pain keeps coming back after injections or you constantly need larger doses of medication.

Also, the usual treatments for pain all have some risk. For example, taking a lot of acetaminophen (Tylenol) or over-the-counter medications called NSAIDs, such as ibuprofen (Advil®) and naproxen (Aleve®), can cause health problems. This is most common if you take these medications in large doses, for a long time or both.

Acetaminophen can cause liver problems, and NSAIDs can cause bleeding in the digestive system and other problems. So, it is not a good idea to depend on them for long-term relief.

Narcotic medications, also called opioids, can actually make the pain worse. They can cause serious addiction and even death. Taking certain chronic pain medications for months, years or longer can cause even more health problems besides the pain.

The difference between “fixing” pain and healing your body

With some injuries and diseases, the pain you feel matches the amount of damage or sickness in your body. With chronic pain, this is not always true. The amount of pain you feel or how long it lasts might be greater than the damage to your body. In other words, your pain might be more severe or longer lasting than the injury or illness itself.

Your doctor might be able to “fix” the injury or illness, but not the pain. If so, the purpose of treatment might change from fixing a problem to healing your body.

Healing and curing

Healing can happen even if doctors cannot cure, or “fix,” your condition. Healing is the process of becoming as healthy and well as possible physically, mentally, emotionally and spiritually. You might think of this as being a “whole” person, feeling as well as you can in each of these different ways.

Some ways to do this are managing your weight, building strength and cardiovascular fitness, staying relaxed and eating well. You can also take care of your emotional and spiritual needs to become as happy and balanced as possible.

Healing means:

- Becoming as healthy as possible
- Being able to function as well as possible
- Avoiding the problems medications and procedures can cause
- Feeling as well, happy and satisfied with life as possible

THINKING ABOUT YOUR CHRONIC PAIN

The next section of this booklet has some questions about your pain. Writing down the answers and sharing them with your doctor or other health provider can help you plan to reduce the pain and feel better in general.

NOTES

ABOUT YOU

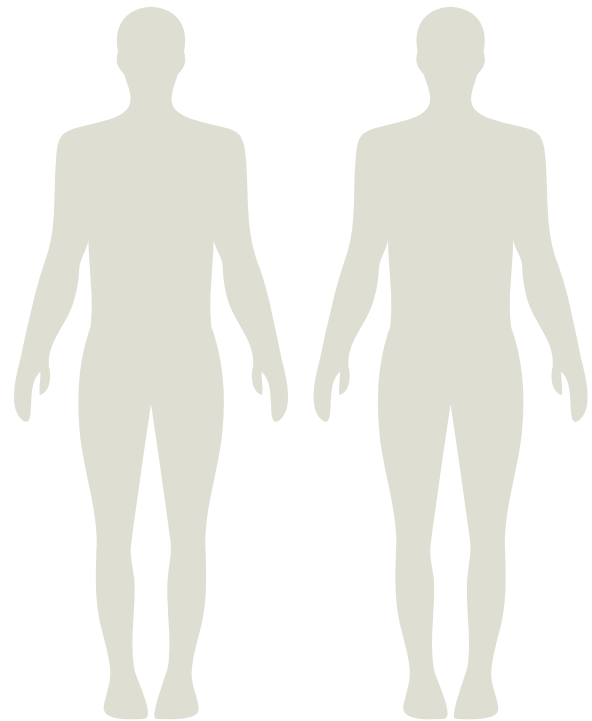
What do you live for? What are the most important things in your life?

What would you do if you had no pain?

ABOUT THE PAIN

Where is the pain?

How long have you had it?



FRONT

BACK

QUESTIONS TO CONSIDER

What medicines have you taken for it?

Are you still taking any of these medicines?

Surgery? ___ Yes ___ No

What kind of surgery?

Other treatments, such as injections (shots), physical therapy, massage or other?

What would be the best possible result of treatment?

What result would I be OK with, even if it was not the best possible?

QUESTIONS TO CONSIDER

Is there anything I am doing now that makes it feel better?

Is there anything I think would fix my pain?

ABOUT YOUR GOALS

What goals do you have for your life?

Why would you like to do these things?

What are the reasons you have not done these things so far?

Research shows 2 things are closely related to both chronic pain and nutrition. These are a condition called obesity, which means being overweight, and the type of foods you eat. Some foods cause inflammation in the body, which can lead to long-lasting, or chronic, pain. Other foods fight inflammation, which helps reduce pain.

The information below explains the connection between obesity, chronic pain and what you eat.

CHRONIC PAIN AND OBESITY

What is obesity?

Doctors use a measurement called body mass index to learn if you have obesity. Body mass index, or BMI, shows how much you weigh compared to your height. In most cases, you have obesity if your BMI is 30 or higher on this scale. The obesity is severe if your BMI is 40 or higher.

If you have obesity, you probably know it and are not happy to read about it in a guide about pain. You might feel blamed for having obesity, like you caused your pain. In fact, it is not you but the extra tissue on your body that is part of your pain. This booklet is partly about obesity because it is such a common condition, like chronic pain. Researchers now know that obesity and chronic pain often go together.

Studies show people who have obesity are more likely to have pain that keeps coming back. They also show that people with more severe obesity tend to have worse pain. Pain and obesity go together in every age group along the life span, from children to older adults. Having a higher body mass index, or BMI, is also shown to lead to low back pain.

Why do obesity and pain go together?

Researchers believe that one way obesity can cause pain is that the extra mass, or amount, of tissue on your body puts a heavier load on your bones and joints. Just like an overloaded piece of equipment, your joints can start breaking down faster than normal. They might change shape or rub on each other in ways that cause pain. You might also stand, sit or walk differently.

Another way is inflammation. Your body's cells can become inflamed, or irritated, by many things. Normally, your body calms the inflammation by releasing specific substances.

If you have obesity, your body has many fat cells. These cells are active, releasing substances that cause a constant, low level of inflammation in your body. This contributes to chronic pain and many other diseases.

The connection between food, obesity and pain

Even separate from weight, what you eat can lower the inflammatory substances in your body or raise them. It can also help determine how much fat your body carries. So, what you eat and drink can reduce both the fat and fat cells and the inflammation from them. This means it can reduce the amount of pain you have. As a side benefit, eating foods that stop inflammation can also reduce obesity, so your body becomes healthier over time.

My Body Mass Index

Learning your BMI can help you determine if you are at a healthy weight. The easiest way is to find a BMI calculator online. You will need to know your height and weight. The Center for Disease Control also called the CDC or the National Institutes of Health or NIH both provide good calculators you can easily use online.

Having Obesity Does Not Make You a Bad Person

First of all, having obesity and chronic pain does not mean you are a bad person, any more than having diabetes or depression does. In the United States, we give a lot of attention to people who meet very specific standards of beauty. This usually includes being thin or skinny (underweight). Because these people get so much attention, we tend to think of them as successful, beautiful or somehow better than the rest of us. But how they look or how much they weigh has nothing to do with their inner personal qualities or value. And it is important to know that being underweight also causes health problems.

However, in the United States, obesity is a much more common health problem than being underweight. Today, 1 of every 4 American adults has obesity. If you have this condition, being “body positive” and loving your body is a good thing. However, this probably means taking steps to treat your obesity because of the serious health problems it causes.

This is especially true if you have chronic pain. Obesity and chronic pain can both make the other condition worse. For example, the more pain you have, the less you are likely to exercise or even move around very much. This may lead to weight gain. Carrying extra weight worsens the pain, and you become even less active. You are also likely to get depressed from the pain and lack of activity or ability to do things. You might eat more, have less energy to shop and cook for yourself or eat fast food or junk food for comfort if you are depressed. This also makes the obesity and pain worse. All these things add up to make your health even worse.

If you have chronic pain, treating obesity can lead to much less pain—without drugs, surgery or other procedures that can have side effects or do more damage. For example, if you start taking a short walk each day, your energy level will go up. With more energy, you can shop for fresh foods and prepare a healthy meal. Exercising and eating fresh foods, with family or friends if possible, makes you feel less depressed—and you might start losing weight. This can decrease your chronic pain. You will also lower your risk of diabetes, heart attack, stroke, cancer and many other serious health conditions. All these things work together to make you healthier and help you feel better and better.

EATING TO REDUCE CHRONIC PAIN

Research shows that foods and drinks that reduce inflammation can reduce chronic pain and improve your mood. Avoiding foods and drink that **cause** inflammation can also help. In fact, changing your diet and lifestyle can allow you to work with your health care team to reduce the amount of medication you take or even stop taking it. Even small changes, such as switching to whole grains and eating more fish and less red meat, can make a difference in your health.

The rest of this booklet gives you suggestions for simple nutrition changes that can help you start feeling better.

Types of foods that reduce inflammation

For example, try ...

Whole grains

Whole grain bread, oats, brown rice, barley, bulgur, quinoa, couscous, polenta and rye bread. You can also switch to whole wheat tortillas and pasta.

You can use potatoes, sweet potatoes and plantains in recipes the same way as whole grains. Avoid having these fried very often because fried foods can cause inflammation.

Beans, nuts, seeds and plant foods that have a pod, such as peas

Black beans, kidney beans, garbanzos (also called chickpeas), white beans (also called navy beans or cannellini beans), hummus, nuts and seeds. Nuts can include walnuts, almonds, pecans and peanuts. Seeds include sunflower seeds, pumpkin seeds, pine nuts and more.

Peas and soybeans are a type of plant called a “legume” that comes in a pod. You can eat sugar snap peas, regular peas, roasted soy nuts, edamame and any type of tofu.

Fruits

Berries, pomegranates and cherries. Dark-colored fruits are especially good for preventing inflammation.

Any other type of fruit. Avoid drinking fruit juice or drink a small glass and mix it with an equal amount of water. (Fruit juice contains a lot of sugar, which makes inflammation worse.)

EATING TO REDUCE CHRONIC PAIN

Types of foods that reduce inflammation

For example, try ...

Vegetables

Yellow, orange and red peppers and tomatoes. Spinach, chard, kale, leaf lettuce, Romaine lettuce, arugula (rocket or roquette) and mixed greens, especially dark, leafy greens. Purple and green cabbage, onions, garlic, broccoli, Brussels sprouts and cauliflower. Radishes, cucumbers, green beans and green onions (scallions).

Olive oil

Use this instead of butter and other oils for cooking foods, when possible. You can use flavored or extra virgin olive oil in dips and dressings.

Fish

Choose fish that lived in cold water, including salmon, herring, anchovies, sardines and mackerel. Wild salmon is healthy to eat, but farmed salmon is not because it usually has a lot of antibiotics in it. Look for recipes using fresh sardines, herring and mackerel, or buy them canned from the supermarket.

Chicken, turkey and other birds

Eat white meat chicken and turkey. Avoid frying or deep frying except as a special treat. Game birds such as pheasant and quail, and farmed birds such as Cornish hens, are fine to eat.

Eggs, cheese and yogurt

Low-fat or skim milk, yogurt, natural cheese (not processed cheese such as cheese slices or spreads).

Some people do not digest cow's milk. You can buy milk that does not include lactose (milk sugar) or avoid milk. Check labels on yogurt to avoid brands with a lot of added sugar.

Herbs and spices

Cinnamon, ginger, turmeric, garlic, rosemary, cayenne pepper, black pepper.

Types of foods that reduce inflammation

For example, try ...

Tea

Black tea, green tea, white tea, herbal tea.

Chocolate

Choose dark chocolate with 70% cocoa or higher. Eat 1 or 2 ounces per day.

Wine

If you drink, you may have ½ to one (1) drink each day if you are a woman, and 1 to 2 if you are a man. Wine can help reduce inflammation, but limit the amount you drink to avoid causing other health problems. Some doctors and researchers believe it is better to avoid drinking any alcohol at all.

Avoid or eat less of these foods

- Red meat, such as beef—If you do eat beef, have it only on special occasions. Grass-fed beef is the best, but it costs more than regular beef, so you might want to plan for it in your grocery budget. Eat less of other beef, including hamburgers, steaks, ribs and beef in tacos, stir-fry and sandwiches.
- Processed meat, such as ham, bacon, sausage and lunch meat
- Certain oils and fats, including margarine, shortening, lard and oils from soybean, safflower, corn and sunflowers
- White bread
- Rice and corn cereals and instant oatmeal
- Instant or white rice, packaged stuffing
- Foods with high-fructose corn syrup
- Soda, including diet soda, fruit juice and other drinks with added sugar, such as energy drinks and coffee or tea drinks with flavorings

Also avoid or eat fewer sweets, especially processed sweets. These include cookies, cakes, pastries such as muffins, donuts, brownies, pies and other sugary desserts.

Simple Food Tips for Less Pain

- The best diet to lower inflammation and pain is based on **healthy foods that come from plants**. This means getting most of your food from eating whole grains, fruits, vegetables, beans, nuts and seeds.
- **Avoid foods that make your blood sugar go up quickly** after a meal, including white bread, refined (processed) grains and other processed foods and sugary foods. If your blood sugar does this often, it creates inflammation in your body.
- **Limit the amount of added sugar in your food each day**. Daily limits for adults are:
 - » Men: 39 grams
 - » Women: 25 gramsThe limits don't mean you have to eat that much added sugar. You can eat less! But try to stick to that amount or less each day. You will need to read labels to check for how much sugar is in a serving of food. Most added sugar is already in the food, even foods you would not expect to have sugar. You might also need to measure the food to learn how many servings you have.
- **Eat plenty of these foods**. These can replace other foods you eat now, such as white bread, red meat and packaged snacks.
 - » Fruits and vegetables—Most Americans eat just 1 fruit and 1 vegetable each day. Often, that vegetable is French fries—high in calories, salt and fat and low in nutrition. Doctors and nutrition experts recommend eating 5 to 7 servings of fruits and vegetables every day.
 - » Herbs and spices—Use these to replace some of the salt you cook with.
 - » Healthy fats, such as olive oil, flax oil or canola oil.
 - » Foods made from soy, such as tofu, roasted soy nuts, edamame and soy milk, unless your doctor tells you to avoid soy.
 - » Fish—Two or 3 times a week. Look at the chart in this guide to learn more about the best types of fish.

For a basic anti-inflammatory diet, you can use the U.S. Department of Agriculture's MyPlate example.

For a more detailed anti-inflammatory diet, you can use the traditional Mediterranean diet food pyramid from www.oldwayspt.org. Or search for "Mediterranean diet pyramid" online.

Supplements can be vitamins, minerals, oils or herbs you take to get a specific benefit. For example, you might take a daily dose of fish oil or a multivitamin each day. Those are both supplements.

If you have chronic pain, you have likely spent time online learning about your condition and what might help. Chances are good you have found some advertisements for supplements that promise to take your pain away.

It is important to remember that every supplement costs money, but not all supplements work. Also, the United States does not have rules about how supplements can be made or what they must contain. So, you might not be buying what you think you are. Visit Operation Supplement Safety at www.opss.org, and choose “Dietary Supplement Ingredients” to learn about ingredients and more.

Supplements can be expensive, and they can also cause bad reactions with other medicines you take, certain foods or certain drinks. Before you buy any supplements, please talk to your doctor. He or she should be able to tell you if researchers have found any evidence that the supplement works for your condition. You can also talk with your doctor about why you want to take a supplement—for example, because your pain medicine is not working well any longer or you need more sleep. The doctor may be able to find something that is proven to work and does not cause harm.

Following is a chart showing common supplements for muscle pain. It includes information on supplements that researchers have found can help, and those that do not help (no matter what you read about them online).

SUPPLEMENTS FOR CHRONIC PAIN

Supplements that may help muscle pain—and some to avoid

May help	Not recommended	Avoid
Avocado-soybean oil (also called “unsaponifiables”)	Boswellia	Collagen
Capsaicin	Rose hip	Creatine
Curcuma (in foods, not a supplement)	S-adenosyl-t-methionine	Devil’s claw
Ginger (in foods, not a supplement)		L-carnitine
Glucosamine		Methylsulfonylmethane
Melatonin		Pycnogenol
Polyunsaturated fatty acids		Vitamin E
Vitamin D		Willow bark extract

Foods and diet can also affect other health conditions. These conditions might be part of the cause of your pain, or they might affect the pain in some way.

The next chart shows some of these health conditions. It also shows supplements that researchers have found to have some benefit for the condition, lists those conditions and the diet or supplements that have evidence for benefit. Notice how often you see the Mediterranean diet or a type of Mediterranean diet on the chart.

SUPPLEMENTS FOR CHRONIC PAIN

Conditions that may improve with diet, supplements or both

Condition or disease	Diet or supplement
Alzheimer disease and dementia	<ul style="list-style-type: none">• Mediterranean diet• Omega-3 fatty acids• Alpha lipoic acid
Artery (large blood vessel) problems	<ul style="list-style-type: none">• Mediterranean diet• Dark chocolate• DASH diet
Arthritis	<ul style="list-style-type: none">• Turmeric extract• Probiotics• Omega-3 fatty acids
Asthma	<ul style="list-style-type: none">• Mediterranean diet
Cancer	<ul style="list-style-type: none">• Mediterranean diet—may help prevent colorectal, breast and prostate cancer
COPD (Chronic obstructive pulmonary disease)	<ul style="list-style-type: none">• Fruits and vegetables rich in antioxidants
Depression	<ul style="list-style-type: none">• Omega-3 fatty acids• Mediterranean diet
Diabetes	<ul style="list-style-type: none">• Mediterranean diet—may help prevent or control diabetes
Heart disease	<ul style="list-style-type: none">• Mediterranean diet, including olive oil and nuts• May help prevent heart attack and stroke

SUPPLEMENTS FOR CHRONIC PAIN

Condition or disease	Diet or supplement
High blood pressure	<ul style="list-style-type: none">• DASH diet• Mediterranean diet• New Nordic diet—similar to Mediterranean diet• Olive oil—especially extra virgin olive oil
Inflammatory bowel disease	<ul style="list-style-type: none">• Turmeric• Anti-inflammatory diet—adjusted for irritable bowel disease
Nonalcoholic fatty liver disease	<ul style="list-style-type: none">• Olive oil or canola oil• Omega-3 fatty acids
Obesity	<ul style="list-style-type: none">• Mediterranean diet• DASH diet
Psoriasis	<ul style="list-style-type: none">• Diet rich in omega-3 fatty acids

Other herbs and supplements researchers are studying for pain:

- Turmeric
- Ginger
- Garlic
- White willow
- Boswellia
- Devil's claw
- MSM
- SAME
- Protease
- Bromelain
- Resveratrol

WHAT ELSE CAN HELP?

Getting physical activity every day can help reduce inflammation and pain. Exercise gets your blood flowing and helps fluids cushion your joints. It helps your body produce chemicals that raise your mood, and it also helps you sleep better. If you have severe pain, you need to start exercising little by little. Otherwise, the exercise may make your pain worse.

No doubt about it that exercising with pain is, well, painful. But it needs to be done anyway. If you exercise regularly, a little more each time or each week, you will feel better eventually. You will feel pain and discomfort, but exercising this way helps you avoid making your pain too much worse. Work with a professional when you start exercising, like a physical therapist or a certified yoga therapist.

Exercise doesn't have to be hard or expensive. Just taking a walk every day can make a big difference. Try to get 150 minutes a week of moderate exercise. This is 25 minutes, 6 days a week, so you can even take a day off. Or you can do 25 minutes a day by exercising 5 or 10 minutes at a time, several times daily.

What is “Moderate” Exercise?

“Moderate” exercise means you are making some effort, but you can still talk to a friend. You are not sweating heavily. It could be:

- Walking
- Hiking
- Swimming
- Riding your bike
- Riding an exercise bike
- Doing yoga or tai chi
- Doing an exercise video or class

Doing an activity that strengthens your muscles on at least 2 days a week is recommended. This could be lifting weights, push-ups or sit-ups. Make sure you do the exercises the correct way. Otherwise, you could hurt yourself more.

Changing how you shop for food and cook, serve and eat it can be important, too. The next section gives some ideas about food that can make the whole eating process a nutritious, healing experience.

WATER IS LIFE

You've probably heard it too many times to count: your body needs water. You are 60 percent to 70 percent water, and you lose it all day and all night through sweat, evaporation, waste and other ways. Replacing the water your body uses—and loses—is essential when you are trying to feel as well as possible.

Ways to get enough water:

- Carry a reusable water bottle and keep refilling it during the day. If you don't like the taste of tap water where you live or work, look for a bottle with a filter. Filters can make plain tap water taste delicious!
- Have a glass of water with each snack and meal. If you have another beverage, have a glass of water, too.
- Replace 1 or 2 of your other daily beverages with water.
- Eat foods that contain a lot of water, including melons, tomatoes, cucumbers and other fruits and vegetables.

FOOD IS MORE THAN FUEL

Try thinking about food as something that gives you energy **and** health. We tend to think of medicines and supplements this way, but not our food.

Food that gives energy and health includes:

- Foods with healthy fat
- Protein
- Fiber
- Whole grains and other healthy carbohydrates
- “5 a day”—Five servings of fruits and vegetables daily

Eating plenty of fiber, such as from fruits, vegetables and whole-grain food, can reduce the harm from foods that have a lot of sugar, corn syrup, chemical sweeteners and unhealthy fats. Eating less of these sugary foods will also improve your energy and health.

Are you eating enough?

Enough food is important. If you are always tired, you might be eating too little during the day or all the time. Or you might be eating too little high-quality food, such as healthy fat, protein, fiber and fresh fruits and vegetables. If you eat fast food, drink soda (regular or diet) or eat mostly packaged food every day, you might be tired because the chemicals and sugar are causing inflammation.

Ask your doctor for help

Creating a healthy eating plan can be confusing and take a lot of time. Ask your doctor if you can talk with a dietitian about what to eat and drink. A dietitian is a health care professional who studies food and nutrition and helps people decide what to eat to get the results they want.

Most doctors will not give you advice or counseling on nutrition unless you ask them. However, some current guidelines for medical practice recommend that doctors do give you nutrition advice. The guidelines especially recommend it if you have a disease such as diabetes, hypertension, obesity, heart disease or cancer. They might also recommend your doctor give you nutrition advice if you have a high risk of getting any of these diseases.

Medical guidelines are also recommending that doctors talk to you about nutrition if you have pain or a brain illness such as depression or dementia. But you probably need to specifically ask your doctor to talk with you about nutrition.

You can also ask that your doctor do something called a HOPE visit with you. You or your doctor can learn how to do this online at www.drwaynejonas.com/hope.

EATING WELL—IT'S NOT JUST ABOUT FOOD

The Mediterranean diet includes many foods that can help your health. However, people who eat this diet in Greece, Spain and other areas where it comes from might be healthy for another reason. They tend to eat with others, pay attention to the food and take time to enjoy it. These things are as healing as eating healthy foods. The social part of eating, and how you think about eating and food, can be as important as the food itself!

Here are some ideas for planning meals and eating foods that build your energy and health:

- **Eat together**—Whether you have a large family, a roommate or a pet, eat with someone and make your mealtime pleasant.
- **Eat with your children**—Research shows that eating meals as a family several times a week helps children get better grades. Children who eat with their families regularly also use less alcohol or illegal drugs.
- **Plan your meals**—Try to shop once a week so you have enough food for the whole week. Avoid making quick trips to the store or a fast food restaurant when you are hungry. You are likely to buy processed foods that are high in salt, fat and sugar. You are more likely to do this if you don't have healthy food at home or in your car.
- **Figure out your cooking style**—Do you like using a Crock-Pot or instant pot? Cooking a lot of food in one day and storing it for later? Cook the way you enjoy doing it.
- **Keep healthy foods at home**—You might want to keep chicken in the freezer or brown rice in the pantry. Having nuts available for snacks gives you fats, protein and vitamins. Nuts are easy to take places with you and to eat quickly.
- **Have a backup plan**—If you plan to cook from scratch but have to stay late at work, what will you do? Decide where to stop for healthier take-out food, or keep a couple of healthy items in the freezer or pantry you can make quickly. Many fast food restaurants now have healthy foods. You can check the menu online and choose healthy foods by calorie count and other nutrition information, such as the amount of sodium or fat.
- **Enjoy your treats**—A piece of chocolate, a pastry, a hot dog or a beer can all be enjoyable treats. Your goal is to avoid having so much of these foods that your body gets inflamed and stays that way. Instead, try them in smaller amounts and on special occasions. Really enjoy them if you like them. Remember, how you think about your food matters to your health, too!

Avoid unhealthy food traps

Some situations make you more likely to buy or eat inflammatory foods. Avoid:

- **Shopping when you are hungry, tired or in a rush.**
- **Planning complicated meals**—It can be too tempting to order takeout instead. Also, you might not cook for yourself often if it is a lot of work or you don't enjoy it.
- **Being really hungry at the end of the day**—Hunger might send you to the drive-through for a fast food snack instead of home to cook a healthy meal. Keep healthy “emergency snacks” in your bag or car, such as a piece of fruit, healthy popcorn or a handful of unsalted nuts. Read the labels on energy bars carefully. They often contain a lot of sugar and are not healthy.
- **Judging or thinking badly about yourself** for eating unhealthy foods or weighing more than you would like—Blaming yourself can make you feel helpless. It can also lead to eating high-calorie foods for comfort. If you have eaten inflammatory foods all your life, switching to anti-inflammatory foods will take some time.
- **Giving in to family pressure**—Some families have strong traditions about food such as eating everything on your plate, overeating on special occasions, drinking a lot of alcohol or eating foods with a lot of fat, sugar and salt. Your family members might say they want you to be healthy but try to get you to eat and drink what they normally do. Or they might say having obesity is OK because everyone in the family has it. Think about your own health, having less pain and creating some new traditions for your family, including eating healthier foods and being more active. You can lead your family to a healthier and longer life.

Be aware of what you eat

Eating while you watch TV, read a magazine, text or surf the web is common, but it's a bad habit for health. This is because you are not usually aware of what you are eating during those times. When you eat, try paying attention to what you taste, smell, touch, hear and see. This is called “mindful eating,” and it is a good way to enjoy your food more, reduce stress and even eat less.

Listen to your body

Your body will tell you when it is full, just as it tells you when you are tired and need sleep. This is another reason to pay attention to what you eat. You might want to keep eating, but know you will be too full if you do. In a restaurant, you can ask to have half your meal put in a box to take home. At home, you can put the food away and get some later if you really want it.

There are several simple ways to get better at listening to your body. Some people have found that stopping when they feel “80 percent full” is a good way to stay mindful. Others find taking a few breaths or saying a prayer before taking a bite increases mindfulness while eating. Pick a method you like, and try it for 30 days. After that, it will become a habit.

Fasting, or going without eating for a short time, can also make you more aware of what you eat. But it’s important to fast correctly. I recommend going at least 10 to 12 hours without food each day. To learn more about how to fast, [read the article](#) on [NBC Better](#).

Scan your body to learn what it needs

Many people eat when food is not actually what they need. We have the option to do this in the United States and other wealthy countries because we have a lot of food around. We also tend to avoid sitting, resting and thinking about what we really want or need because we are used to doing things quickly.

Doing a body scan can help you give yourself what you really need. It might be food, or it might not. Here is how to do it:

1. **Scan your body.** Is your stomach grumbling? Does it feel empty? Do you feel weak and dizzy or have a hard time concentrating? If you don't feel any of those things, and think you want food, try drinking a large glass of water. You might realize you were actually thirsty. If you want more water after drinking one glass, that is a good sign you needed water.
2. **Scan your mind.** Are you craving a cheeseburger? Did you just see an ad for a cheeseburger? This happens with many types of food, whether you see the ad online, on TV or in print. Reading recipes and seeing pictures of the cooked food can make you "hungry" too.
3. **Scan your feelings.** Are you feeling stressed, angry, anxious or sad? Or you might feel lonely or just want to taste something good. But food cannot take care of your emotional needs. If you want to eat because you are upset, or want to feel pleasure, try doing an activity that helps relax you, such as taking a 15-minute walk outdoors. Or do an activity that gives you pleasure, such as sitting down with a magazine or working on a project you enjoy for half an hour. Drink water or tea while you do that—add some lemon or lime for flavor.

Make changes you can manage

After reading this guide, you might be inspired to stock up on anti-inflammatory foods and start eating the [Mediterranean](#) or [DASH diets](#) or a similar plan. If you can do that and stick with it, great! However, many people do better with small changes over time. For example, do you snack a lot after work? Have an extra glass of wine every night? Get fast food for dinner a couple of times a week? Try making small changes for healthier habits.

Small changes include adding cut-up vegetables to your snack tray, switching to whole-grain crackers, having seltzer instead of a second glass of wine or getting a healthier entrée when you order fast food. Most fast food restaurants have menus with nutrition information so you can pick healthier foods. The menus are often online, but you might also see calorie counts in the restaurant.

Changing just one thing, like drinking 1 or 2 fewer sodas a day, can make a big difference in your health. For example, drinking 1 soda often gives you 300 calories or more. Drinking 1 or 2 less a day, or even every other day, cuts your calories. It can even start a chain reaction—not **no** inflammation, but **less** inflammation in your body.

FOODS AND DRINKS

Which foods on the anti-inflammatory list do I eat?

Does the list have anti-inflammatory foods I don't eat but would not mind trying?
Which ones?

Which foods on the "Avoid or eat less of" list do I eat?

Two inflammatory foods I think I could stop eating or eat less of:

1 _____

2 _____

Do I drink any of the anti-inflammatory beverages on the list, such as tea?

How much water do I usually drink each day? _____

What beverages do I drink most often?

QUESTIONS TO CONSIDER

Are any of those on the “Avoid or eat less of” list? ___ Yes ___ No

If yes, think about possibly replacing 2 beverages a day with plain coffee, tea, seltzer or water.

COULD NUTRITION HELP ME WITH CHRONIC PAIN?

Think about the question below. Mark the answer that sounds most like your opinion right now.

Am I interested in trying to change my pain with nutrition (foods, beverages and possibly nutrition supplements)?

___ Yes, I am ready to try anything.

___ No, I think surgery, medicine and other treatments are the only thing that will help.

___ Yes, but I don't think it will help.

___ Yes, but I've tried losing weight before and it didn't work.

___ No, it's too much work.

___ No, it's a big change.

___ Yes, I did it before, but I went back to my usual diet and I still have pain.

___ No, because it seems so complicated.

___ Yes, but I don't think I can afford different foods.

___ No, because I can't afford it.

___ Yes, but my family doesn't want to eat different foods.

___ No, because my family does not want to eat different foods.

Notes for your doctor or other health provider about your answer:

MY PERSONAL PLAN

When will I next see my health care provider? _____

What do I want to achieve by the time I see my provider again?

What is 1 change I plan to make:

This Week:

This Month:

This Year:

FOR FURTHER READING:

- [How Healing Works](#) (2018) by Dr. Wayne Jonas
- [A Guide to Optimizing Treatment through Integrative Health for People Living with Pain](#)
- [Women & Pain: Taking Control and Finding Relief](#)
- [Journaling resource](#)
- [Healthy Food, Healthy Mind, Healthy Lifestyle, Healthy You](#)

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Dr. Jonas is a practicing family physician, an expert in integrative health and health care delivery, and a widely published scientific investigator. Dr. Jonas is the Executive Director of Samueli Integrative Health Programs, an effort supported by Henry and Susan Samueli to increase awareness and access to integrative health. Additionally, Dr. Jonas is a retired lieutenant colonel in the Medical Corps of the United States Army. From 2001-2016, he was president and chief executive officer of Samueli Institute, a nonprofit medical research organization supporting the scientific investigation of healing processes in the areas of stress, pain, and resilience.

Dr. Jonas was the director of the Office of Alternative Medicine at the National Institutes of Health (NIH) from 1995-1999, and prior to that served as the Director of the Medical Research Fellowship at the Walter Reed Army Institute of Research. He is a Fellow of the American Academy of Family Physicians.

His research has appeared in peer-reviewed journals, such as the *Journal of the American Medical Association*, *Nature Medicine*, *Journal of Family Practice*, *Annals of Internal Medicine*, and *The Lancet*. Dr. Jonas received the 2015 Pioneer Award from the Integrative Healthcare Symposium, the 2007 America's Top Family Doctors Award, the 2003 Pioneer Award from the American Holistic Medical Association, the 2002 Physician Recognition Award of the American Medical Association, and the 2002 Meritorious Activity Prize from the International Society of Life Information Science in Chiba, Japan.

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To access more information on integrative health, including tools and resources for patients and providers, visit DrWayneJonas.com

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