AICR’s Recommendations for Cancer Prevention

- Be as lean as possible without becoming underweight
- Be physically active for at least 30 minutes every day. Limit sedentary habits, like watching television.
- Avoid sugary drinks. Limit consumption of calorie-dense foods (particularly processed foods high in added sugar, or low in fiber, or high in fat)
- Eat more of a variety of vegetables, fruits, whole grains and beans
- Limit consumption of red meats (such as beef, pork and lamb) and avoid processed meats
- If consumed at all, limit alcoholic drinks to 2 for men and 1 for women a day
- Limit consumption of salty foods and foods processed with salt (sodium)
- Don’t use supplements to protect against cancer

Special Population Recommendations

- It is best for mothers to breastfeed exclusively for up to 6 months and then add other liquids and foods
- After treatment, cancer survivors should follow the Recommendations for Cancer Prevention

And, always remember—do not smoke or chew tobacco
Eat Well to Reduce Your Cancer Risk

Table of Contents

Reduce your cancer risk. 2
Put plant foods first. 4
Eat more for fewer calories. 10
Cut down on heavily processed foods. 14
Reshape your plate. 21
Cook in healthier ways. 22
Need more help? 25
About AICR 27

Healthy Living for Cancer Prevention Series
Did you know that besides not smoking, other lifestyle choices—like healthy eating—may decrease your risk of developing cancer? This booklet is about simple dietary changes you can make today.

More than 1 in 3 Americans will develop cancer at some point during their lives. You might know someone who has been affected by cancer or perhaps you are a cancer survivor.

That’s why AICR is working toward preventing as many cases of cancer as possible.

Although there are no guarantees, research shows that by eating healthy food, being physically active every day and maintaining a healthy weight, we could prevent about one-third of the most common cancers. Add not smoking and we could cut the number of cancer cases in half.

The science is clear: making healthy changes at any time in life, from childhood to old age, will help to reduce your risk. So why wait?

Start today!
Why wait? It’s never too late to make healthy changes and lower your cancer risk.
Eat well for life

On the following pages, you will find practical information about how to eat healthfully to help reduce your cancer risk.

This advice is based on our 10 Recommendations for Cancer Prevention found on the inside cover of this brochure. You can find out more about our Recommendations in our companion brochure, 10 Ways to Reduce Your Cancer Risk. See page 25 for how to order or download a free copy.
Put plant foods first

Choosing mostly plant foods in your diet is the first step to eating well and reducing risk of cancer.

What are plant foods?

Plant foods fit into these main categories: vegetables, fruits, whole grains, beans, nuts and seeds. It is best to choose these foods more often.

Why choose plant foods?

- Many plant foods are low in calories (see page 13), so they can help you to have a healthy weight.
- Eating a wide variety of plant foods provides vitamins, minerals, fiber and phytochemicals, which help protect our cells from damage that may lead to cancer.

What are phytochemicals?

Phytochemicals are natural compounds that may help protect cells in the body from damage that can lead to cancer. Scientists are discovering hundreds of these compounds in all kinds of plant foods that work together in a variety of ways to fight disease, including acting as antioxidants, to keep your cells healthy. That's why it's good to eat a variety of colorful plant foods every day to get a mix of different phytochemicals.
Whole grains *(eat more, replacing refined grains)*
- Choose brown or wild rice, oats, whole-wheat pasta and whole-wheat bread, bulgur, barley, quinoa, etc.

Dry beans and legumes *(eat more, replacing high-fat meats)*
- Try split peas, lentils, chickpeas, pinto, kidney and other beans.

Vegetables and fruits *(eat more)*
- Eat non-starchy vegetables—including leafy greens, tomatoes, broccoli, cauliflower, summer squash and carrots. Use fresh, frozen (plain, no sauces) and canned (with no added salt).
- Eat fruits that are fresh, frozen, canned (in water, juice or light syrup) and dried.
- Eat at least a 3 ½-6 cups per day.
- Limit juice to 6 ounces daily and choose 100 percent vegetable or fruit juice rather than juice blends made with sweetened water.

Refined, non-whole-grain foods *(eat less)*
- Limit white bread, white rice and white-flour pasta.
  These foods are less nutritious and less filling than the whole-grain versions.
Focus on fiber
Dietary fiber occurs naturally in plant foods (and not in animal foods). Our most recent research update on colorectal cancer found strong evidence that plant foods containing dietary fiber decrease the risk of this cancer. These foods include vegetables, fruits, dry beans and whole-grain breads and pasta, brown rice and oats.

Fiber has many health benefits, including moving food through our digestive system more quickly.

Benefits from beans
Dry beans and lentils are a quick and easy source of protein. They are low in fat and high in fiber, vitamins and minerals. They leave you feeling fuller for longer, which helps you stay in shape and be a healthy weight.

Research shows that vegetables and fruits protect against a number of cancers, including:

- esophagus
- mouth
- stomach
- larynx
- pharynx

SCIENCE
Vegetables and fruits: 3½-6 cups a day

Eating at least 3½-6 cups of vegetables and fruits a day is an important step toward eating a cancer-fighting diet. Choose mostly vegetables that are not fried or do not have lots of added fat, and fruits without added sugar.

<table>
<thead>
<tr>
<th>What Does a Healthy Portion Look Like?</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chopped Vegetables</td>
<td>1 cup</td>
<td>1 baseball or rounded handful for average adult</td>
</tr>
<tr>
<td>Raw Leafy Vegetables (such as lettuce or baby spinach)</td>
<td>2 cups</td>
<td>2 baseballs or 2 fists for average adult</td>
</tr>
<tr>
<td>Sweet Potato</td>
<td>1 cup cooked</td>
<td>1 medium = 1 baseball</td>
</tr>
<tr>
<td>Fresh Fruit (such as small apple or 6-inch banana)</td>
<td>½ cup</td>
<td>1 small piece = ½ baseball or rounded handful for average adult</td>
</tr>
<tr>
<td>Dried Fruit</td>
<td>¼ cup</td>
<td>scant handful for average adult</td>
</tr>
</tbody>
</table>

Find out more about cancer-fighting foods at [www.aicr.org/foodsthatfightcancer](http://www.aicr.org/foodsthatfightcancer)
If eating at least 3½ cups a day sounds like a challenge, why not start by adding just one more portion of fruits or vegetables to your meals?

<table>
<thead>
<tr>
<th>Time</th>
<th>Meal</th>
<th>Portion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>Bowl of breakfast cereal</td>
<td>+</td>
</tr>
<tr>
<td>Lunch</td>
<td>Tuna sandwich</td>
<td>+</td>
</tr>
<tr>
<td>Snack</td>
<td>Low-fat yogurt</td>
<td>+</td>
</tr>
<tr>
<td>Dinner</td>
<td>Bowl of chili</td>
<td>+</td>
</tr>
</tbody>
</table>
You’ll be surprised how quickly extra portions can add up.

**And...**

1. 1 small banana + 6 oz. of 100% fruit juice  = 1½ cups

2. Tomato + lettuce = ½ cup

3. ½ cup fresh fruit = ½ cup

4. 1 cup carrots + ½ cup green pepper = 1½ cups

**TOTAL: 4 CUPS**
Eat more for fewer calories

By eating foods that are less concentrated in calories most of the time, you can enjoy tasty and satisfying meals that help you stay a healthy weight.

Maintaining a healthy weight is one of the most important ways to reduce cancer risk.

**What is calorie density?**

Food provides us with energy (calories). But some foods contain more calories bite-for-bite than others. They are known as calorie-dense foods. They tend to be high in fat and/or sugar.

**Why is calorie density so important for cancer prevention?**

When you eat too many calorie-dense foods, particularly processed foods high in sugar and/or fat, your risk of becoming overweight or obese increases.

Being overweight or obese means a higher risk of cancer and other diseases.
<table>
<thead>
<tr>
<th>Food Change</th>
<th>Equivalent Substitutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium bagel with butter</td>
<td>2 cups of fruit salad + ½ turkey sandwich OR whole-wheat roll and 2 Tbsp of peanut butter + large fruit salad</td>
</tr>
<tr>
<td>1½ ounces of cheese</td>
<td>1 cup of carrots + ¼ cup of hummus OR 1 cup of plain yogurt with ½ cup of chopped fruit or berries</td>
</tr>
<tr>
<td>Medium portion of French fries</td>
<td>1 medium baked potato and small bowl of chili</td>
</tr>
<tr>
<td>1 cup of white pasta with cream sauce</td>
<td>1 cup of whole-wheat pasta with veggie sauce + side salad + small scoop of sorbet</td>
</tr>
</tbody>
</table>
Eat Well to Reduce Your Cancer Risk

Low-calorie density

High-calorie density
How to spot calorie-dense foods*

**Very Low Calorie-Dense Foods**
- Includes most fruits and vegetables and broth-based soups.

**Low Calorie-Dense Foods**
- Includes many cooked grains, breakfast cereals, beans and legumes, low-fat mixed dishes and salads.

**Medium Calorie-Dense Foods**
- Includes breads, meats, cheeses, high fat mixed dishes, salad dressings and some snack foods.

**High Calorie-Dense Foods:**
- Includes crackers, chips, chocolate candies, cookies, butter and oil, bacon and full fat mayonnaise.

Cut down on heavily processed foods

Foods that have been manufactured or greatly altered from their original forms are heavily processed. Examples are cookies, refined sugary cereals, candy, chips, chicken nuggets and sausage.

When these types of foods are made, water, fiber and nutrients are lost and extra fat, salt and sugar are often added. The extra fat and sugar make the food more calorie-dense. Eating just a small amount of these foods can provide a lot of calories without making you feel full.

Aim for less salt

Too much sodium can increase our risk of stomach cancer as well as high blood pressure. On average, Americans consume 3,300 mg of sodium daily—mainly from processed foods. Limit how much you eat to 2,300 mg or less per day. Look for lower sodium options by checking the Nutrition Facts label.

Where does the salt we eat come from?

75% comes from processed foods like prepared meals, many canned foods, potato chips and processed meats as well as bread and cheeses. 25% is added during cooking or at the table.
Read the Nutrition Facts label on food packages

Foods labeled “natural” by manufacturers are not necessarily less processed, healthier or lower in calories.

Instead, check the Nutrition Facts label starting with line 1. It tells you the size of one serving. Compare it to line 2, which tells you how many servings of that size are in the package.

The other numbers on the label—lines 4 through 18—refer to one serving only. If you eat 2 or 3 servings at one time, you should multiply each of those numbers by 2 or 3.

This label is for a particular brand of macaroni and cheese:
Sugar
No strong evidence links sugar directly with cancer. But eating too much sugar can lead to being overweight, which increases risk of cancer.

Sugary drinks
Regularly consuming sugary drinks—like regular sodas, sweetened iced tea, lemonade, many “energy drinks” and juice drinks—contributes to weight gain. It’s best to trade sugary drinks for healthier alternatives. Water is always the best choice, but unsweetened tea and coffee can also be good options.

Fat
As with sugar, there’s no strong evidence linking the fat in our diets directly with cancer. However, it can be easy to overeat if your diet contains many processed foods high in fat. If you regularly eat more calories than you need, you risk becoming overweight, and being overweight increases risk of cancer.

Our bodies need some healthy fat in our diet to absorb certain vitamins and make us feel full. Choose unsaturated, plant-based spreads and oils including: olive, canola, peanut (and other nut oils) and soybean oil.

Eat foods rich in omega-3 fats like cold-water fish (salmon, tuna and sardines) and flaxseed.

Saturated fat (found in meat, butter and pastry) is linked to heart disease, so limit saturated fat from animal foods and use vegetable oils like olive or canola when possible.

Nuts, seeds and vegetable oils
Nuts and seeds are valuable sources of fiber, essential fatty acids and vitamins and minerals. These foods are nutritious but calorie-dense, so limit your portion size.
Make less room for red meat and avoid processed meat

Red meat, like beef, pork and lamb, can be part of a healthy, balanced diet, but you don’t need to eat it every day. Aim to eat no more than 18 ounces, cooked (24 ounces raw), a week. Eating more than this increases your risk of colorectal cancer.

Make several of your weekly meals red meat-free. You can still enjoy red meat a few times a week and eat less than 18 ounces.

Here are some average portion sizes:

- Medium steak = 5 ounces of red meat
- Pork chop = 2.6 ounces of red meat
- Spaghetti sauce with ground beef = 3 ounces of red meat
- Serving of roast lamb = 3 ounces of red meat
- A deck of cards = 1 portion

What about processed meat?
Processed meat has been preserved by smoking, curing, salting or adding preservatives. Eating processed meat is also a cause of colorectal cancer. It’s best to avoid it and choose unprocessed meat.
Some of the most common processed meats include:

- bacon
- sausage
- ham
- salami
- pastrami
- bologna (and other lunch meats)
- pepperoni
- hot dogs

Appetizing alternatives

- Trade red meat for lean poultry like skinless chicken or turkey.
- Replace some or all of the meat in stews, casseroles, chilis and pasta sauces with beans or lentils.
- Serve fish a couple of times a week – filets are quick to prepare.
- Canned fish such as tuna, salmon and sardines are inexpensive and make great sandwich fillings.
- Instead of salami or sausage try fresh, roasted poultry, fish, bean spreads (like hummus) or nut butters.
- Try homemade bean burgers, falafels or fishcakes.
What about other animal foods?

Fish
Fish is a healthy choice—aim to eat it regularly.

Poultry
Chicken and turkey are good alternatives to red meat.

Dairy foods
Some evidence shows that foods high in calcium such as milk may protect against colorectal cancer, while other evidence shows that too much of these foods may increase the risk of prostate cancer. There’s not enough conclusive evidence to make a recommendation about dairy foods for cancer prevention.

Dairy foods are an excellent source of nutrients that help keep our bones healthy. To keep calories low, opt for lower fat options like low-fat or skim milk and reduced-fat cheese.

Eggs
Eggs are a good source of protein and can play an important part in a healthy diet when eaten in moderation. They are not linked to increased risk of cancer.

Meat from wild animals
Meat such as rabbit and venison has a different composition from that of animals that are bred for meat. It also tends to be leaner. We do not yet have evidence on which to base a recommendation for wild game red meats and cancer risk.
Reshape your plate

By reshaping what you put on your plate and putting plant foods at the center instead of meat, you can bring a healthier balance to your diet.

AICR’s New American Plate model offers a simple rule-of-thumb for eating a healthy and delicious cancer-fighting diet: Instead of thinking of meat as the focus of your meal, first try to think of the vegetables, whole grains and beans you plan to eat. Then add a smaller portion of meat for flavor.

Fill at least 2/3 or more of your plate with plant foods and 1/3 or less with animal foods like lean meat and low-fat dairy.

Thinking differently about your plate helps to reduce red meat without feeling like you are eating less. It also makes more room for vegetables, fruits and other plant foods that are essential for good health and cancer prevention.

Visit AICR Healthy Recipes, at www.aicr.org.
Cook in healthier ways

The way you prepare and cook food is also important for cancer prevention.

Best bets for healthy cooking

Steaming
Steaming over boiling water retains fresh vegetables’ vitamins, color and texture. Stove-top steamers are inexpensive to buy or just use a saucepan, metal strainer and a lid. No oil is required.

Baking and roasting
Baking and roasting are ideal ways to cook tender cuts of meat, poultry, fish, tomatoes and some vegetables. With these methods, you can use little or no added oil to keep calories lower.

Poaching
Gently poaching in water or fat-free, reduced-sodium broth adds little or no fat and is a healthy method for cooking chicken, fish and eggs.

Microwaving
Microwaving is a good way to cook vegetables and whole grains. Always use microwave-safe cookware (and not plastic wrap or styrofoam).

High-temperature cooking
alters the make-up of foods, especially meat. There is some evidence that eating burned or charred foods increases the risk of cancer.
Grilling
Red meat, chicken, fish and some vegetables can all be grilled. Before grilling you can marinate the food in the refrigerator. To avoid harmful bacteria, discard the marinade from meats before grilling. Let flames die down before grilling to prevent charring.

Stir-frying
Stir-frying is healthy because the food is only cooked for a short time, so it retains its color, flavor and nutrients. Plus, you only need a moderate amount of oil.
Other important healthy diet factors

Alcohol
Even small amounts of alcohol pose some cancer risk. For lowest risk, AICR recommends not drinking alcohol at all. Alcohol increases the risk of these cancers:

- breast
- colon
- esophagus
- larynx
- liver
- mouth
- pharynx

If you do drink alcohol, limit your intake to no more than two drinks a day for men and one drink a day for women.

Find out more about this at www.aicr.org/alcohol

Dietary supplements
By eating a balanced diet rich in vegetables, fruits and other plant-based foods, most of us can obtain all the nutrients we need, so AICR doesn’t recommend taking supplements for cancer prevention. However, some groups of people (older adults, pregnant women) may benefit from taking supplements for specific health reasons. Speak with your health care provider about your individual needs.

Find out more about this at www.aicr.org/supplements
Need more help?

The information in this booklet is about eating healthy for cancer prevention. Being physically active, maintaining a healthy weight and not smoking play a big part, too. Find out more in our booklet, *10 Ways to Reduce Your Cancer Risk*, and other free AICR brochures.

Visit [www.aicr.org](http://www.aicr.org) to download brochures or contact AICR to order (up to 3 copies total):

- *Reach Your Healthy Weight*
- *Move More*
- *The New American Plate*

Other AICR brochures (up to 3 single copies free):

Simple Steps Series for physical activity

- *Start Where You Are*
- *Keep It Up*
- *Mix It Up*

To order, call AICR toll-free at 1-800-843-8114. Bulk order discounts are available for health professionals.

**Contact us at:**

American Institute for Cancer Research  
1759 R Street, NW, P.O. Box 97167  
Washington, DC 20090-7167  
or call: 1-800-843-8114 or 202-328-7744
Visit the Toll-Free Nutrition Hotline

Dial 1-800-843-8114 to leave a message for a registered dietitian (who will return your call), Monday-Friday, 9 a.m.-5 p.m. Eastern Time. Or visit the AICR Hotline online at www.aicr.org.

Try our Healthy Recipes and subscribe to our weekly email Health-e-Recipes. Visit www.aicr.org.

The New American Plate Challenge is a free online weight-loss program from AICR. For each of 12 weeks, you’ll receive a new challenge, healthy recipes, tips for getting active and tools to track your progress. To sign up, visit Napchallenge.org.
About AICR

OUR VISION: We want to live in a world where no one develops a preventable cancer.

OUR MISSION: We champion the latest and most authoritative scientific research from around the world on cancer prevention and survival through diet, weight and physical activity, so that we can help people make informed lifestyle choices to reduce their cancer risk.

We have contributed over $105 million for innovative research conducted at universities, hospitals and research centers across the country. Find evidence-based tools and information for lowering cancer risk, including AICR’s Recommendations for Cancer Prevention, at www.aicr.org.
About the Continuous Update Project

As the U.S. charity in the World Cancer Research Fund network, we contribute to the Continuous Update Project (CUP), an ongoing analysis of global scientific research into the link between diet, physical activity, weight and cancer.

The CUP produces periodic reports on the state of the evidence linking various lifestyle factors to risk of specific cancers. These reports will inform a major update of our Recommendations for Cancer Prevention scheduled for 2017.

Visit our website for the complete list of CUP reports including:

- 2015: Gallbladder, Kidney and Liver cancers
- 2014: Breast Cancer Survivors, Ovarian and Prostate cancers
- 2013 Endometrial Cancer
- 2012 Pancreatic Cancer
- 2011 Colorectal Cancer
- 2010 Breast Cancer

You can support AICR’s life-saving research and education in a variety of ways:

- make a donation online at www.aicr.org;
- write to AICR, 1759 R Street, NW, P.O. Box 97167, Washington, DC 20090-7167; or
- include a bequest in your will.

For more information, contact our Gift Planning Department at 1-800-843-8114 or gifts@aicr.org.
CancerPrevention Together We Can is an initiative of the American Institute for Cancer Research. The website, www.aicr.org/can-prevent is dedicated to presenting evidence-based, user-friendly and interactive tools that educate and empower people to reduce cancer risk.

AICR Guidelines for Cancer Prevention

The choices you make about food, physical activity and weight management can reduce your chances of developing cancer.

- Choose mostly plant foods, limit red meat and avoid processed meat.

- Be physically active every day in any way for 30 minutes or more. Limit sedentary habits, like watching television.

- Aim to be a healthy weight throughout life.

And always remember—do not smoke or chew tobacco.