How Lycopene May Fend off Prostate Cancer

Healthy New Fruit-Vegetable Combos for Autumn

Facing Cancer with an Attitude

Say Cheers without Alcohol

Cancer Survivor Series

Cancer Information Where To Find Help
In these pages, you’ll find trustworthy advice on eating less red meat, drinking less alcohol, staying active and steering clear of weight loss myths—plus several delicious autumn recipes!

The Newsletter is based on the Continuous Update Project, our global analysis of scientific research into the link between diet, physical activity, weight and cancer produced in partnership with our international affiliates. (Read more about the CUP on page 9.)

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from the editor
Limit Red Meat, but Keep Flavor

What’s for dinner? If your first answer is some type of meat, AICR invites you to put vegetables, whole grains and beans at the center of your meals for lower cancer risk.

TRADITIONAL AMERICAN plates put the spotlight on a large piece of meat, with a side of buttery white potatoes and perhaps some peas. But that plate lacks enough of the cancer-fighting compounds found in vegetables and less starchy plant foods. It also features too much fat—thus too many calories—from the meat and added butter. That’s why naturally low-calorie vegetables that contain far less fat and fewer calories should be the real stars of your plate.

Red Meat in Moderation Is Key
Lean beef, pork and lamb are all types of red meat. They do contain healthy protein, vitamins and minerals. But AICR’s expert report and its updates found that eating more than 18 ounces in a week’s time is linked to a higher risk for colorectal cancer.

A 3-ounce portion of red meat is the same size as a deck of cards or a checkbook.

The solution? Treat meat as a garnish for your vegetables, whole grains and beans. Three ounces of meat can go a long way if you cut it up and flavor it well with your favorite herbs and spices (instead of salt). Here are some ideas.

1. **POTATOES AND MEAT.** Spotlight the spud as the star of the meal. Top a baked or steamed sweet potato (which contains beta-carotene) with beef and bean chili or sautéed lean pork and peppers.

2. **BEEF UP SOUPS AND STEWS.** Add bits of lean beef, pork or lamb to fat-free, reduced-sodium broth, plus lots of veggies to prepare a hearty homemade soup or stew. Onions, celery, carrots, green beans, corn, peas, sweet potatoes, cabbage, greens, zucchini and tomatoes are good choices. You get lots of meaty flavor plus the vitamins, minerals, phytonutrients and dietary fiber found in the veggies.

3. **BEAN CUISINE.** Dried beans such as white, pinto, kidney, black, navy and garbanzo provide a good source of protein. Cook dry beans until tender or use rinsed, canned, low sodium beans. Mash beans and add to meatloaf, meatballs and burgers. For best results, use a ratio of 1 (15- or 16-ounce) can or 1 ½ cups of cooked dried beans to 1 pound of lean ground beef. Or stir beans into soups, stews and chilis along with half the meat you’d normally use.

4. **TRY MEATY MUSHROOMS.** Finely chopped and sautéed mushrooms can substitute for up to half of the ground meat in recipes such as burgers, meatloaf, meatballs and spaghetti sauce. The benefit is not only a meaty taste and texture, but the addition of mushrooms makes each serving lower in total fat, saturated fat and calories while higher in fiber and plant-based nutrients.

Meatless or Less Meat?
Movements like “Meatless Mondays” encourage going meatless once a week to safeguard our health and the environment. However, eating smaller meat portions overall and filling up on vegetable, bean and grain dishes also helps you eat a varied diet of plant-based foods that fight cancer.

One reason why AICR advises limiting red meat in your diet is because it is higher in calories (energy) than most plant foods. See the article on page 12 for more details.
Along with getting at least 30 minutes of moderate physical activity every day, it’s also important to move more throughout the day. Here are some exercises that may lead to better health and lower cancer risk.

IN OUR WORLD of convenience and technology, we take the escalator instead of the stairs, use a remote to change the television channel and drive everywhere. But the good news is that taking only a few minutes for physical activity more often during your day can add up to reduced risk of some kinds of cancers.

Make Time for Short Activity Breaks

Being sedentary affects many factors linked to cancer risk, including sex hormone levels, insulin resistance, inflammation and body fatness. All of these factors can be kept in check by being physically active. AICR recommends getting at least 30 minutes of moderate physical activity each day for lower risk of breast, colorectal and other cancers. Yet because we sit for long periods, studies are finding that getting up and moving around often is important, too.

“Making time to get at least half an hour of moderate to vigorous activity every day is important, but those 30 minutes represent only a sliver of our day,” says AICR’s Alice Bender, MS, RDN. “Research suggests there are small things we can do throughout our day that make a big difference, too.”

Small Moves You Can Do

Taking a few minutes each hour to climb stairs, get a glass of water, walk around the block or sweep the floor are the kinds of physical activity breaks that can make a difference.

Try to spot other opportunities to move, too. For example, if someone offers you a ride to a store you could otherwise walk to safely, choose to walk. Or ask a friend to go for a walk with you after a meal.

If you don’t have many opportunities to be active, doing some easy exercises at home can help you use your muscles.

The two exercises pictured below are from the National Institute on Aging (NIA) Go4Life program. For more exercises that strengthen your upper and lower body, visit www.http://go4life.nia.nih.gov/try-these-exercises or call the NIA to order a printed version at 1-800-222-2225.

**Chair Stand** (pictured above)

Your abdominal and thigh muscles will benefit from this exercise. You’ll need a sturdy, armless straight-backed chair to do it. If you have knee or back problems, talk with your doctor before trying this exercise.

1. Sit toward the front of a sturdy, armless chair with knees bent and feet flat on floor, shoulder-width apart.
2. Lean back with your hands crossed over your chest. Keep your back and shoulders straight throughout exercise. Breathe in slowly.
3. Breathe out and bring your upper body forward until sitting upright.
4. Extend your arms so they are parallel to the floor and slowly stand up.
5. Breathe in as you slowly sit down.
6. Repeat 10-15 times.
7. Rest; then repeat 10-15 more times.

**Standing Side Leg Raise** (pictured below)

This exercise strengthens your hips, thighs, and buttocks. For an added challenge, you can hold the leg lift longer to improve your balance.

1. Stand behind a sturdy chair with feet slightly apart, holding on for balance. Breathe in slowly.
2. Breathe out and slowly lift one leg out to the side. Keep your back straight and your toes facing forward. The leg you are standing on should be slightly bent.
3. Hold position for 1 second.
4. Breathe in as you slowly lower your leg.
5. Repeat 10-15 times.
6. Repeat 10-15 times with other leg.
7. Repeat 10-15 more times with each leg.
I Saw It on TV… Weight-Loss Myths

Eight types of cancer are associated with extra body weight. With daily media stories about weight loss, it’s important to separate the myths from the facts when getting to a healthy weight.

TO HELP PEOPLE reduce their risk of cancer, getting to a healthy weight matters. Clinical Dietitian Sonja Goedkoop, MSPH, RDN of the Massachusetts General Hospital Weight Center, tells AICR she hears many weight loss myths from clients. Here are a few common ways people hear misleading information:

1. **“I heard about it on TV.”**
   This is the start of many conversations I have with patients. It usually has to do with some supplement (e.g., garcinia cambogia) that “leads to weight loss.”

   **Bottom Line:** There are usually very few studies supporting the weight loss benefits of these supplements, plus a list of potential risks or side effects from taking the supplement and always the caveat that a healthy diet and physical activity are needed for it to work.

2. **“Juicing or cleansing will help me lose weight.”**
   There is no clear and consistent evidence that juicing actually releases toxins from the body or will help with weight loss. Moreover, by juicing, you are removing most of the fiber from the whole fruit/vegetable and you are left with a non-filling, caloric beverage.

   **Bottom Line:** There are usually very few studies supporting the weight loss benefits of these supplements, plus a list of potential risks or side effects from taking the supplement and always the caveat that a healthy diet and physical activity are needed for it to work.

3. **“I go to the gym.”**
   Exercising is only one component of weight loss. Research shows that exercise alone does not lead to weight loss. Decreasing calories does lead to weight loss, even without exercise. However, the greatest weight loss is seen when healthier eating is combined with exercise. Exercise provides its own health benefits, so think of both diet and exercise as essential parts of a healthy lifestyle for cancer prevention and overall health.

4. **“I heard on the news that…”**
   News stories love to promote the newest study relating to diets and weight loss. But what matters is studies, plural, not any single study. Also, what we often aren’t hearing on the news is if this study applies to the general public, if it was a high quality study and whether other research also supports the claim.

   Be cautious with what you hear in the media. If it sounds too good to be true, it probably is.

5. **“I can’t eat healthy food because my family won’t eat it.”**
   Preparing nutritious foods is important for everyone. It is possible to change behaviors for the whole family, especially when healthier food is appealing. For example, instead of serving a plate of plain steamed or roasted vegetables, spruce them up a bit with a handful of nuts and dried cranberries, a sprinkle of Parmesan cheese or spritz of lemon juice. If family or friends are not on the same page, involve them in the cooking and shopping to make healthy foods everyone will like. Make one new healthy, plant-based recipe a week—don’t give up!

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Sonja Goedkoop, MSPH, RDN

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Find delicious, healthy recipe at AICR’s Test Kitchen: www.aicr.org/testkitchen.
Winning Combos for Fall Produce

Summer’s garden vegetables, berries and stone fruits may have run their course, but new and delicious autumn vegetables are coming soon to a market near you.

FALL OFFERS A MULTITUDE of fruits including grapes, cranberries, pomegranates, persimmons and wonderfully wide assortments of apples and pears. Fruits like these can complement autumn vegetables for delicious results.

The natural cancer-preventive phytochemicals in all types of produce not only ward off cancer, they are also responsible for taste, color and aroma. AICR-funded researchers have studied dozens of phytochemicals like quercetin in apples, carotenoids in sweet potatoes and orange winter squashes (including pumpkins), resveratrol in red grapes and anthocyanins in cranberries and pomegranates.

Pairings that Protect Your Health
Apples, pears, grapes and pomegranate seeds are excellent accents for green salads and can lend a sweet note to cooked vegetable dishes.
Raisins, prunes and dried versions of cranberries, cherries, apricots, blueberries and other fruits are also handy additions to squash, sweet potatoes, carrots, parsnips, turnips and rutabagas. Just remember that dried fruits’ natural or added sugar content is more concentrated than sugar in fresh fruits, so use only one tablespoon per serving.
Here are some delicious vegetable and fruit combos from the AICR Test Kitchen.

You can help...
Keep the AICR Newsletter going by including a few more dollars this time in the business reply envelope with your Free Information Request card.
**Carrots, Dried Apricots and Cinnamon**

2 cups baby carrots  
2 tsp. canola oil  
½ cup orange juice  
8 whole dried apricots, cut into thin strips  
¼ tsp. ground ginger  
¼ tsp. ground cinnamon  
Salt and ground black pepper to taste  
1 tsp. honey

Halve carrots lengthwise, leaving thinnest ones whole. > Heat oil in medium skillet over medium-high heat. > Add carrots, stirring until coated with oil. > Pour in juice. Add apricots, ginger and cinnamon. > When liquid boils, reduce heat and simmer, stirring occasionally, until carrots are tender and juice is syrupy, 8-10 minutes. > Season carrots to taste with salt and pepper. > Remove from heat and mix in honey. > Serve warm or at room temperature.

Makes 4 servings. Per serving: 103 calories, 2 g total fat (0 g saturated fat), 19 g carbohydrates, 1 g protein, 2 g dietary fiber, 32 mg sodium.

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**Red Cabbage with Apples**

2 cups apple juice or cider  
2-4 Tbsp. apple cider vinegar  
½ tsp. allspice  
3 cups shredded red cabbage (or pre-shredded bagged green and red slaw mixture)  
1 cup grated red apple  
Pinch of salt

In medium saucepan, bring apple juice, vinegar and allspice to boil. > Add cabbage, apple and salt. > Simmer, uncovered for 30 minutes, stirring occasionally. > Serve warm or cold.

Makes 4 servings. Per serving: 96 calories, <1 g total fat (0 g saturated fat), 24 g carbohydrates, 1 g protein, 3 g dietary fiber, 85 mg sodium.

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**Brussels Sprouts with Pecans and Dried Cranberries**

1 bag (16 oz.) frozen, petit baby Brussels sprouts  
1 Tbsp. extra virgin olive oil  
2 tsp. balsamic vinegar  
2 Tbsp. finely chopped, lightly toasted pecans  
¼ cup dried cranberries  
Salt and freshly ground black pepper, to taste

Cook Brussels sprouts according to package directions. > Meanwhile, in small bowl, stir together oil, vinegar, pecans and cranberries. > Transfer cooked sprouts to serving dish. > Gently toss with dressing. > Season with salt and pepper and serve.

Makes 4 servings. Per serving: 102 calories, 6 g total fat (>1 g saturated fat), 11 g carbohydrates, 2 g protein, 2 g dietary fiber, 32 mg sodium.

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**Baked Winter Squash with Pears and Figs**

Cooking oil spray  
1 delicata, acorn or small butternut squash, cut in half and seeded (ask your produce manager to cut before buying)  
2 Tbsp. 100 percent apple or orange juice, divided  
1 firm ripe pear, chopped and divided  
4 dried figs, chopped and divided

Preheat oven to 400 degrees F. > Lightly coat metal cookie sheet with cooking oil spray. > Place squash, cut side up, on cookie sheet. > Place 1 Tbsp. juice, ½ pear and ½ figs in each half. > Cover each half with aluminum foil, bending foil close to squash around edges. > Place in preheated oven. > Bake for 1 hour, until squash is tender when pierced with fork. > Turn off heat and let sit for 10-15 minutes to cool. > Serve.

Makes 2 servings. Per serving: 163 calories, <1 g total fat (<1 saturated fat), 40 g carbohydrates, 6 g protein, 9 g dietary fiber, 8 mg sodium.
How Much Can Lycopene Help Prevent Prostate Cancer?

Among the steps men can take to reduce prostate cancer, evidence shows that eating a healthy diet that includes tomato products may help. Here’s an update on what scientists are finding out about tomato compounds.

**PROSTATE CANCER** is a complex disease, either slow-growing over many years or occurring more aggressively. For decades, scientists have been studying how compounds in plant foods (called phytochemicals) may work to prevent cancer. One that is most supported by research as potentially protective against prostate cancer is lycopene.

Lycopene is in the family called “carotenoids.” It is found in tomatoes, watermelon, papaya, pink guava and pink grapefruit. Compounds that form as lycopene are metabolized in our bodies and act as antioxidants. Antioxidants protect against cancer by preventing cell damage caused by certain molecules that increase with aging, pollutants and other factors. Damaged cells, over time, may lead to cancer.

**Antioxidants May Act Together**

It’s not clear how much of lycopene’s protection comes from its own antioxidant actions or stems from its ability to support and renew other antioxidants. These include vitamins E and C and enzymes that are part of the body’s defense system.

Cooking tomatoes releases lycopene, making it easier for our body to absorb. That’s why tomato products like tomato sauce, paste and juice provide more lycopene than raw, unprocessed tomatoes do. (Raw tomatoes still provide some lycopene, plus vitamin C and fiber.) Our bodies seem to absorb lycopene and other carotenoids best when we eat them with a little healthy fat.

An analysis of human studies found that eating a lot of tomato-based products is associated with a 10-20 percent reduction in prostate cancer incidence. It also showed that high levels of lycopene in the blood are associated with a 25 percent reduction in prostate cancer risk. A recent study revealed that men with the highest consumption of lycopene were half as likely to develop lethal prostate cancer when compared to men with the lowest lycopene intake.

**Why Lycopene Effects May Differ**

In laboratory studies, lycopene-related compounds act directly to interrupt cancer development by decreasing cell growth and reproduction, increasing self-destruction of abnormal cells and modifying the androgen hormones that drive development of prostate cancer, says AICR Nutrition Advisor Karen Collins, MS, RDN, CDN.

However, she adds, the results of human studies are less clear. “We don’t eat lycopene, we eat foods containing lycopene,” she says. “That may make a big difference.”

Studies in animals show that while lycopene alone shows cancer-protective effects, tomatoes provide greater effects. That’s probably because of the other nutrients and compounds in whole tomatoes that work with lycopene.

Some animal studies suggest the protection from tomatoes plus another plant food, like soy or broccoli, are greater than from tomatoes alone.

She also points out that different growing conditions may vary the amount of lycopene in any particular tomato that subjects in human trials consume. (Read more on Karen’s blog, SmartBytes® at www.karencollinsnutrition.com.)

**Genes and Lycopene**

Individual genetic or hormonal differences seem to help some men benefit from tomatoes more than others. Nancy Moran, PhD, a research scientist at The Ohio State University’s Comprehensive Cancer Center, says, “The scientific community is currently interested in finding out how a person’s genetic profile interacts with lycopene absorption and metabolism.”

Learn about screenings, symptoms and prevention in our free brochure, Reduce Your Risk of Prostate Cancer. To order, check box 3 on the Free Information Request form.
Make an Investment in Cancer Research

**AICR IS FORTUNATE** to have many generous supporters. Most individuals support our cancer research and education programs by sending checks. In view of significant gains in stock values that began in 2009, many professional advisors are recommending that donors who give to charity should consider making a gift of appreciated securities.

We would like to pass along an important Tax Planning Tip from Marc Carmichael, Attorney at Law and Publisher of Charitable Giving Tax Service.

Investors who own marketable securities—stocks and bonds—that have gone up in value have a tremendous opportunity to increase their support for worthwhile organizations.

By giving stocks instead of writing a check you can receive a charitable deduction based on the full fair market value of the stocks, not just what you paid for them. The stocks must have been held long-term (more than one year) in order to deduct the “paper profit.” For example:

Emily happens to own securities worth $1,000 that she bought 15 years ago for only $200. If Emily sells the stock she will have a capital gain to report of $800 and a capital gains tax to pay of $120 (15% x $800). So the stock is really worth only $880 to Emily ($1,000 minus the $120 capital gains tax burden).

But if Emily contributes the stock, the organization will keep the entire $1,000 free of capital gains tax. And Emily will receive an income tax charitable contribution deduction for the full $1,000, which saves her taxes totaling $280 in her 28% tax bracket. It is fair to say that her $1,000 gift will actually cost her only $600 ($880—$280 of taxes saved).

If you have questions about making a gift of stock, please contact Ann Worley or Richard Ensminger in our Office of Gift Planning at 1-800-843-8114 or email us at gifts@aicr.org.
Helping Others through Cancer

Here’s how a life-long cancer survivor inspires others to practice healthy habits that follow AICR’s Recommendations for Cancer Prevention.

**AICR SUPPORTER** Frieda Peischler has lived with non-Hodgkin’s lymphoma since 1967 when she was 24. She is now 70 years old and an inspiration to other survivors and everyone else around her.

“In the 1960s, I told my oncologist there was no way I was going to lay down and die,” she recalls. “I was going to fight this.

“When you’re going through treatment, like chemo, you feel the isolation,” she says. “You’ve got to have a list of people you can call. You need to kid yourself into thinking you’re normal, even if you aren’t!”

Frieda has mentored other patients for 40 years. “I try to get them to do things like keeping a journal, so you can remember questions you have for the doctor next time you go.”

A priest who is also a psychologist trained her for two years to help other survivors who were depressed. Now people come to her for help.

“Everyone knows someone who’s had cancer,” Frieda comments. “A lot of the time regular people don’t know how to relate to people who are sick. It just comes down to being real.”

**Facing Cancer with an Attitude**

Frieda says she has lost her hair four times now. She used to order wigs that were gray, but one day they sent her a red one by mistake. “In the choir where I sing, the guys told me I’m really a redhead at heart. You have to have an attitude if you’re a redhead!”

That’s how she feels about cancer as well. She has faced many side effects of treatment, including thrush of the mouth and kidney problems from radiation therapy that now require her to have dialysis.

Her brother, with whom she lives on their family farm in Pennsylvania, and a team of friends would take her to treatments at 5:30 am every day then pick her up at 11:30.

“He reminded me to eat, too,” she says. Her weight plummeted to 110 pounds from her usual weight of 170. “I was always looking for a chair with a cushion on it,” she jokes.

Despite the grueling regimen, Frieda encouraged her fellow patients to eat a healthy plant-based diet.

“I’ve met six people in dialysis who live in apartments,” she says. “I got them to try growing peppers and tomatoes on their balconies.”

**Finding Beauty in the Basics**

Frieda supports AICR because “I had to support research somewhere along the line. Your newsletter and the researchers AICR funds are directly supporting me and other people who have cancer.”

Along with eating healthy foods, Frieda agrees with AICR’s message to get daily physical activity. At her 200-year-old farmhouse, she and her brother grow their own vegetables and fruits. She picks apricots, plums, sour cherries, pears and apples and makes her own preserves or freezes the produce. She makes simple healthy recipes that her body can tolerate.

“There is beauty in the basics,” she says. “And it’s important to just walk around. I walk around my barn three times for exercise.”

The farm is a peaceful place where Frieda often enjoys visits from relatives and friends.
Festive and Alcohol-Free

It may be tempting to celebrate special occasions with alcoholic drinks. But limiting alcohol is important for reducing risk of cancer and other health problems.

**RESEARCH SHOWS** that it’s a good idea to toast good times with less alcohol for better health. Although alcohol is assumed to be a built-in feature of social gatherings and fine dining, studies link alcohol with higher risk of several cancers (see box).

Lucky, there are more healthy ways than ever to mix up festive, non-alcoholic beverages.

When you do indulge in alcohol, set limits and drink plenty of water between sips of alcohol.

**Remember**—if you choose to drink alcohol, limit daily alcoholic beverages to 1 standard size drink for women and 2 for men.

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**Cherry Citrus Spritzer**

1. **Start with a base:**
   - club soda
   - seltzer water
   - sparkling spring water
   - cool brewed tea (green, herbal or fruit flavored)
2. **Use fresh fruits, chopped or puréed:**
   - melons
   - strawberries
   - citrus
   - tropical fruits
3. **Flavor with 100 percent juice (add just ¼ cup per drink):**
   - cherry
   - apricot
   - mango
   - apple (or sparkling cider)
   - grape
   - low-sodium tomato or vegetable
4. **Add garnishes:**
   - orange slices
   - fresh fruit wedges
   - berries
   - grapes
   - fresh mint sprigs
   - celery stalks

In blender, purée cherries. In large pitcher, use long-handled wooden spoon to stir together cherries with juices. Place ice in 4 tall glasses. Pour citrus mixture over ice and add ½ cup club soda to each serving. Stir and garnish each glass with orange slice and swizzle sticks.

Makes 4 servings. Per serving: 128 calories, 0 g total fat (0 g saturated fat), 32 g carbohydrates, 2 g protein, 3 g dietary fiber, 26 mg sodium.

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**What the science says about alcohol and cancer:**

AICR’s expert report and its updates found strong evidence that alcoholic beverages increase risk of these cancers:

- breast
- colorectal
- esophagus
- larynx
- liver
- mouth
- pharynx

Studies also link heavy drinking with heart disease, high blood pressure, stroke, osteoporosis, malnutrition, inflammation of the pancreas, brain damage, accidents and falls. Alcoholic drinks also contain calories and can contribute to gaining excess weight—another cancer risk factor.
The Effects of Your Food’s Energy Density

With AICR funding, Terry Hartman, PhD, MPH, RDN—of the Rollins School of Public Health at Emory University in Atlanta—is examining how the energy density of our diets affects body weight and other markers of cancer risk.

Q. Please describe your current AICR-funded research study.
A. My colleagues and I designed this research to explore how energy density of the diet is associated with overweight and obesity, waist size and markers of inflammation and insulin resistance. These factors are linked with an increased risk of several cancers. They include postmenopausal breast cancer, female gynecologic cancers, as well as cancers of the colon and esophagus. We’re using data from the National Health and Nutrition Examination Survey (NHANES), collected by the National Center for Health Statistics.

Q. Why did you choose NHANES?
A. It’s quite a large sample and represents adults across the United States. A lot of studies collect information about height, weight and waist circumference by simply asking the subjects. NHANES uses trained staff to measure these things. Trained interviewers use a standardized protocol to gather information about the diet. All of this makes us more confident that we are getting reliable information.

Q. What is energy density?
A. Energy density—sometimes called calorie density—is the amount of calories in a given weight of food. Foods high in energy density, like brownies, have more calories per ounce than foods low in energy density, like an orange or carrots.

My colleague Dr. Barbara Rolls at Penn State University has shown that people tend to eat about the same weight of food from one day to the next. When we replace high-energy-dense foods with low-energy-dense foods, we can eat about the same weight of food for fewer calories. That can help control weight.

Q. Can you share your findings so far?
A. Eating a high-energy-dense diet is linked with overweight and obesity. We found that both body mass index and waist circumference increased as the energy density of the diet increased. In fact, individuals who consumed the diets highest in energy (calories) were about 50 percent more likely to be obese, even after controlling for age, race, socioeconomic status and physical activity.

Women who ate a high-energy-dense diet tended to have higher insulin levels—a marker of insulin resistance—measured when they were fasting.

Q. How can we reduce the energy density of our diets?
A. Fruits and vegetables tend to be low in energy density. Eat them instead of higher-energy-dense foods. Instead of starting your day with a sweet roll, eat high-fiber cereal with skim milk. At lunch, trade high-fat sides like chips for a salad. Start dinner with a broth-based soup instead of a creamy soup.

Q. Besides increasing the risk of being overweight or obese, how could the energy density of a person’s diet contribute to higher cancer risk?
A. People who consume low-energy-dense diets get the benefit of more fiber [which helps prevent colorectal cancer and promotes bowel health], vitamins and phytochemicals.