Eat and Drink for Your Health

What you eat and drink is important to your health. Nutritious foods and fluids can help you feel well and prevent illness and disease, including certain cancers.

Healthy nutrition is important if you are going through treatment after a cancer diagnosis or are a cancer survivor.

This information is supported by evidence from research. It includes recommendations that you can make to optimize the nutrition you give your body. Learning about healthy ways to nourish your body can help you have an active role in choosing what is best for you.

However, this information does not include everything there is to know about nutrition. Keep in mind, ongoing medical research may change this information.

If you have any questions about nutrition for cancer prevention or about nutrition during or after cancer treatment, talk with your health care provider or a dietitian who is knowledgeable about the best nutrition advice.

Today and beyond, focus on eating foods and drinking fluids that benefit your body and mind.

A note about exercise

In addition to healthy nutrition, research shows that exercise is a powerful tool against cancer. People who exercise for at least 30 minutes a day, at least five days a week, are less likely to get cancer.

Exercise also improves cancer outcomes and the physical side effects of cancer treatment. Exercise also lowers the risk of cancer coming back.

If you already exercise, keep exercising. If regular exercise or physical activity has not been a part of your personal care, now is a great time to start. Talk with your health care provider about getting started.
Start With the Basics

Sometimes, information about nutrition and finding the “best diet” can be overwhelming. While there is no “one size fits all” diet for people, there are basic and practical guidelines for eating a healthy, nutritious and powerful anti-cancer diet.

Use the following framework, which supports healthy nutrition. By eating healthy most of the time, you occasionally can work into your eating plan something that is outside the framework. This may be a restaurant meal, foods at a social event or a special dessert.

**Eat whole foods**

Whole foods are those that come closer to the way they are in nature. Whole foods retain more of their original healthy nutrients, fiber, phytonutrients and antioxidants than processed foods.

Research shows that people who follow a whole-food diet have less inflammation throughout their body. Ongoing inflammation in the body has been shown to increase cancer risk.

By eating whole foods, you eat foods that are as close as possible to their natural form, without additives or preservatives. An example is a baked potato and potato chips. A baked potato is a vegetable rich in fiber and vitamins. Potato chips are processed from their original form with added fat and salt. Most of the nutrition from a potato is removed when it is made into potato chips.

If you purchase processed foods, it is important to read the ingredients list on the package. The fewer the ingredients, the better.

Eating whole foods is strongly recommended over taking supplements of concentrated, individual vitamins, minerals or other substances. The American Institute for Cancer Research (AICR) recommends choosing a balanced diet with a variety of foods rather than taking supplements.
**Eat a plant-based diet**

Research shows a plant-based diet lowers the risk of developing several types of cancer. Additionally, some studies suggest that eating more vegetables and fruit can lessen the risk of cancer recurrence.

With a plant-based diet, the focus of meals is on plants, not meat. Meals include vegetables, fruits and whole grains. They might not include any meat or only a small amount of meat. The AICR recommends that a meal contain two-thirds plant-based foods such as whole grains, beans and legumes, vegetables and fruits.

Most fruits and vegetables are low in fat and high in fluid and fiber. If you are trying to lose weight, eating more vegetables and fruits can make you feel fuller without taking in as many calories.

**Eat a variety of vegetables and fruits every day**

Research suggests foods that contain phytonutrients and antioxidants help people live longer and healthier lives. Phytonutrients are known to decrease inflammation in the body and to make the body’s immune system stronger. Antioxidants protect cells from damage. Eating foods that contain phytonutrients and antioxidants help lower the risk of cancer.

Vegetables and fruits are rich in phytonutrients and antioxidants. They are also excellent sources of fiber, vitamins and minerals. Examples of phytonutrients or antioxidants include:

- **Lycopene.** Found in tomatoes and watermelon.
- **Carotenoids, including beta-carotene.** Found in carrots, sweet potatoes and dark leafy greens.

- **Isothiocyanates and indoles.** Found in cruciferous vegetables including cabbage, Brussels sprouts, broccoli, cauliflower, bok choy, and collard greens.
- **Anthocyanins and ellagic acid.** Found in blueberries, strawberries and blackberries.
The best way to get the health benefits of phytonutrients and antioxidants is to eat at least five servings of vegetables and fruits every day. Eat a variety of types and colors.

While all vegetables are good for you, the isothiocyanates and indoles in cruciferous vegetables are shown to trigger the death of cancer cells in both laboratory and animal studies. A high intake of cruciferous vegetables is linked to a lower risk of cancer of the bladder, breast, colon, endometrium, stomach, lungs, ovaries, pancreas, prostate and kidneys.

**Avoid or limit certain foods and beverages**

Research studies continue to show that eating processed foods and beverages may increase cancer risk. These foods and beverages tend to be high in fat, saturated fat, sugar, salt and additives.

These foods and beverages usually contain a lot of calories. Excess calories from any source can lead to unhealthy weight gain. Too much body fat raises the risk of at least 11 different cancers by increasing insulin resistance, promoting inflammation and boosting estrogen production.

**Sugar and other sweeteners**

There often is concern over sugar and cancer risk. Glucose, the form of sugar that circulates in your blood, is fuel for healthy cells but it also fuels cancer cells. The body does not have a way to keep glucose away from cancer cells and direct it only to healthy cells. Some people suggest that avoiding all sugar can “starve” cancer cells and prevent them from growing.

Big surges in blood sugar can elevate insulin levels. High levels of insulin seem to promote cancer growth. Therefore, overdoing high-sugar foods and beverages can increase the risk of cancer.

Foods and beverages that contain added sugar tend to be highly processed and low in nutrients and fiber. They are linked to chronic diseases.

The health recommendation is to avoid or at least limit foods and beverages with added sugar. Nearly half of added sugar comes from sweetened beverages. Replace sweetened beverages with water, plain tea, coffee, low-fat milk, or unsweetened plant milk. Infuse water with berries, citrus fruit or cucumber. Swap sugary desserts and sweets with nutrient-rich fruit, nuts, vegetables or humus.
Processed foods and beverages

Processed foods and beverages are those changed from their original whole-food state or those things that are made in a factory. Heavily processed foods typically contain many additives and preservatives that are added to improve taste or prevent spoilage. They also are less nutritious than whole foods. And they tend to be high in calories, sodium, sugar and unhealthy fats.

An example of a processed food is processed meat, such as bacon, sausage, hot dogs and deli meats. These meats are salted, cured, fermented or smoked.

The American Institute for Cancer Research (Cancer Update Project) lists processed meats as a cancer-causing agent for colorectal cancer. Studies also suggest that processed meat may increase the risk of breast cancer.

The health recommendation is to avoid or at least limit processed foods and beverages. Replace them with healthier, natural whole-food alternatives.

Alcohol

Alcohol use increases the risk of cancer of the mouth, larynx, esophagus, liver, breast and colon. Even low to moderate alcohol intake has been linked to cancer. The type – beer, wine or liquor – does not make a difference.

For cancer prevention, the health recommendation is to avoid alcohol. If you do drink alcohol, limit intake to no more than one drink a day for women and no more than two drinks a day for men. A standard size drink is 12 ounces of beer, 1.5 ounces of liquor or 5 ounces of wine.
Do you know what makes up a nutritious diet? If you are not certain, you are not alone. A nutritious diet includes nutrients that help your body and brain work well.

The two types of nutrients are macronutrients and micronutrients. The best way to get needed nutrients is by eating a variety of vegetables, fruits, beans, whole grains, healthy fats and lean proteins.

The following information explains these nutrients and how they help your body. Examples of foods that contain the nutrients also are given.

**Macronutrients**

Macronutrients are carbohydrates, fiber, proteins/amino acids, fats and water. Carbohydrates, proteins/amino acids and fats provide the energy your body needs to function. Think of them as fuel for your body.

**Carbohydrates**

Carbohydrates have glucose, or sugar, that the body can use for energy. The healthiest sources of carbohydrates are vegetables, fruits, unprocessed whole grains and beans. The body digests these whole foods more slowly than it does for carbohydrates that are processed or refined. These whole foods also tend to have more micronutrients that help the body.

For your health, avoid or limit carbohydrates that are processed or refined.
Fiber
Fiber is a type of carbohydrate that your body cannot digest. It passes through the body undigested. This non-digestible fiber acts as food for the good bacteria in the colon and helps fight disease. Eating foods with fiber also helps regulate bowel movements and keeps hunger and blood sugar in check.

**Eat at least 30 grams or more of fiber every day.** Good sources of fiber are vegetables, fruits, beans and legumes, nuts, seeds and whole grains. If you have not been eating a diet high in fiber, it is best to add fiber gradually to avoid gastrointestinal upset.

Proteins/amino acids
Protein is essential for your muscles and cells. Some studies show that eating a healthy amount of protein helps with cancer survival. The Institute of Medicine recommends that 10 to 35 percent of daily calories should come from protein.

Choose proteins that are low in saturated fat. Plant sources include beans, legumes, nuts and seeds. Animal sources include fish, poultry, lean meats and eggs.

Do not eat burnt or charred meat, fish or poultry. When meat, poultry or fish is cooked over very high temperature, the muscle proteins react with the heat to form a cancer-causing chemical that can change your DNA. This increases the risk of cancer of the breast, colon, prostate, pancreas and stomach.

Fats
Fats are essential for many body functions, including building cell membranes and preventing inflammation. They also are an important energy source for the body. Fats supply more energy than carbohydrates.

Some fats are healthier for your body than others. The following is an overview of types of fats.
**Monounsaturated fats and polyunsaturated fats (omega-3 and omega-6 fatty acids)**

Make monounsaturated fats and polyunsaturated fats the majority of fat in your diet.

Sources of monounsaturated fats include olive oil and olives, peanut oil, nuts and avocados. Monounsaturated fats may reduce the risk of heart disease and diabetes. Olive oil has been linked to a lower risk of developing cancer.

Sources of omega-3 polyunsaturated fats include fatty fish such as salmon, sardines and mackerel. Vegetable sources include flaxseeds, chia seeds and walnuts. Omega-3 fatty acids decrease inflammation in the body and make the body’s immune system stronger.

Research suggests that omega-3 fatty acid supplements may reduce the risk of cancer of the colon, kidneys and breasts. Laboratory studies suggest omega-3 fatty acids, specifically DHA and EPA, may make some cancer therapies more effective and tolerable.

Research also shows omega-3 fatty acids improve overall well-being and may reduce peripheral neuropathy, a common side effect of chemotherapy.

Vegetable oils, such as safflower, soybean, sunflower and corn, contain omega-6 fatty acids. Many processed foods also contain omega-6 fatty acids. Growing evidence suggests that it is important to eat more omega-3 fatty acids than omega-6 fatty acids. Some studies show that those who eat more omega-3 than omega-6 have a lower risk of developing cancer. Having some omega-6 fat is fine, but having too much can promote inflammation and chronic diseases.

**Saturated fats**

Saturated fats are in animal products such as meat and dairy. Coconut oil and palm kernel oil come from plants, but they are saturated fats. They are in many processed foods.

Having a diet high in saturated fats may increase the risk of developing certain types of cancer. Therefore, limit your intake of saturated fats. Adopt a plant-based diet, avoid processed foods, and eat fewer animal products such as red meat, and avoid high-fat dairy products.
**Trans fats**

Processed foods, such as snack foods, margarine and pre-packaged baked goods, often have trans fats or hydrogenated oils. Trans fats are usually listed on a food label as “partially hydrogenated oil.” Although they are unsaturated, trans fats behave like saturated fat in the body.

Do not eat foods that have trans fats or hydrogenated oils. Trans fats cause inflammation and contribute to insulin resistance. They are considered to be a major cause of chronic disease. The small amount of trans fats that comes from natural sources is not thought to hurt health.

**Water**

Water is essential for helping your body function. For example, water carries nutrients to cells and helps get rid of waste products. Every day, your body loses at least two cups of water, mainly through urine and sweat.

On average, adults need eight to 12 cups of water every day. You need more when you exercise or if you live in a warm climate.

Your body absorbs water from beverages and water-rich foods such as vegetables and fruits. Drink water instead of sweetened beverages, soda or fruit juice.

If the water supply where you live is unsafe, drink bottled water. If you live in a home with old plumbing, and the tap has been off for more than six hours, let the tap water run for one to two minutes before drinking. Harmful minerals, such as lead, can leak and contaminate drinking water. If you have well water, have it tested each year to see if it is safe for consumption.

Research does not show that alkaline water improves cancer outcomes. Your body strives to maintain balanced acid base in the blood. The pH of your body is tightly regulated by your respiratory system and kidneys. Therefore, drinking alkaline water will not change this complex body process.
Micronutrients

Micronutrients are vitamins and minerals. Micronutrients are needed for metabolism, brain function, hormone production, cell function, bone and skin health, and immune response. It is best to get vitamins and minerals from foods rather than supplements.

While all vitamins and minerals are important, the following vitamins and minerals are important for recovering from cancer or helping to prevent cancer.

Calcium

Calcium is the most abundant mineral in the body. It is critical for many functions, including bone development and maintenance, blood pressure regulation, muscle contraction and blood clotting.

Incorporate calcium-rich foods into your daily diet. Good sources of calcium include low-fat milk, low-fat yogurt, cheese, soybeans, tofu, cauliflower, broccoli and leafy greens such as cabbage, kale, spinach and bok choy. Unless you are told otherwise by your health care provider, it is recommended to eat three servings of calcium-rich food each day.

Selenium

Selenium is an essential mineral that protects cells and DNA. Studies suggest maintaining a normal selenium level in the body may reduce the risk of cancer of the prostate, lungs, gastrointestinal tract and bladder.

It is not recommended to take a selenium supplement. Some research shows that selenium supplements may increase the risk of aggressive and secondary cancers.

Instead, get your recommended daily intake of selenium from whole grains, nuts, poultry, meat and seafood.
**Vitamin A**

Vitamin A consists of a group of nutrients called retinoids. They support healthy vision, skin, mucous membranes, bone growth, and cell growth and maintenance.

Two forms of vitamin A are in foods: performed vitamin A, which is in animal products, and provitamin A (beta-carotene), which is in orange, yellow or red vegetables and fruits.

Excess vitamin A from animal products can be toxic. It is recommended to eat vegetables and fruits high in beta-carotene each day.

It is fine to take a multivitamin that contains 100 percent of the recommended daily allowance (RDA). But do not take more than this a day and do not take a beta-carotene supplement, as this can be harmful.

**Vitamin C**

Vitamin C is an antioxidant that helps protect against free radical damage that can lead to cancer. Vitamin C also is vital to the formation of collagen, a protein found in skin, tendons, bones and teeth.

Research shows that getting vitamin C from food or supplements has many health benefits. Some foods that contain vitamin C include guava, oranges, kiwi, strawberries, green peppers, red peppers, hot peppers and broccoli.

More research is needed for IV vitamin C therapy for cancer. While vitamin C given by IV may offset side effects of treatment and symptoms, it does not appear to impact other cancer outcomes.
Vitamin D

Vitamin D is needed for building and maintaining healthy bones and teeth. This is because calcium, the primary component of bone, can only be absorbed by your body when vitamin D is present. Vitamin D also regulates phosphorus levels and supports the immune system. Having a healthy level of vitamin D in the body also lowers the risk of cancer.

Your body makes vitamin D when direct sunlight converts a chemical in your skin into an active form of the vitamin (calciferol). About 10 minutes of mid-day sun exposure a day may be enough to prevent vitamin D deficiency in some people. Vitamin D also is in trout, salmon, tuna, halibut, sardines, egg yolks, and fortified products such as milk, yogurt and cereals.

Talk with your health care provider about having a blood test to measure your vitamin D level. If needed, you may need to take a vitamin D3 supplement to reach a healthy level of vitamin D in your body. A standard daily vitamin D3 dose is between 600 and 2,000 international units (IU). Taking more vitamin D than what is recommended can be harmful to the body.
Other Helpful Foods

In addition to the many health benefits of vegetables and fruits, ongoing research shows that other foods may be good for your health.

**Seeds**

Seeds are rich in fiber, micronutrients and phytonutrients. Adding them to your diet is a healthy step. Add seeds to any meal, from salads to smoothies. Or eat them on their own. Seeds include:

- **Flaxseed.** Flaxseed is an excellent source of plant-based omega-3 fatty acids and fiber. Flaxseed is rich in lignans, which may help fight cancer.

  Based on research, it is recommended to eat one to four tablespoons of ground flaxseed a day. The body can only absorb nutrients from ground flaxseed, not whole. Add ground flaxseed to oatmeal, smoothies and soups.

  Drink plenty of water while taking flaxseed. Flaxseed may interfere with prescription medication absorption, so do not take prescription medications at the same time as flaxseed. If you have a history of bowel obstruction, talk with your health care provider to make sure flaxseed is right for you.

- **Hemp seeds.** Hemp seeds are an excellent source of plant-based protein. They also are a source of healthy omega-3 fatty acids.

- **Chia seeds.** Chia seeds are an excellent source of omega-3 fatty acids, fiber, copper, iron, manganese, selenium, calcium and zinc.

- **Pumpkin seeds.** Pumpkin seeds are an excellent source of magnesium, copper and manganese.

- **Sunflower seeds.** Sunflower seeds are an excellent source of copper, magnesium, selenium, vitamin B1 and vitamin E.

**Green tea**

Green tea contains the antioxidant epigallocatechin-3-gallate (EGCG). Laboratory studies show green tea may lower the risk of cancer and cancer recurrence. Green tea also may help lessen side effects of certain cancer therapies. However, patient studies are inconsistent regarding these benefits. It seems genetics may play a role as to why some people benefit and others do not.

If you are sensitive to the effects of caffeine, consider selecting decaffeinated varieties. When drinking green tea, do not add sugar or other sweeteners.

It is better to gain the possible benefit from green tea by drinking it. Oral EGCG supplements have been shown to cause liver toxicity.

While black tea is made from the same plant as green tea, it has not been linked to cancer benefits. White tea has the highest level of antioxidants but has not yet been studied in cancer research.
Foods and Drinks to Consider

**Citrus (limonene)**

Citrus peel or the oil concentrated in it is promoted as a cancer treatment. In a small study, the chemical limonene found in lemon oil was tested. While limonene showed positive results for its effect on cancer, there is not enough evidence yet to make limonene a standard part of cancer treatment.

**Dairy**

Research results are mixed regarding dairy consumption and cancer risk. Some studies show eating yogurt and low-fat dairy products lowers the risk of developing cancer. Other studies suggest that high-fat dairy consumption is linked to increased rates of death from any cause, including cancer, and a risk of cancer recurrence. However, once a person has cancer, it can be difficult to separate the effects of dairy and the effects of fat consumption overall. Low-fat dairy is an important part of your diet and a great source of calcium.

**Juicing**

While eating whole vegetables and fruits is best, juicing them is a way to get their nutrients if you do not eat them whole. Juicing pulls out the liquid from fruits and vegetables. The juice has most of the plant’s vitamins, minerals and phytonutrients.

However, the juice is concentrated, which means it may be high in sugar and calories, which can cause weight gain. Unlike eating whole fruit and vegetables, juice does not contain much fiber, which can cause you to feel less full than if you ate the same food. As a result, you may consume more calories.

Juice also can increase levels of insulin and insulin-like growth factor (IGF-I) in your body. This may stimulate cancer cell growth.

A better option than juicing is to blend whole vegetables and fruits into smoothies or to eat the whole fruit or vegetable.
**Mushrooms**

Laboratory studies show that certain types of mushrooms may have anti-cancer effects. These mushrooms include shiitake, reishi and maitake. Research suggests that certain molecules in these mushrooms strengthen the immune system, and thereby slow tumor growth.

However, more research is necessary. Some mushrooms can increase the risk of bleeding and make some chemotherapy medications less effective. They also can increase the side effects of some medications.

If you use mushrooms in recipes, cook them. Do not eat them raw.

The safety of mushroom supplements is not known. Tell your health care provider if you take a mushroom supplement.

**Soy**

Soy contains protein, fiber, calcium and B vitamins. Whole soy also has isoflavones, a plant-based compound with estrogen-like activity. Studies show that eating whole soy may lower the risk of cancer coming back.

The American Institute for Cancer Research notes that having up to 50 milligrams of soy isoflavones a day, about one to two servings of whole soy foods, may decrease cancer risk. Consuming whole soy products is considered safe even for women with a history of breast cancer or who are at risk for developing breast cancer. Healthy sources of whole soy include soybeans, edamame, tofu, soymilk, tempeh, miso and soy nuts.

Consuming more than 75 milligrams of soy isoflavones a day, about three servings, is not recommended.

Do not use supplements containing soy isoflavone extracts or soy isolates. Soy isolate is in many soy supplements, powders, bars and meat alternatives.
Supplements to Consider

Dietary supplements are vitamins, minerals or botanical substances. Many people, including cancer survivors, take supplements. Some people take them to ensure they get enough nutrients. Others take them to help ward off illness.

A supplement should add to your dietary intake of nutrients, as supplements rarely replace nutrients. Also, keep in mind that just because a supplement is natural does not mean it is safe. Using some supplements can cause unwanted side effects and lessen the effect of some prescribed medication, including chemotherapy and radiation.

**Multivitamins**

A multivitamin is a general term for a tablet that combines several vitamins and minerals. Taking a multivitamin is important if you cannot get enough nutrients from food. This can happen if you are not eating a variety of foods, have a problem with digestion or absorption, or take certain medications.

Talk with your health care provider about whether taking a multivitamin is right for you. A dietitian can determine if your diet is adequate or may be lacking in certain vitamins or minerals.

A multivitamin should contain close to 100 percent of the recommended daily allowance (RDA). It should not contain excessive doses of vitamins or minerals. A multivitamin with at least 400mcg folic acid is recommended for women who are or could become pregnant.

Multivitamins likely do not increase or decrease the risk of cancer. They may be useful if your diet or appetite has decreased due to cancer treatment. Do not take multivitamins with high doses of antioxidants during cancer treatment, especially radiation.

**Antioxidants**

Antioxidant supplements often include vitamins A, C, or E and selenium. While antioxidant supplements have been promoted and shown to reduce cancer treatment side effects, they also can reduce the treatment’s strength and effect on cancer. For this reason, do not take antioxidant supplements during chemotherapy or radiation unless a member of your cancer care team or pharmacist says you may do so.

Additionally, vitamin E supplements and high dose beta-carotene or vitamin A supplementation may increase the risk of some cancers and death. It is safest to receive antioxidants from foods.
Botanicals to Consider

Botanicals are from plants. They can be dried or fresh, part of a plant, or a plant’s chemical component. They can be herbs, spices, extracts, or dietary supplements.

The following information explains common botanicals and what you may want to consider about them.

**Lycopene**

Lycopene is a pigment that plants make. It is an antioxidant that neutralizes free radicals in the body, which protects cells from damage.

Research suggests that lycopene-rich foods reduce the risk of developing cancer. Since lycopene-rich foods have other nutrients, such as vitamin C and potassium, more research about the benefits of lycopene alone is needed.

The health recommendation is to eat foods rich in lycopene such as cooked tomatoes, watermelon and pink grapefruit. Lycopene supplements are not recommended.

**Curcumin (turmeric)**

Curcumin is a plant-based phytonutrient that has anti-oxidant, anti-inflammatory and potentially anti-cancer properties. Curcumin is in the spice turmeric.

While there is great interest in using curcumin for those with a history of cancer, science has yet to show clear clinical benefits. Laboratory studies show curcumin stops the growth of cancer cells. But since the body quickly breaks down curcumin, making it hard to study, researchers are not certain curcumin can do the same in the body.

There are no specific recommendations for curcumin beyond cooking with the spice turmeric. The safety of using curcumin during chemotherapy is not known. Therefore, do not use curcumin during chemotherapy unless a member of your cancer care team or pharmacist says you may do so.

**Resveratrol**

Resveratrol is a plant-based phytonutrient that has anti-oxidant, anti-inflammatory and potentially anti-cancer properties. Resveratrol is in many foods including berries, grapes and peanuts.

While there is great interest in using resveratrol to treat or prevent cancer, more research is needed to show how it affects those with a history of cancer. Laboratory studies show resveratrol stops the growth of cancer cells. But since the body quickly breaks down resveratrol, making it hard to study, researchers are not certain resveratrol can do the same in the body.

There are no specific recommendations for resveratrol beyond eating a phytonutrient-rich, plant-based diet.
Other Things to Consider

Pesticides

Research studies have not shown a clear link between pesticides and the development of cancer. However, many people are concerned about pesticides on food and their potential effect on health.

To reduce exposure to pesticides, wash all fresh produce. Produce suspected to be most contaminated with pesticides include strawberries, spinach, nectarines, apples, grapes, peaches, cherries, pears, tomatoes, celery, potatoes and sweet bell peppers.

Tips for washing produce

- For unpackaged produce or produce that is packaged but not labeled as washed:
  - Rinse it with cold water. You do not need soap or produce wash.
  - Use a small brush for produce with rough or tougher skin.
- Wash produce before you cut it.
- Peel away the outer leaves of leafy vegetables.
- Peel vegetables when possible.

Organic foods

Products designated as organic by the U.S. Department of Agriculture (USDA) follow certain criteria. They must be produced without conventional pesticides, fertilizers, bioengineering, growth hormones or antibiotics. They also must be produced using practices that conserve natural resources. Most organic foods are nearly free of pesticide and fertilizer residues and antibiotics and hormones that do not occur naturally.

Organic food has not been shown to prevent cancer. It is a personal choice. Much more research is needed to study the relationship between organic food and cancer. Current data relies on consumers to self-report, which is prone to error.

Organic produce should be washed before eating since it still may contain allowed organic pesticides and bacteria.
**Plastics and BPA**

Plastics are made from organic and inorganic compounds. Bisphenol-A (BPA) is a plasticizer. Some research shows that the BPA in containers can seep into food or beverages. In the body, BPA acts as a synthetic hormone that mimics estrogen.

Based on hundreds of studies, the U.S. Food and Drug Administration (FDA) regards BPA as generally safe at very low levels. Nevertheless, many people choose to avoid it.

**Ways to reduce your BPA exposure**

- Use glass or stainless-steel containers.
- Purchase BPA-free containers.
- Avoid heating plastic in the microwave or washing it in the dishwasher. Plastic may break down over time and allow BPA to leak into foods.
- Do not use or buy cans lined with plastics, including BPA.

**Eating out**

Many people dine out to be social and to relax. But this can challenge a healthy eating plan and your weight. You may have less control over ingredients and portion size at restaurants.

If you eat out often and struggle with maintaining a healthy weight, start by substituting one or two restaurant meals a week with healthy, plant-based meals you make at home.

When you do eat out, choose a restaurant that focuses on fresh ingredients and has heart-healthy and lower-calorie options. Whenever possible, select a restaurant that allows you to customize your meal. Most of your meal should be vegetables, in addition to a healthy protein such as legumes, wild-caught fish, or poultry.

To help with portion control, eat only half of a restaurant entrée and take the other half home.

Do your best to avoid eating fast food.
**Weight management**

Being overweight is linked to a higher risk of developing certain types of cancer. Maintaining a healthy weight improves cancer outcome and reduces the risk for cancer to progress or come back again.

During treatment, focus on eating as healthy as you can with a goal to maintain weight and muscle. Consume calories from nutrient-rich foods and remain physically active. If you do not know how many calories you need, talk with a dietitian who can determine what is right for you.
Mrs. Lips, a resident of San Antonio, Texas, was a loyal Mayo Clinic patient of more than 40 years and a self-made business leader who significantly expanded her family's activities in oil, gas and ranching. Upon her death in 1995, Mrs. Lips paid the ultimate compliment by leaving her entire estate to Mayo Clinic. By naming the Barbara Woodward Lips Patient Education Center, Mayo honors her generosity, her love of learning, her belief in patient empowerment and her dedication to high-quality care.