



American
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Cancer
Research®

AICR

the newsletter

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LOOK INSIDE FOR
FREE
BROCHURES AND
THE LATEST ON
CANCER RESEARCH



from the editor

Healthy stews filled with cancer-preventing vegetables can help to keep you warm this winter, and so can physical activity. You can find informative articles on both in this issue of our Newsletter.

We also visit The James Cancer Center's Garden of Hope at The Ohio State University in Columbus. There, survivors are learning about and using AICR's Recommendations for healthy eating and physical activity as they harvest fresh vegetables and herbs as part of an innovative study run by Steven K. Clinton, MD, PhD.

We're delighted to announce Yakima Fresh, a grower, shipper and packer of Northwest apples, pears and cherries, as a new partner and sponsor of our 2016 CanPrevent Initiative.

If you would like to qualify for a tax deduction in 2015, please remember to make your gift by December 31. Thank you to all of our supporters who have doubled their impact by utilizing their employer's matching gift option! These gifts go a long way toward fighting cancer. To find out if your company matches gifts to AICR, go to www.aicr.org/matching.

Marilyn Senter

FREE MATERIALS! WINTER 2016

Free Publications from AICR

The New American Plate Portion Size Guide (PG)

This 4-page guide shows how portion sizes have ballooned and tells how to judge healthy portion sizes to maintain a healthy weight for lower cancer risk.



UPDATED Reach Your Healthy Weight (SL)

Learn why a healthy body weight is key for cancer prevention and use our science-based tips.



The New American Plate: Comfort Foods (CF)

Find out how to make favorite recipes in healthier ways according to the New American Plate model for cancer-fighting meals, including macaroni and cheese and meatloaf.



MARILYN'S CHOICE

NEW Activity Magnet (AM)

This handy refrigerator magnet features three easy exercises to stay limber so you can be more physically active for lower cancer risk.

UPDATED Cancer Information: Where to Find Help (FH)

This brochure lists organizations that provide free or low-cost information and services for cancer survivors and their loved ones.



Strategies for a Secure and Satisfying Retirement (SSR)

This informative booklet reviews the basics and explains strategies for increasing your retirement savings.



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.

Eating Healthy When You're Dining Out

It's possible to eat delicious restaurant meals as part of a cancer-fighting diet. Just focus on plant foods and use these tips to navigate the menu.

BEFORE YOU DECIDE where to dine out, look up restaurant menus online or ask around to find out which places offer healthy fare. Before heading out, if you're already hungry, take the edge off with a light snack or beverage, like a small glass of reduced-sodium tomato juice. At the restaurant:

- Drink water or sugar-free beverages and limit alcohol (no more than 1 drink for women and 2 for men) before and during the meal.
- Tell the server not to bring bread and butter or chips. Instead, begin with a broth-based soup or green salad with dressing on the side.
- Order sandwiches that include vegetables like greens, tomatoes or peppers, but keep cheese to a minimum.
- Ask for side dishes of vegetables, whole grains and beans in light dressing instead of fried or with buttery or creamy sauces.
- Trim the size of large entrées by:
 - sharing one entrée with a friend; or
 - requesting a take-out container when you order so you can save half the portion before eating the rest; or
 - choosing smaller items, such as an appetizer and soup instead of an entrée.
- Skip or share dessert, or choose fruit or a mini dessert popular in many restaurants.

Be Alert to Menu Mischief

Restaurants may highlight high-calorie foods that are more profitable. You may see them first on the menu

Some terms that indicate extra calories are:

- Alfredo (cheese and cream sauce)
- au beurre (with butter)
- au gratin (with cheese)
- batter-dipped (deep fried)
- béarnaise (with egg yolks and butter)
- bisque (creamy soup)
- breaded (usually deep-fried)
- carbonara (cream, eggs, Parmesan cheese and bacon)
- creamy or creamed
- crispy (usually fried)
- croquette (mixed with egg and deep-fried)
- flaky pastry
- fritters (batter-dipped and deep fried)
- hollandaise sauce (egg yolk and olive oil)
- kung pao (deep fried with peanuts)
- parmigiana (breaded, fried and baked with Parmesan and mozzarella cheeses)
- tempura (batter-dipped and deep fried)
- popcorn shrimp or chicken (batter-dipped and deep fried)

labeled with tempting terms such as “succulent” and “tender.” Scan the whole menu before deciding what to order.

Pick a Winner

Luckily, many restaurant menus now offer healthier items. Here are some smart selections with cancer prevention in mind:

- low-fat salad dressings (served on the side)
- broth-based soups
- whole beans instead of refried beans
- grilled, baked or poached poultry or fish
- veggie burgers
- brown instead of white rice or other whole-grain side dishes
- entrées served without cheese
- fresh fruit or low-sugar desserts
- unsweetened beverages

A small portion of a high-calorie dish won't hurt once in a while, but make your restaurant meals mostly low-calorie with plenty of vegetables, fruits, whole grains and beans to maintain a cancer-fighting diet.

FREE OFFER

You can order a free copy of our handy New American Plate Portion Size Guide. Simply check box 1 on the Free Information Request card.



A Refuge from “The Chaos of Cancer”

Cancer researcher Steven K. Clinton, MD, PhD, and his team at The Ohio State University (OSU), established an urban garden designed to provide cancer survivors with access to fresh produce and information about healthy eating.

An Urban Oasis

At OSU, Dr. Clinton, Professor of Oncology and Program Leader for Molecular Carcinogenesis and Chemoprevention, has fostered many research efforts focusing upon diet, nutrition and cancer through collaborations between The James Cancer Hospital, dietitians and agricultural and food scientists. The hospital's National Cancer Institute-designated Comprehensive Cancer Center at OSU is one of few that share a campus with a renowned university's College of Food, Agricultural and Environmental Sciences.

The Garden of Hope is located on OSU's 261-acre agricultural research center in urban Columbus. The garden initially began as a service to cancer survivors in 2012 with

a 2-acre plot providing fresh fruit, herbs and vegetables.

titled Growing HOPE (Harvesting Opportunities through Physical Activity and Nutrition Education).



In 2015, one goal of the research was to provide effective weight management through dietary changes combined with physical activity.

This strategy will have lasting impact on health and may contribute to a lower risk of cancer recurrence. Dietary information and physical activity were recorded at enrollment and throughout the gardening season to provide personalized feedback and strategies for change.

While this research project was limited to 35 participants, the garden harvest is available to nearly 400 survivors. Participants attend weekly classes focusing on each of AICR's Recommendations. Each class ends with a cooking demonstration by chefs from The James

Cancer Hospital and Wexner Medical Center. After a taste test, participants receive recipes using garden produce harvested that week.

Farm Manager Glenn Mills coordinates planting and a bountiful harvest throughout the season that varies week to week. Mills also gives practical gardening information to survivors so they can begin gardens at home.

Students from nutrition, medicine and agricultural programs engage in service-learning opportunities and supporting cancer survivors while harvesting and maintaining the garden. Dietetic interns also participate in harvesting, helping to gather produce for those needing assistance and answering questions about food safety, preparation and dietary guidelines.

“For many students, it is a unique experience to be involved with so many people who have recently completed very rigorous cancer therapies or even some who are progressing with fatal disease,” notes Dr. Clinton. “I think that the interactions I have seen are truly motivational for our students and survivors.”

Using AICR's Recommendations

The participants in the 2014 pilot study benefitted greatly from education focusing on diet composition. “They significantly increased the amount of fruits and vegetables consumed, and we noted significant reductions in their in-



STEVEN K. CLINTON, MD, PhD

A Stage for Research and Education

During the 2013 and 2014 growing seasons, the team's efforts expanded to include research studies and educational opportunities for students. Dr. Clinton, an AICR grantee, and Colleen Spees, PhD, MEd, RDN, a faculty member in Medical Dietetics, established a research project



COLLEEN SPEES, PhD, MEd, RDN



take of red and processed meats as well as sugary foods—all showing greater adherence to the AICR Recommendations,” Spees says.

A follow-up evaluation 6 months later indicated that the majority of survivors maintained their healthier habits. Spees adds, “One hundred percent reported that the study made an incredible difference in how they felt and behaved.”

Dr. Clinton says cancer survivors are greatly in need of personalized diet and lifestyle intervention. The rigors of cancer therapy often affect taste and digestive functions at many levels,

he explains. In addition, some cancer therapies place patients at greater risk of acute and chronic toxicities to various organs.

“Research is desperately needed to serve this growing population that currently numbers over 14.5 million in the United States alone,” notes Dr. Clinton.

Connecting with Nature

Dr. Clinton and Dr. Spees both note a far greater impact on participants than they have been able to measure and document. “In this wonderful ‘living laboratory’ we saw a way for our patients and survivors to really get in touch with

where healthy food comes from,” says Dr. Clinton. “Many survivors have never picked or tasted fresh garden produce, and this has been a revelation.”

The experience is also very sensory through the sounds and smells of the farm, touching the plants, the feel of soil under their feet and the glorious Midwest sunsets. As one participant commented, “I just felt like this was 45 years ago, picking corn with my dad.”

Many survivors come with friends, children, parents or spouses. “This garden has become an ‘urban oasis,’ serving as a refuge from the chaos of cancer for so many of our survivors,” Spees explains.

It is also clear that many cancer survivors derive comfort from sharing their cancer experience with others and knowing that they are not alone. Many say the experience provides a connection to the cycle of life as they move through a season of garden preparation, planting, nurturing and harvesting, Spees says.

Growing the Project

“The garden began as a service to our patient population at The James Cancer Hospital and a nice way to connect with our community and provide education on survivorship,” Dr. Clinton comments, “but we quickly realized that there are many opportunities for educating our students, as well as for research.

“Most critically, we would like to define an entire curriculum, including educational lectures on AICR guidelines, cooking demonstrations and web-based personalized guidance so that this effort could be replicated at other cancer centers across the nation.”

Dr. Clinton is currently conducting an AICR-funded study on prostate cancer prevention.

Spreading the Word on Good Nutrition

Frank Batchelder, who was diagnosed with prostate cancer in 2008, was in the first group of survivors who harvested vegetables at the Garden of Hope. Frank used the information he learned from the classes and the garden to promote good nutrition at his residence, the Wesley Glen Retirement Community.



FRANK BATCHELDER

Frank, a patient of Dr. Clinton’s, works with registered dietitians to make sure the dining services offer a wide variety of appealing healthy food. He also writes short articles about nutrition for the community’s 350 residents. “We have super good food here!” Frank says. At 93, Frank delights in using the gym and the pool at Wesley Glen when he’s not attending computer classes and mentoring new residents. “My kids are telling me to slow down,” he laughs.

Warm Winter Stews



Chase away winter's chill with health-boosting stews. Plenty of wholesome ingredients can fill your stewpot with tasty combinations brimming with cancer-fighting nutrition.

FIRST, USE THE NEW AMERICAN PLATE MODEL. Just create a meal that's no more than 1/3 fish, poultry, red meat or low-fat dairy. At least 2/3 of your dish should be plant foods like whole grains, vegetables and beans.

This way, your stew will nourish you with health-boosting phytochemicals and allow you to eat larger portions for fewer calories. A fish stew with onions, celery, carrots, tomatoes and fennel is a good example. Serve your stew over brown rice or quinoa for whole-grain goodness.

Find plenty of delicious cancer-fighting recipes at www.aicr.org

FOCUS ON LEAN PROTEINS. Avoid extra calories and unhealthy fats by providing meatless protein or selecting lean meats, skinless poultry or any kind of seafood. **You can use less meat or no meat at all when you cook with vegetable proteins such as lentils, beans and tofu.**

If you choose beef, the leanest cuts are loin or round, as in sirloin tip and eye of round. Flank steak is also lean.

For ground meats, buy packages labeled at least 90 percent lean and for ground poultry, choose chicken or turkey breast. AICR recommends limiting red meat—which includes beef, lamb and pork—to no more than 18 ounces weekly to avoid risk for colon cancer. Save processed meats like ham, bacon and sausage for special occasions because they, too, increase colon cancer risk.

ADD PLENTY OF HEARTY WINTER VEGETABLES. Cut vegetables into evenly sized pieces for even cooking. Add firm vegetables like potatoes and winter squash first: cut into 1-inch squares, they will probably take 15–20 minutes to cook. Halfway through (7–10 minutes), add bite-sized pieces of broccoli or kale, which cook more quickly.

WINTER SQUASH: *Pumpkin, acorn, butternut, hubbard and delicata squashes.*

- These winter treats are rich in fiber, which is linked to a lower risk of colorectal cancer. Their carotenoids probably reduce the risk of cancers of the mouth, pharynx, larynx and lung. And the beta-carotene and vitamin C may help to reduce the risk of cancer of the esophagus.

LEAFY GREENS: *Swiss chard, kale, collards, turnip and mustard greens.*



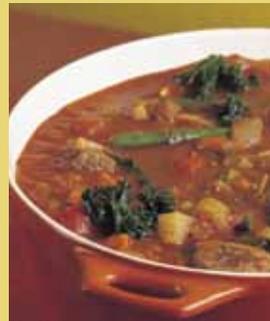
Budget Tip

If you're trying to eat a wide variety of vegetables to get the most cancer protection, try buying store-brand bags of frozen chopped vegetables without sauce. Then you can prepare as much as you need for a meal and keep the rest frozen.



RECIPE

New American Plate Beef Stew



- 1 Tbsp. extra virgin olive oil
- ½ lb. lean beef stew meat, cut into 1-inch cubes
- 1 medium onion, chopped
- 2 medium carrots, sliced
- 2 garlic cloves, finely chopped
- 1 can (about 15 oz.) no-salt-added diced tomatoes in juice
- 1–2 Tbsp. no-salt-added tomato paste
- 1 can (about 15 oz.) reduced-fat, low-sodium beef broth
- 1 Tbsp. dried oregano
- 1 cup water
- 1 large potato, cubed
- ½ lb. frozen green beans
- 1 cup chopped kale
- Salt and freshly ground black pepper, to taste

In large pot or Dutch oven, heat olive oil over medium-high heat. > Add beef and sauté for about 5 minutes, stirring, until browned on all sides. > Remove beef from pot and set aside. > In same pot, sauté onion for about 5 minutes on medium heat, stirring often, until translucent. > Remove onion from pot and set aside. > Add carrots and garlic to pot. > Sauté for about 5 minutes, stirring often, until barely tender. > Return beef and onion to pot. > Add tomatoes with juice, tomato paste, broth, oregano and water. > Bring to boil. > Reduce heat to low and simmer for about 45 minutes, until beef is almost tender. > Add potato and bring back to boil. > Lower heat, cover partially and simmer for about 15 minutes, until potato is barely tender. > Add green beans and kale; cook for another 6–8 minutes. > Season to taste with salt and pepper. > Serve.

Makes 3 servings. Per serving: 300 calories, 9 g total fat (2 g saturated fat), 35 g carbohydrates, 23 g protein, 8 g dietary fiber, 194 mg sodium.

- Dark green leafy vegetables offer fiber and carotenoids. They also give us folate, which is essential for healthy DNA.

CRUCIFEROUS VEGETABLES: *Broccoli, Brussels sprouts, cabbage, cauliflower, rutabagas and turnips (plus kale, collards and turnip greens, listed above).*

- Besides fiber, carotenoids and vitamin C, these vegetables contain phytochemicals called “glucosinolates.” Studies suggest these substances may help to deactivate cancer-causing compounds, slow cancer growth and stimulate the self-destruction of cancer cells.

ROOT VEGETABLES: *Carrots, onions, parsnips, potatoes, rutabagas and turnips (the last two are cruciferous).*

- You’ll get a wealth of different nutrients and phytochemicals from this diverse group of veggies. Parsnips provide vitamin C and folate. Onions are part of the allium family of vegetables, which includes chives, garlic, leeks and shallots. They probably protect against stomach cancer with active compounds such as quercetin and allyl sulfides.

PUNCH UP THE FLAVOR. Instead of adding salt or fat, boost taste in more healthful ways:

- *Use onions, garlic, herbs and spices.* Add strong herbs like rosemary and bay leaves at the beginning of the cooking process. Sprinkle on milder ones like dill and tarragon just before serving.
- *Boost flavor with tomato paste.* Microwave chopped onions and garlic with tomato paste and dried herbs and spices before adding them to your stewpot.
- *Add creaminess with low-fat Greek yogurt.* Blend it in before serving or offer it as a garnish.

- *Add a squeeze of fresh lemon or lime juice before serving.*

You can order a free copy of *The New American Plate: Comfort Foods*, which gives you healthy recipes for favorite dishes like macaroni and cheese and meat-loaf. Check box 3 on the Free Information Request card.



Realistic Goals Lead to Better Activity Habits

New study results continue to show benefits from physical activity, including cancer prevention and better survival. Here's how setting physical activity goals can work for you.

FOR ANYONE, SOME ACTIVITY is better than none. By starting at a pace that is a little challenging for you, whether it's adding a 10-minute walk to your day or working up to an hour of walking a day, you can get stronger and reduce your cancer risk.

Setting goals—even small ones—is essential to making physical activity part of your daily routine. Set a goal for a week, write down the physical activity you do, for how long, how vigorously, where and when. Afterward, you'll be able to judge what activities work best for you.

Use the “SMART” system. The letters stand for:

SPECIFIC: A specific goal describes exactly what you must do to reach your goal. What will you do to be more active?

MEASURABLE: A measurable goal allows you to track your progress. How often will you be more active?

ACHIEVABLE: A goal can be as high as you want it to be, but make sure you know it is possible. Will that type of activity be something you can do now?

REALISTIC: Goals should be realistic considering your resources and time. How can you fit your goal into your budget and schedule?

TIMELY: Give yourself a specific time frame. When do you aim to reach your goal?

A SMART goal example would be: “I will take the stairs instead of the elevator 3 times per week over the next month.”

More ideas are:

- Take a 5-minute activity break once every hour during the day, even if it's just standing to stretch your arms and legs.
- Stand up and pace while you're talking on the telephone.
- Before or after a meal, take a 15-minute walk. Offer to walk a neighbor's dog.
- Lift hand-held weights anytime you're sitting, even while you watch TV.
- Borrow a beginner's exercise video for stretching, aerobics or



tai chi from the library and try it out at least once this week.

- At least two days this week, spend 15 minutes or more doing some form of aerobic exercise, like brisk walking, vacuuming, bicycling, rowing, swimming laps or following a low-impact aerobic exercise video.
- At least two days this week, spend at least 15 minutes doing some form of strengthening exercise, that may include: lifting free weights or doing resistance band exercises, doing wall push-ups or doing sit-ups.

GET SOCIAL SUPPORT. You may feel more motivated with a friend or neighbor to walk or cycle with. Or consider a club for hiking, boating, cycling, dancing and walking. All offer ways to become more active. Ask your reference librarian, community center or county recreation office or go online to find one near you.

3 Easy Moves To Stay Fit
To reduce your cancer risk, AICR recommends getting at least 30 minutes of moderate physical activity every day.

Wall Push-Ups (arms, shoulders and chest)

1. Stand with feet flat on the floor, arms extended straight out in front of you, hands shoulder-width apart.
2. Lean forward until your arms are parallel to the wall or a sturdy table and your body forms a straight line.
3. Push your body up so your arms are straight and your body is parallel to the wall or table.
4. Repeat for 1 second.
5. Repeat 10-15 times.
6. Rest for 30 seconds.

Side Leg Raises (hips, thighs and core)

1. Stand with feet flat on the floor, arms at your sides.
2. Lift your right leg straight out to the side, keeping your back, neck and head in a straight line.
3. Hold for 1 second.
4. Repeat for 10-15 times.
5. Repeat 10-15 times with other leg.
6. Rest for 30 seconds.
7. Repeat 10-15 more times with each leg.

Torso Stands (calves and ankles)

1. Stand with feet flat on the floor, arms at your sides.
2. Lift your right leg straight out to the side, keeping your back, neck and head in a straight line.
3. Hold for 1 second.
4. Repeat for 10-15 times with other leg.
5. Rest for 30 seconds.
6. Repeat 10-15 more times with each leg.

FREE OFFER

MARILYN'S CHOICE

Our free Activity Magnet can be mounted on your refrigerator and shows three easy exercises you can do anytime for an activity break. Check box 2 on the Free Information Request card.

Get Warmed Up

Before doing longer sessions of physical activity, warm up for 5 minutes by:

- marching in place
- reaching your arms above your head (reaching up and lowering) and in front of your chest (pushing and pulling back) repeatedly, 8 times for each move
- reaching across your chest: stand with your feet slightly apart, knees bent and keep your hips facing forward, hands on your hips. Alternate reaching each arm across your chest to the other side, twisting your torso easily to the side each time. Do 8 on each side.

Leaving a Legacy of Healthy Eating

ETHEL KUNNES is a registered dietitian who loves to cook. In the 1970s, she taught international cooking as part of an adult education program at the high school near her home in Los Altos, California.

Like most AICR supporters, Ethel has been touched by cancer. She has had many friends and family who have had cancer, and her mother died of cancer. Ethel made her first gift to AICR in 1984. She chose to support AICR because she feels research is important. She also likes that our *Newsletter* provides information to help people prevent cancer.

Ethel joined AICR's Monthly Donor Program in 2002. She became a monthly donor for three simple reasons: it was easy, she didn't have to think about making a gift every year and, by doing it by credit card, she didn't have to write checks anymore.

Ethel says, "I feel good knowing that I am supporting an organization that is helping people prevent cancer." She likes that AICR keeps people informed and keeps it simple. "Otherwise, people wouldn't follow it," she says. Her recommendations on diet and nutrition have always been to eat everything, don't stress just one food and don't eliminate any food.

She seems to have passed that interest down to her grandson, Adin. She proudly shares how, four years ago, he encouraged some young students who were losing interest in going to school, at the East Palo Alto Elementary School, to help him start a vegetable garden. The parents of the students were so surprised to see their kids learning and be interested in the garden that they themselves started their own community garden.

Today Ethel lives happily with her dog in a retirement community of over 400 people, which provides many opportunities to be active. She is currently a member of her community's food committee.

We are grateful for Ethel's generous support!



ETHEL KUNNES AND TOMMY

FROM AICR

AICR's **CancerResource™** offers a reliable source of science-based nutrition and physical activity information to help cancer patients and survivors recover and prevent secondary cancers.



CancerResource™ is reviewed by an advisory board of leading researchers and oncologists from Dana-Farber Cancer Institute, Duke and other top facilities.

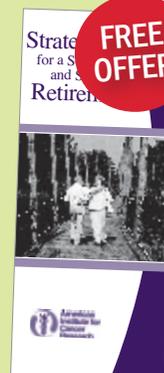
CancerResource™ has two segments: **During Treatment** and **After Treatment**. The publication also lists resources for eating well and being more physically active to prevent recurrence.

To download or order a free copy of **CancerResource™**, visit www.aicr.org; or you can call 1-800-843-8114.

Strategies for a Secure and Satisfying Retirement (SSR)

Few financial topics receive as much attention as the challenge of saving for retirement.

Many people would agree that they should be setting aside more money, but they lack a plan—or the determination—for following through. This informative booklet reviews the basics and explains strategies for increasing your retirement savings. To receive your free copy, please check box 6 on the Free Information Request card.



Make a New Year's Resolution to Support Cancer Research

We invite you to join AICR's Monthly Donor Program and demonstrate your leadership in our vital struggle against cancer. Monthly gifts can also be made in honor or in memory of a loved one. You can change your gift amount or cancel at any time. Monthly Donors also receive:

- a recipe box to fill with our tasty recipes
- twelve new recipe cards each year, one per month
- AICR *Newsletter*
- opportunities to receive exclusive publications.

To join, please complete the Monthly Donor form on the enclosed envelope or call our toll-free number, 1-800-843-8114, and ask to speak with Dan Hendry.



Vital Facts for Reaching a Healthy Weight

Having a healthy weight is one of the most important AICR Recommendations for lower cancer risk. Test your knowledge of weight fundamentals by taking our quiz.

UPDATED

1. The amount of calories your body burns at rest (your “basal metabolic rate”) is influenced by which factors?

- a. age
 - b. carbohydrate intake (calories)
 - c. activity that raises your heart rate
- Correct answer: A.* Basal metabolic rate decreases with age. Other factors that affect metabolic rate include gender, height, body weight and the amount of lean body mass (muscle) a person has, but not cardiovascular activity.

2. Which single behavior is the most effective for weight loss?

- a. increasing strength training
 - b. increasing cardiovascular activity
 - c. decreasing total calorie intake
- Correct answer: C.* Weight loss can be achieved through eating fewer calories. Increasing physical activity without reducing calories generally does not lead to weight loss (although there are still health benefits). The most effective way to lose weight is through combining diet and exercise.

3. How many times per week should you do resistance or strength training to reduce loss of muscle mass with age (called “sarcopenia”)?

- a. 3 days per week
 - b. 4 days per week
 - c. 5 days per week
- Correct answer: A.* In addition to 30 minutes or more daily of moderate physical activity recommended for reduced cancer risk, health experts

advise doing resistance exercises for each major muscle group 2–3 times per week to prevent sarcopenia.

4. Low-carb diets limit refined added sugars and sometimes nutritious starches in whole grains and other plant foods, plus natural sugars found in fruits and many dairy products. These diets:

- a. are the most effective diet-type for weight loss
- b. do not show greater weight loss than other diets, long-term
- c. are popular because carbohydrates are not necessary in the diet

Correct answer: B. Many people experience greater initial weight loss on a low-carb diet. However, research shows that 1–2 years out, low-carb diets do not lead to greater weight loss any more than other diets that reduce calories.

5. How quickly should you lose weight for long-term results?

- a. slow weight loss is recommended as it is more sustainable
- b. rapid weight loss is associated with better long-term results
- c. it depends on the individual

Our free brochure, *Reach Your Healthy Weight*, explains the link between weight and cancer, and offers practical tips for reaching a healthy weight. To order, check box 4 on the Free Information Request Card.

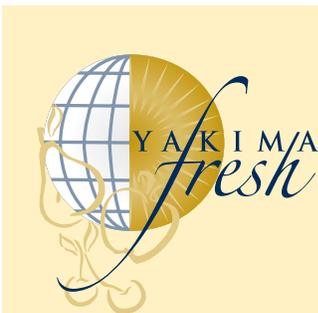
FREE OFFER



Correct answer: C. Experts generally recommend weight loss at a rate of 1–2 pounds per week. However, some people may not be able to achieve that rate in a healthy way, so the most important thing is to keep making progress at a rate you can healthfully sustain.

6. Which of the following is NOT associated with weight gain?

- a. stress
 - b. lack of sleep
 - c. eating after 8 pm
- Correct answer: C.* Research links stress and poor quality sleep with weight gain. However, not much evidence associates eating after a certain time and weight gain. Regardless of the time, if snacking is adding too many extra calories, it can lead to weight gain.



Thank you to our generous sponsor Yakima Fresh for sponsoring our 2016 CanPrevent Initiative. Yakima Fresh is a proud grower, shipper and packer of Northwest apples, pears and cherries. For generations Yakima Fresh has been devoted to helping consumers eat healthy.

PHOTO: VEER

The Sweet News about Chocolate

Chocolate lovers take heart, the world's favorite candy isn't all bad when it comes to good nutrition and health. A little cacao-rich chocolate contains phytochemicals that can even fit into a cancer-fighting diet.

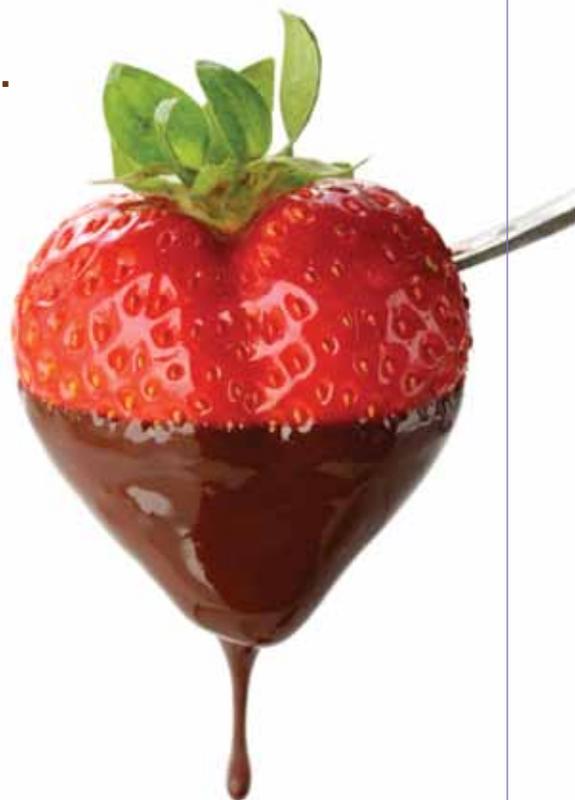
THE ANCIENT MAYANS, who first cultivated cacao from which modern-day chocolate is made, considered the plant's rich brown seeds a "food of the gods." These early people roasted and ground the cacao beans, and then stirred in water, cinnamon and chili peppers to make a drink coveted for its pick-me-up powers. Seventeenth century European explorers shipped beans home where they added sugar to mask the cacao's bitter taste.

Later, candy manufacturers boosted chocolate's flavor factor by adding gooey fillings. This reduced these confections' nutrients per bite and earned chocolate a bad reputation as a "junk food." Today, nutrition professionals have re-

discovered that this plant-based sweet—especially the plain dark variety—is a potent dietary source of natural plant compounds called flavonoids that may have health-protecting effects.

Cacao (the roasted ground form is called cocoa) is the source of these beneficial phytochemicals. High amounts give dark chocolate its hue, and milk chocolate contains lower amounts. White chocolate and caramel, marshmallow and nougat fillings contain none of this prized bean and more sugar.

For example, 1 ounce of dark chocolate (at least 70 percent cacao solids) provides 3 grams of dietary fiber or roughly one-tenth of the daily recommendation compared to only 1 gram in milk chocolate. As for



phytochemicals, it's the flavonoids in chocolate, specifically the flavanols, that may work their wonders on a variety of ills such as stress, heart disease and mental alertness.

Maximize the benefits eating chocolate while minimizing the risks of eating too much and gaining unwanted weight with these tips:

- 1. Darker Is Better.** Read labels to find dark chocolate that contains 70–85 percent cacao solids for highest flavonoid content. It may be an acquired taste, however, since darker chocolate is more bitter.
- 2. A Little Goes a Long Way.** There is no officially recommended serving size for chocolate. However, many studies show benefits with 1 ounce of dark chocolate a couple of times weekly.
- 3. Fresh Fruit Pairs Nicely.** Dip fruits like strawberries, grapes

and apple slices in melted dark chocolate. This is a good way to keep portion sizes small. Plus, these three fruits are good sources of different types of flavonoids.

- 4. Enjoy Variety.** Get a fix of flavanols from cocoa powder. Choose products that are not Dutch-processed as this removes flavonoids. Sprinkle cocoa powder over whole-grain breakfast cereal like oatmeal or mix it into low-fat plain or vanilla yogurt.

The Taste of Love

Stressed? Want to give a healthy valentine? Choose dark chocolate. Researchers in Switzerland discovered that subjects who ate 1.4 ounces of dark chocolate daily for two weeks showed lower levels of stress hormones.

Many studies show that cacao flavanols promote heart health by reducing fatty plaque build-up and preventing blood clots. In one study, results showed that chocolate may be good for the head as well as the heart. Seniors in Italy who drank a high-flavanol cocoa drink daily for eight weeks tested better at quick thinking, memory and attention skills.

Can a Compound from Vitamin E Reduce Cancer Growth?

A new compound with a long name is being researched for its potential to prevent and reduce metastases in several cancers. Here is what an AICR grantee is finding out about this substance.



WILLIAM REDMOND, PhD

A DIETARY SUPPLEMENT derived from vitamin E, alpha-tocopherylacetic acid (α -TEA), has been found to induce cell death (apoptosis) in a variety of mouse and human cell lines.

Not only does α -TEA not harm normal cells, it is effective enough to be tested in humans, says AICR grantee William Redmond, PhD, Assistant Member, Laboratory of Cancer Immunotherapy, Earle A. Chiles Research Institute, Providence Portland Medical Center in Oregon.

Dr. Redmond cautions that the drug is not the same as the vitamin itself, but rather a chemical derivative.

Laboratory testing showed that α -TEA inhibits tumor growth and significantly reduces the incidence of lung cancer growth (metastases). This double benefit, plus the drug's stability, lack of toxic side effects, selectivity for tumor cells and capacity to activate the immune system, has cleared the way for human testing.

More Types of Cancer May Be Affected

The drug is believed to be active in a variety of tumor types, including breast and colon cancers.

Moreover, there may be additional mechanisms by which α -TEA enhances tumor cell death, and it might also increase the immune system's ability to recognize and eliminate some tumor cells.

"We are making important progress in translating α -TEA from the laboratory to the clinical arena, and I'm very optimistic about the current phase 1 trial," says Dr. Redmond. "Although several more years of development are still needed, we believe that α -TEA holds great promise for treating metastatic cancer."

Human Trials Beginning

About 60 subjects are in the current phase I trial. Dr. Redmond's goal is to find the highest dose of the drug that can be given to patients safely and to identify potential toxicity. Additional goals are to monitor the drug's effect on tumors, to check for specific immune cells circulating in the blood and to determine which features of tumors, if any, make it possible to predict the response to α -TEA.

The patients in the trial have metastatic carcinoma, sarcoma or lymphoma, and their disease has not responded to other types of treatment (or has progressed after

initial therapy). However, they're not so ill that they cannot benefit from a new and different treatment.

"We hope for a favorable safety profile and sufficient clinical advantage that can be used to guide future clinical trials," says Dr. Redmond.

His best guess for the future of α -TEA is that it will be ideal for high-risk patients when given in conjunction with standard-of-care drugs, such as chemotherapy, radiation therapy, immunotherapy and targeted agents such as Herceptin for certain types of breast cancer.

"It is well accepted in cancer immunotherapy that treatments that integrate immune function interventions with other ways of manipulating cell response will have the best chance of reducing tumor growth and aiding recovery," Dr. Redmond notes.

UPDATED

Cancer Information: Where to Find Help lists many organizations that provide mostly free information about specific cancers and services to patients. To order a free copy, check box 5 on the Free Information Request card.

FREE OFFER



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