

the newsletter

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from the editor

Renew your energy and health this Spring using the information in your AICR Newsletter! This issue features joyful physical activity programs in California and Kansas, plus ways to get the calcium you need from a wide variety of healthy foods.

Cancer-fighting compounds called flavonoids are found in many vegetables and fruits, as you'll find out from the experts we interview. Tea is one source, so take a break for a cup of your favorite tea with our healthy snack recipe. More research on how vegetables may help ward off cancer risk from meat rounds out this issue.

Thank you very much to those of you who have made a contribution in memory or in honor of a loved one. If you would like to make a gift in memory or in honor of someone, please fill out the enclosed blue card, call 1-800-843-8114, or visit us online at www.aicr.org/ honor-memorial. We will send a notification to the person(s) of your choosing.

### **Free Publications from AICR**



(D)



**Nutrition for** 



#### Reduce **Your Risk of** Colorectal Cancer (BHC)

The symptoms. screening facts and prevention steps are summarized in this free brochure.



#### When a Loved One Dies (FDB)

This booklet offers practical and valuable information for a time when you or someone close to you needs comforting direction.



**Simple Steps: Keep It Up (KU)** In this brochure, you'll find tips and ideas for maintaining the minimum 30 minutes of moderate physical activity recommended daily for lower cancer risk.



**The Facts About** the Fats in your Foods (FSO) This brochure describes which kinds of fats and oils are healthy and how they fit into a cancerfighting diet.



#### **AICR Tape Measure (TM)**

Our handy tape measure gauges your waist size and lists healthy measurements for women and men.





**ORDER TODAY.** These free materials help you put AICR's science-based advice to work every day in making healthier choices. Your support makes AICR's life-saving research and education possible, so any gift will be greatly appreciated.

- 1 Fill out the enclosed Free Information Request card.
- 2 Return it in the envelope provided to: AICR, 1759 R Street, NW, P.O. Box 97167, Washington, DC 20090-7167.
- 3 You should receive your publications within a few weeks.



#### Got milk? If not, no worries! Many other foods serve up a heaping helping of calcium to keep your bones in shape for cancer-preventive physical activity.

**CALCIUM IS THE MOST ABUNDANT** MINERAL in our bodies. It's needed to keep bones strong and stave off conditions like osteoporosis, plus it can prevent tooth loss and help blood clot, nerves communicate and muscles contract.

Recommendations for men and women over age 50 call for approximately 1,200 milligrams (mg) of calcium daily. However, "the average older adult consumes only 700 mg of calcium daily, and less for those who don't eat dairy. So it's important to make sure to get enough," says Bess F. Dawson-Hughes, MD, chief of the calcium and bone metabolism laboratory at the Jean Mayer USDA Human **Nutrition Research Center on Aging** at Tufts University in Boston.

DAIRY. It's common knowledge that dairy foods are rich in calcium. One cup of skim milk with added vitamins A and D provides 300 mg. Three cups, plus www.aicr.org smaller amounts of calcium for more info in foods in a typical day's on healthy diet, deliver the entire daily recommendation. But as we get older, our ability to digest the natural sugar in milk, called lactose, decreases. This makes it more likely to experience

gas, bloating and diarrhea after

drinking milk.

Regardless of the age at which lactose intolerance develops, it may be possible to tolerate drinking milk in small servings (1 cup or less) at a time and with meals, or switch to lactose-free milk or lower lactose dairy products like cheddar and Swiss cheeses.

Yogurt is another great choice: 1 cup of plain low-fat yogurt provides at least 300 mg of calcium. However, nonfat plain Greek yogurt provides about 187 mg per 6 ounces and is lower in lactose and higher in protein than regular yogurt.

FISH. Canned salmon and sardines with their soft edible bones are swimming in calcium. One-half cup of drained canned pink salmon or sardines offers almost as much calcium as 1 cup of milk.

These fish are also naturally rich in vitamin D. This vita-

**Visit** 

eating.

min gives you a leg up in absorbing calcium. Try salmon in place of tuna in a favorite salad recipe. Serve sardines on whole-grain crackers with lemon, or toss

them into green salads. Like albacore tuna, they are also good sources of healthy omega-3 fats, plus protein.

**PLANT FOODS.** Eat your greens, beans and nuts. One-cup of cooked broccoli contains as much calcium as 1/4 cup of milk. Arugula, okra, turnip greens, dandelion greens, kale, collard greens, endive and mustard greens are other good bone-builders. Spinach, Swiss chard and beet greens also contain calcium, but it's not well absorbed.

Dried cooked garbanzo beans (1 cup), pinto beans (1 cup) and white beans (1/2 cup) contain calcium equal to <sup>1</sup>/<sub>4</sub> cup of milk. The same holds true for 23 almonds (1 ounce).

Stir greens and beans into canned or homemade soups and stews, or add into pasta or salads with almonds for crunch.

On the sweeter side, four dried figs will give you the calcium in 1/4 cup of milk.

**CALCIUM-FORTIFIED FOODS.** Orange juice, breakfast cereals, cereal bars, breads, instant oatmeal, nondairy milks, tofu and corn tortillas are all available calcium-fortified.

#### **The Bottom Line**

"Eat a wide variety of foods to meet your calcium needs," says Rose Clifford, RDN, MBA, nutrition program manager at Iona Senior Services. in Washington, DC. "Spread your calcium intake over the day. This will help you to absorb more."

# Staying Fit with Youthful Hearts

## A California-based strengthening program helps older adults to thrive, including colorectal cancer survivors.

WHEN JEAN MCKECHNIE of Marin County, California, received a colon cancer diagnosis at age 78 in August 2014, she was stunned. "I thought I'd gotten past that age. I thought I would be cancer-free for life," she says.

During her eight months of chemotherapy after surgery, Jean had to limit her physical activity, which included her participation in a class called Youthful Hearts. The class focuses on strengthening and stretching and is run by Jeanette Logan, a certified fitness instructor. But Jean went back to the class after her recovery had progressed enough for her doctor to agree she was ready.

"Once I went back to it, it helped me a lot. The classes give me energy and get rid of the aches and pains," she says.

In 1994, Jeanette began instructing men and women age 50 and older because she wanted her fitness practice to provide a gentler, more mindful approach to exercise. Her classes reach nearly 250 people ages 53–95 and are aimed at improving physical fitness

as well as mental, emotional and spiritual fitness.

"Exercise is important but so is the management of stress," Jeanette says. "I incorporate a lot of stress relief into my classes." She uses techniques from meditation, yoga and tai chi. Jeanette also says laughter plays an important role in health.

"A lot of older people in the world have forgotten how to play. We try to make physical activity a joyful experience with creativity and laughing."

#### **Starting Where You Are**

Youthful Hearts' strength and stretching classes include varied exercises for different ability levels. Classes start with breathing exercises, simple movements, like moving arms up and down, and other slow movements to get blood flowing. Groups then progress to low-key aerobics and stretching, as well as strengthening and balance activities.

Jeanette modifies some activities for different ability levels. "In my class, it is not about being per-

fect. You can sit in a chair and modify an exercise. It is important to understand you can start where you are," she notes.



EANETTE LOGA

As we age, our bodies lose muscle mass and strength. This can lead to a condition known as sarcopenia. Strength training, in addition to stretching and other exercises, can help prevent this condition, especially among seniors. Physical activity also can lower the risk of cancer and other diseases, as well as help cancer survivors live better quality lives.

Participants in Jeanette's classes say the physical activity helps them to maintain their strength, allowing them to continue daily activities, as well as improve sleep, balance and joint mobility.

Jean notes the camaraderie of her classmates helped her through her treatment and recovery. "After the doctor cleared me to return to Youthful Hearts, I realized how much I had missed the classes, and I was glad I was going back." Jean has been cancer-free since her exam in September 2015.



JEANETTE'S CLASS CELEBRATES HALLOWEEN.

#### **MARILYN'S CHOICE**

Our handy brochure, Keep It Up, gives you practical ideas to keep your physical activity routine going for lower cancer risk. To order this free brochure, check box 1 on the Free Information Request card.



# **Reducing Sugar for Better Health**

**AICR** recommends limiting sugar, including sugary beverages, to prevent gaining extra body fat that can lead to cancer. Here is how one woman cut back on sugar by giving up soda.

#### FREELANCE PHOTOGRAPHER JUDY

**ROLFE** was shooting a session at the AICR annual meeting two years ago when something she saw stopped her in her tracks.

"The presenter showed a picture of sugar in a plastic bag that was equivalent to the amount of sugar in a can of cola [8 teaspoons]," Rolfe says. "I'm a visual person, so that really caught my attention. I told myself I really needed to stop drinking sugary sodas," she says. At the time, she estimates, she drank an average of two sodas a day.

Rolfe says she knew that consuming too much sugar was unhealthy, but she had never seen the scientific data behind the recommendation to cut back.

#### **A Sugar-Heavy Culture**

Sugar-sweetened drinks are the top source of added sugars for most Americans. One 12-ounce can of regular soda with 150 calories and 41 grams of added sugars can send anyone close to the recommended daily limit on added sugars.

"The USDA's Dietary Guidelines advisory committee recommends an upper limit of 10 percent of calories coming from added sugar. So for a 2,000-calorie diet, that would be 200 calories of added sugar," says AICR's Alice Bender, MS, RDN.

Rolfe came home from the conference, gave away the sodas in her refrigerator and hasn't had another one since. She now drinks a lot of water, unsweetened iced tea and seltzer water mixed with a little juice.

"It's hard to find alternatives that don't have sugar or artificial sweeteners in them," she says. "It's not a sugar-free friendly world."

Giving up sodas wasn't easy for her. "I went through a bit of a withdrawal," she says. "It went on for six months to a year." When



Sugar is added to many processed foods. Check package ingredient lists for the following forms of sugar: agave, cane, caramel, corn sweetener/syrup, fruit juice concentrate, high-fructose corn syrup, honey, malt and molasses. Other words that indicate sugar end in "-ose" and "-ol."

she felt she needed some sugar. Rolfe had a piece of chocolate with a high percentage of cocoa or chewed some sugar-free gum.

#### Feeling Better vs. Sodas

Rolfe has been happy with her decision to cut out sodas. She has lost several pounds and feels healthy—a necessity for an on-thego photographer. She says, "It's a life choice I'll never go back on."

#### **NEW**

Order our free AICR Tape Measure to find out the recommended waist sizes for men and women. Check box 3 on the Free Information Request card.





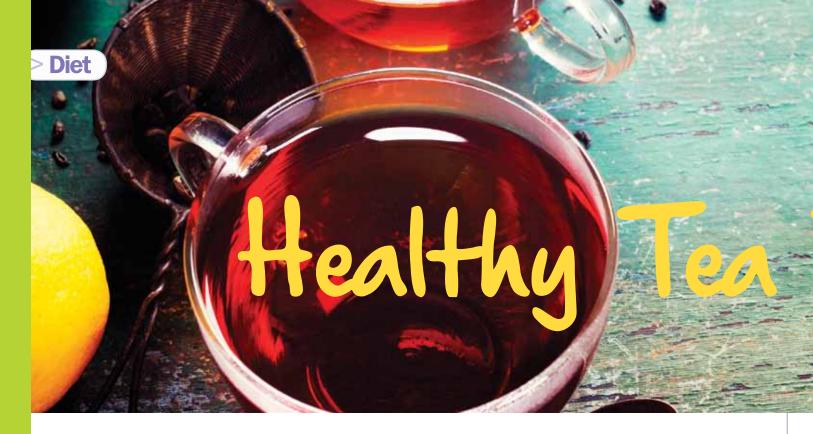




Fruit-flavored herbal teas without added sweeteners may taste sweeter to you than regular teas. Or you can flavor your water by freezing herbs and fruits in ice cubes. The flavor will slowly intensify as the ice melts. Berries, basil, thyme or a squeeze of fresh lemon or orange can all infuse water with delicious flavor.







# This Spring, cozy up with a cup of freshly brewed tea or cool off with refreshing iced tea. Every sip gives you a dose of cancer-preventive flavonoid compounds.

**OTHER THAN WATER**, tea is the most consumed beverage in the world. Though not conclusive, some studies suggest that drinking tea may help shield against prostate cancer and cancers of the colon and esophagus.

Aside from flavonoid phytochemicals, tea provides a variety of other phytochemicals studied for possible health benefits, plus manganese and fluoride.

One of the more widely known tea compounds is EGCG (epigallocatechin gallate), found in green and white teas, which shows strong antioxidant effects in cell studies. Even decaffeinated forms of black tea, which have lower amounts of disease-fighting phytochemicals than regular teas, still contain quite a bit.

Although they have different tastes, colors and aromas, all non-herbal teas come from the leaves of the evergreen Camellia sinesis. Their differences stem from their stage of growth and level of fermentation. This also means that their flavors are best developed with slightly different brewing techniques.

#### **How to Brew Your Cup of Tea**

The best way to brew tea is the way in which you enjoy it, so try the techniques below then adjust the temperature, brewing time and amount of tea to your preference.

Start with one tea bag or one teaspoon of loose tea per cup.

**BLACK TEA** has the darkest color and strongest flavor. Its leaves are fully fermented during processing. More than 80 percent of tea consumed in the U.S. is black tea.

 Boil water and pour it over your tea. Steep it for 3-5 minutes.

**GREEN TEA** has a delicate flavor. It is not fermented during processing, and its color resembles the fresh tea leaf. It's the second most commonly consumed tea in the U.S.

 Green tea requires a lower temperature and a shorter brewing time. After the water boils, remove it from the heat. Allow the water to cool for about 10 minutes before pouring it over your tea. Steep for about 1 minute.

**OOLONG TEA** is partially fermented during processing, leaving both its color and flavor halfway between green and black teas.

• Brew with water heated to 180–190°F, and steep for 5–7 minutes.

**WHITE TEA** is the least processed variety and is not fermented. The leaves are harvested when they are not fully open and are covered with white fuzz.

 Brew with water heated to 180–190°F, and steep for 3–4 minutes.



## Chunky Cranberry Dip

Good for spreading on a whole-wheat mini bagel.

1 8-oz. package reduced fat cream cheese 1-2 Tbsp. low-fat milk 1/2 cup chopped dried cranberries

1/4 cup sliced almonds

1/2 tsp. orange zest, preferably fresh

In medium bowl, place cream cheese and allow to soften at room temperature. > Mash with fork until texture is light enough to combine easily with other ingredients. > Gradually add milk until cheese becomes soft and spreadable. > Mix in remaining ingredients. > Cover and refrigerate up to 2 days ahead or let stand at room temperature 1 hour before serving to allow flavors to blend.

Makes about 1 <sup>1</sup>/<sub>2</sub> cups. Per serving (1 tablespoon): 29 calories, 2 g total fat (<1 g saturated fat), 3 g carbohydrates, 1 g protein, <1 g dietary fiber, 35 mg sodium.

#### **Refresh Yourself with Iced Tea**

About 85 percent of the tea consumed in the U.S. is iced. To brew a pitcher, use 8-10 tea bags per quart of boiling water. Steep for 3-5 minutes. Adjust the strength of your tea with the addition of cold water or ice cubes. Bottled teas offer convenience, but they are quite low in flavonoids. They often have lots of added sugars, too, and tend to be pricier than homebrewed iced tea.

#### **Keeping Tea Healthful**

What you put in your tea matters. Unsweetened tea has only two calories per cup. Sweeten it with honey, and each teaspoon adds 21 calories. Regular sugar adds 16 calories per teaspoon.

You may have heard that adding milk to tea reduces your body's ability to absorb the flavonoids. Not all studies show this, so if you like milk in your tea, continue to enjoy it that way. To keep the calories low, splash your tea with nonfat or low-fat milk. Add spices like cinnamon, ginger or cloves for a fun, slightly sweet taste.

Use caution in tea shops and restaurants because chai and other teas often come with lots of sugar and milk. Before ordering, ask questions about how your drink is prepared.

#### **Healthy Tea Time Treats**

Tea time can be delightful with a small healthy snack. Boost your flavonoid intake even more by pairing your tea with berries, citrus fruits, plums, edamame (green soy beans) or an ounce of dark chocolate.



If it's a more traditional dessert you're after, pick something small to keep the calories in check. Each of these should supply between 100-120 calories.

- · 2 large, rectangular graham crackers
- · 2 mini blueberry muffins
- 2 gingersnaps

If you're partial to traditional watercress or cucumber tea sandwich triangles, be sure to use a slice of whole-wheat bread and low-fat mayonnaise or cream cheese.

#### You can help...

Keep the AICR Newsletter going by including a few more dollars this time in the business reply envelope along with your Free Information Request card.

# **Exploring How Flavonoids May Boost Health**

Two leading researchers in the field of nutrition and cancer review vital inroads into our understanding of how flavonoids, a major class of phytochemicals in plant foods, may protect our health from cancer.

#### **EATING FRUITS AND VEGETABLES**

has long been associated with better health, explains Johanna T. Dwyer, DSc, RDN. Dr. Dwyer is



JOHANNA T. DWYER, DSC, RDN

professor of Medicine at Tufts University's School of Medicine and Friedman School of Nutrition Science and Policy, as well as director of the Frances Stern Nutrition Center there.

In 2003, the USDA Database for the Flavonoid Content of Selected Foods was founded. The database has greatly advanced research to better estimate the types and amounts of flavonoids people are currently eating. It is also helping to clarify how various compounds seem to protect health. The database now includes the values



JOHN W. ERDMAN, JR., PHD

for 506 foods and 26 common flavonoids.

Last summer, Dr. Dwyer and John W. Erdman, Jr., PhD, professor emeritus in the department of Food Science and Human Nutrition at the Uni-

versity of Illinois, outlined how these data are critical.

Fruits and vegetables are sources of fiber, vitamins, minerals and many phytochemicals, which may help to prevent cancer. All of these factors and many others in our personal environments combine to affect our health.

The database is helping to cut through some of this complexity.

### The Potential Power of Flavonoids

Most fruits and vegetables contain flavonoids, a large class of phytochemicals. This class is further divided into six subclasses based on their chemical structures. Flavonoids are studied for possibly:

- tamping down chronic inflammation;
- boosting antioxidant status;
- reducing the risks of cancer, heart disease and type 2 diabetes;
- · improving cognitive function;
- playing a role in the prevention of urinary tract infections.

AICR's expert report and Continuous Update Project found that diets rich in fruits and non-starchy vegetables are linked to lower risk of cancers of the mouth, pharynx, larynx, esophagus, stomach and lung. Flavonoids may play a big role in this protection.

#### **How to Eat More Flavonoids**

On average, Americans consume way too few flavonoids: only 250 mg total flavonoids daily, says Dr. Erdman. We can increase that by four- or fivefold, he says, by eating more fruits and vegetables and selecting other flavonoid-rich foods.

"Eat a wide range of vegetables, fruits and other plant foods so you get as diverse a range of flavonoids as possible," Dr. Erdman advises.

To perk up your intake of flavonoids, Dr. Erdman suggests seasoning foods liberally with herbs and spices, drinking freshly brewed tea and eating soy foods and small servings of dark chocolate.

### **Fuel Up on Flavonoids**

Each of the six flavonoid subclasses appears to have different protective properties. Some of their food sources are also listed below.

#### **Flavanones**

- Citrus fruits and juices
  Flavonols
- Apples, blueberries, onions and tea

#### Flavanols (includes proanthocyanidins, which are many flavanol molecules linked together)

 Apples with skin, berries, natural cocoa powder, dark chocolate, grapes with skin, peanut butter, black and green teas

#### **Anthocyanidins**

 Berries, cherries, plums, purple carrots, purple grapes, red cabbage

#### **Flavones**

 Celery seed, kumquats, oregano, parsley, sage, thyme

#### Isoflavones

- Edamame and other soybean foods such as soymilk and tofu
- Lesser amounts in chickpeas, fava beans, peanuts, pistachios

Dr. Dwyer notes that it's best to eat fruits and vegetables often, not just in bursts, like having a large serving at dinner only. "We may need several doses a day," she says. "The health effects probably last for hours, not days." Whole foods (not supplement pills) are the best sources of flavonoids, she adds.

Nutrition for Healthy Aging, explains how to meet your nutrition needs as they change with age while eating to prevent cancer. Check box 2 on the Free Information Card to request a free copy.





JOAN ELMS (CENTER) WITH RESEARCHER IVANA VUCENIK, PHD (LEFT) AND SUPPORTER LISA HECHT (RIGHT) AT THE 2014 AICR RESEARCH CONFERENCE.

## My Survivorship Story by Joan Elms

**WHEN I LOST MY FULL-TIME JOB**, I didn't have the money for regular check-ups. About five years passed since I'd gone in for a mammogram. When I finally saw a doctor in 2013, he told me I had breast cancer.

It could have been much, much worse than it was. If the cancer had started earlier, it could have progressed rapidly throughout those five years and I never would have known. But I was lucky: We caught the cancer right when it started. I was able to have a lumpectomy and keep my breast.

Cancer wasn't entirely new to me. I'd watched my father struggle with prostate cancer when I was in my twenties. Back in those days, people didn't know as much about it—some folks even thought cancer was contagious. Of course, now we know you can't catch cancer from someone else. But many people still don't know that there are things they can do to prevent it.

That's why it's so important to me to talk to my sisters, nieces and coworkers about getting regular physicals and following AICR's guidelines. It's also why I support AICR.

For many years, AICR has been saying that the choices we make can have an impact on our health, and they'll continue to say it until everyone listens. My little contributions to AICR aren't that much, but when they're added to everyone else's, together we're able to make a big difference.

Here's what I've learned: You can either say, "I have cancer and I'm dying," or "I have cancer and I'm going to continue living." AICR has helped me to continue living and grow healthier every day.

When a Loved One Dies: The Next Steps Most people do not have much experience to guide them through the

period after the death of a family member or friend. When a Loved One Dies: the Next Steps offers practical and valuable information for a time when you, or someone close to you, need comforting direction. This information will help you focus on necessary tasks and identify resources available.

To order this helpful booklet, simply check box 6 on the Free Information Request card.

#### Ask the expert...

#### Planned Giving Q & A

**Q:** I'm seeing my attorney soon to update my will and would like to include a gift to AICR, but I need to provide for my brother Sam, who is physically handicapped. Is there some way to achieve both of these goals?

**A:** There are several ways to provide for both Sam and AICR.

- Make AICR a contingent beneficiary, with assets passing to us in the event Sam dies before you.
- Establish a charitable remainder trust that will make payments to Sam (or to a special needs trust for his care) for his life. When the trust ends, the remaining assets will pass to AICR.
- Provide for IRA benefits to pass to AICR at your death in exchange for a charitable gift annuity for Sam. We will make fixed annuity payments, based on Sam's age at your death (minimum age 60), for his life, with future benefit to AICR programs.

# To remember AICR in your will, please use the following language:

"I give, devise and bequeath to the American Institute for Cancer Research for its general purposes [state fraction or percentage of the rest, residue and remainder] in my estate, both real and personal."

Or

"I give and bequeath to the American Institute for Cancer Research the sum of \$\_\_\_\_\_ to be used for the general purposes of the Institute."

For more information, please contact our Office of Gift Planning at 1-800-843-8114.

Thank you to participants in our Monthly Giving Program. Your support ensures that vital cancer research continues. To join, use the enclosed envelope or visit www.aicr.org/monthly.



Loved One

Next Steps

#### **Physical Activity**

# "Walk Tall, Walk Strong, Walk Kansas"

More walking programs are getting Americans to take steps for better health and lower risk of diseases like cancer. Here's how Kansas has gotten people in every county to walk.



SHAROLYN JACKSON, RIGHT, WITH MARGE, CENTER AND FRIEND

#### FROM ARIZONA TO MASSACHUSETTS.

walking clubs and programs are bringing people together to walk regularly. Most programs strive to establish accessible paths where wheelchair rolling is possible, too.

One great example, Walk Kansas, relies on the county extension offices affiliated with Kansas State University. Sharolyn Flaming Jackson, MS, an extension specialist, has worked on the program since it began in 1991. The program went statewide in 2001, and she became the coordinator in 2007.

"County offices started adopting it for their own communities," she recalls. "Local agents are the ones who make this program run."

#### **Setting Reachable Goals**

The campaign starts in March and lasts through April. "March is a time when New Year's resolutions are flagging a bit," Jackson comments. "Eight weeks is enough time to change some habits, have some success and feel physically better."

Three goal levels are set. The easiest is the US Department of

Health and Human Services recommendation of being physically active for  $2\frac{1}{2}$  hours per week. At this rate, a team of six people could walk the distance across the state of Kansas in 8 weeks.

The next challenge level is 5 hours a week—across the state and back. The third is 6 hours per week, which would take the team around the perimeter of the state.

The local extension offices can add activities like aerobics, zumba or yoga classes, plus healthy eating and cooking classes. AICR healthy recipes are used as key resources, Jackson says. Participants have increased their vegetable and fruit consumption during the program.

### **Find a Walking Program Near You**

#### **State programs:**

Arkansas: http://www.uaex.edu/health-living/health/fitness/

walk-across-arkansas.aspx

Arizona: www.http://cals.arizona.edu/walkacrossaz

Maryland: extension.umd.edu/walkmd

**Nebraska:** walknebraska.org **New Hampshire:** healthynh.com

Oregon: oregonwalks.org

The Rockies (Idaho, Montana and Wyoming): www.uwyo.edu/

wintherockies edur

Walk Across Tennessee: walkacrosstn.tennessee.edu

Walk Texas: dshs.state.tx.us/diabetes/walktx

#### **Multi-state programs:**

**Every Body Walk!:** everybodywalk.org, info@everybodywalk.org. A partnership of government and business organizations that offers a free online newsletter.

Rails to Trails: www.railstotrails.org, 866.202.9788. Converts unused rail tracks to walking trails and offers a free online newsletter. Walk with a Doc: walkwithadoc.org, 614-714-0407. Take regular walks with healthcare providers in dozens of sites around the U.S.



#### **A Thriving Program**

Walk Kansas now reaches more than 16,000 people each year. "We've been doing it long enough that people expect it now," Jackson comments.

"Our youngest participant was 2 years old and our oldest is Marge, who is in her mid-90s. She walks in place at home and still calls me with suggestions for the program," Jackson says.

Find out more at www.walk kansas.org.

# Put Healthy Fats on Your Plate

Eating moderate amounts of plant-based fats fits AICR's recommendation to eat a mostly plant-based diet to prevent cancer. Here's how to sort out the good fats from the ones that can harm your health.

controlling how much fat you eat is important to maintaining a healthy weight for lower cancer risk. Whether it comes from animals or vegetables, dietary fat is highly concentrated in calories. One tablespoon of most fat (and high-fat salad dressings and sauces) has about 100–125 calories.

Most of us know that diets high in saturated fat from animal products like meat and dairy foods are not good for your heart. Ditto for deepfrying and buttery or creamy sauces, which can even make healthy vegetables or fish too high in fat.

#### **Turn to Healthy Fats**

Eating some healthy fat is important for good health. Fat helps your body absorb some important vitamins, like vitamin A from orange vegetables and fruits. Some fat in your meal or snack also satisfies hunger.

Your best choices are plantbased oils, such as olive or canola.

#### **Choose These Healthy Oils**

Foods containing fat always contain a mixture of different types of fat. Here are sources in which these healthful types predominate:

Monounsaturated: olive, canola and peanut oils; avocados; almonds, peanuts and most other nuts and seeds (except walnuts)

**Polyunsaturated:** safflower, sunflower, corn and soybean oils; walnuts and seeds

They may even help to lower levels of "bad" (LDL) cholesterol. Plant oils provide vitamin E, an important antioxidant, and unrefined oils (such as extra-virgin olive oil) contain phytochemicals that laboratory research suggests could help protect against cancer development.

A few plant foods are high in fat, such as nuts, seeds and avocados. All are good sources of vitamin E and fiber. But eat them in moderation to keep calories in check. A scant handful (1 ounce) of nuts can total more than 100 calories. A tablespoon of seeds (flax, sunflower, sesame and others) can have about 100 calories and half an avocado supplies about 12–17 grams of fat. For comparison, 1 tablespoon of olive oil contains about 14 grams of fat.

Omega-3 fatty acids, found in fish like tuna and salmon, are also health-protective; you can get a form of these fats in canola oil, walnuts and flaxseed.

AICR's Alice Bender, MS, RDN, recommends limiting saturated fat from foods like butter, meat, cheese and dressings in a meal to 10 percent or less of calories. If you have high blood cholesterol, your target may be less.

your target may be less, so discuss this with your healthcare provider.

You can order a free copy of our popular brochure, *The* Facts About the Fats in Your Foods. Check box 4 on the Free Information Request card.

#### Tips to Cut Fat

Low-fat cooking methods are baking, roasting, broiling, sautéing and steaming (stove-top or microwave). You can use fat-free broth to keep foods moist while cooking.

- Stick to 1 tablespoon of fat in each serving of salad dressing. You can make salad dressings go further by whisking in some fat-free broth, plain low-fat yogurt and/or mustard.
- To limit calories when you bake, reduce the fat in the recipe by half and substitute an equal amount of unsweetened applesauce.
- For dairy products, choose lowfat or reduced-fat versions.
- If you eat beef, choose the leanest cuts and trim any fat before cooking.
- Avoid processed meats like bacon, hot dogs, sausage and deli meats. They are not only

high in fat but also raise risk for colorectal cancer from smoking, curing and chemicals used by their manufacturers.

 Palm and coconut oils are high in saturated fat, even though they are often used as substitutes for trans fats in packaged baked items, snacks and other products.

The Fats

in Your Fonds

Research

# **Balanced Meals May Prevent Cancer**

Could eating certain vegetables with red meat help to offset meat's potential cancer-causing substances? AICR grantee Sabrina Trudo, PhD, RDN, associate professor in the School of Human Environmental Sciences at the University of Arkansas, is studying how vegetables' effects on carcinogens may someday help with meal planning.



SABRINA TRUDO, PhD, RDN

#### Q: What is the general focus of your research on nutrition and cancer prevention?

A: I'm interested in whether certain plant foods can affect the way the body metabolizes carcinogens. Our research focuses on improving the body's defense mechanisms to get rid of carcinogens before DNA damage and disease has occurred.

I'm interested in plant foods that, because of their unique profile of phytochemicals, can make the most out of the body's enzymes to make carcinogens less dangerous. The carcinogens that I am most interested in are heterocyclic aromatic amines, or HAAs. They are formed from cooking red meat at high temperatures and are one of several potential reasons behind the link between excess meat consumption and cancer risk.

In my AICR study, we are exploring the effect of eating vegetables on HAAs. Participants ate four different meals. One was a control meal of well-done cooked meat. Another included well-done cooked meat with a serving of vegetables from the broccoli family. Another included well-done cooked meat

with a serving of vegetables from the celery family. The final meal included well-done cooked meat with a serving from both families of vegetables (broccoli and celery).

#### Q: Why broccoli and celery?

A: The broccoli and celery families each have unique profiles of phytochemicals that act on the body's defense mechanisms in different ways. Evidence suggests that compounds we obtain from eating cruciferous vegetables may increase the activity of the body's enzymes that convert HAAs into safer compounds. Other compounds in vegetables such as celery and parsnips may inhibit the body's enzymes that convert HAAs into more toxic compounds.

I'm curious whether combining the vegetables will have an additive or synergistic effect on converting the HAAs into safer compounds. We will be looking at metabolic changes to see whether there is a favorable change in how HAAs were handled in the vegetable groups, by determining whether there are any differences in the participants' metabolic profiles.

Since people tend not to eat the same vegetable every single day, I'm particularly interested in the net effects from a single meal.

### Q: How do you see this research moving forward?

A: The study is a pilot of 30 men and women, and we are very interested in doing a follow-up study that examines the potential impact of genetic differences. There could be a subset of people who may respond differently to the vegetables and I'd like to explore those differences.

I'd also like to go back to an animal model to tease things out and help connect the dots. There are HAAs that are colon specific, so we go back to animal models of colon carcinogenesis to make comparisons.

March is National Colorectal Cancer Awareness Month. Find out more about preventing this cancer, including tips on limiting red meat and avoiding processed meat, from our free brochure, *Reduce Your Risk of Colorectal Cancer*. To order, check box 5 on the Free Information Request Card.

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