



American
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AICR

the newsletter

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LOOK INSIDE ▶ FOR YOUR FREE BROCHURES



From Marilyn Gentry

Since 1982, AICR has been a leading authority on lifestyle, nutrition and cancer. With your help, we have funded research on nutrition and cancer even before the concept of “food as medicine” was popular. Now, nutrition is rightly seen as a vital part of cancer prevention and treatment. Learn more with our food as medicine article on page 4.

I was excited to see the article about the Blue Zones, which are areas of the world where people live long and healthy lives. After working for many years in the field of cancer prevention, I have learned important healthy lifestyle tips to integrate into my daily habits. In many ways, my choices to eat well, exercise and do meaningful work echo the tenets highlighted in Blue Zone areas. Learn more on page 6.

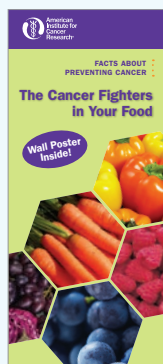
I hope the inspiring tips and research-based facts in this newsletter help you lead a healthy lifestyle, too.



Free Publications from AICR

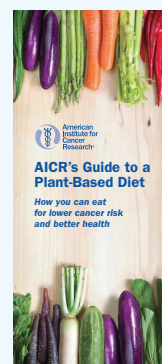
THE CANCER FIGHTERS IN YOUR FOOD ▶

sums up the latest information about cancer-fighting compounds found in plant foods.



AICR'S GUIDE TO A PLANT-BASED DIET

▶ Discover the wide range of whole grains, vegetables, fruits, pulses and other delicious plant foods that AICR recommends eating for lower cancer risk.



REDUCE YOUR RISK OF COLORECTAL CANCER ▶

This brochure tells you the risk factors and steps to avoid this common but preventable disease.



WHEN A LOVED ONE DIES: THE NEXT STEPS ▶

You'll find practical and valuable information for a time when you or someone close to you needs comforting direction.



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. By phone:** call AICR toll-free at 1-800-843-8114 to order your free brochures.
- 2. By mail:** write to AICR, PO Box 97167, Washington, DC 20090-7167

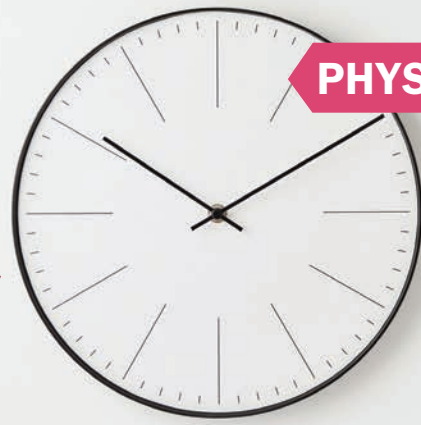
AICR EVENTS

In March 2024, Nigel Brockton, PhD, Vice President of Research at AICR, spoke at the 45th Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine (SBM) in Philadelphia, PA. SBM's vision of “better health through behavior change” is a perfect fit with AICR's mission, and this message has never been more important. Dr. Brockton led the session on “Pragmatism versus Perfection: When Is Research Evidence Strong Enough to Give Advice?”



NIGEL BROCKTON, PHD

When Is the Best Time of Day to Exercise?



Spoiler alert: Science says the timing doesn't matter as long as you're active.

Is there a “better” time of day to exercise? Headlines may lead you to that conclusion. But at AICR we’ve noted that for every news article that claims, “working out in the morning is best,” there’s another article stating that “evening workouts are best.” What gives? With so much information available, how do we know when to exercise? Researchers have attempted to answer this question. But first. . .

Why Exercise?

A commitment to staying physically active is vital to our overall health. Here are eight research-proven benefits of exercise.

1. Improved sleep quality
2. Increased energy levels
3. Prevention of multiple types of cancer
4. Better balance and strength to reduce fall risk
5. Less depression, anxiety and improved memory
6. Lower risk of heart disease, diabetes and stroke
7. Better joint mobility
8. Longer ability to live independently

AICR recommends 150 minutes of physical activity per week. That is 30 minutes daily for five days. Or divide it up and move for 15 minutes twice daily for five days to meet the goal.

Getting Started

Whether you are a beginner or getting back into working out, 150 minutes a week might seem daunting. But remember, any movement is better than none at all. Try 10 minutes of walking daily. Start slowly. You are more likely to stick with working out if you set realistic goals from the start.

In the United States, 25.3 percent of people are physically inactive. Each year, physical inactivity contributes to one out of every ten premature deaths and racks up about \$117 billion in avoidable health-care costs.

The Best Time of Day to Work Out

Regarding working out, science shows that each time of day has advantages. Research suggests that individuals vary in how exercise works best for them.

Exercising in the morning. A morning workout routine eliminates competing demands that can creep up during the day and derail your exercise plans. Studies show multiple benefits of working out in the morning.

- Increased energy during the day
- All-day appetite reduction from hormonal shifts
- Better sleep from exercise-induced blood pressure changes

Exercising in the afternoon. Some people may prefer to exercise during the day. Research shows that exercising in the afternoon can:

- Rejuvenate daytime energy
- Improve clarity of thinking
- Lessen overall fatigue

Working out at night or before bed. Evening workouts may be best for night shift workers or those who feel less stressed and more focused at the end of the day. Here are some possible benefits of working out in the evening.

- Faster sleep onset and longer time in deep sleep
- Lower nighttime blood pressure
- Reduced habits such as snacking before bed

The Bottom Line

Any time of day is the best time of day to exercise if it works for you. The “when” of exercise is much less important than sticking to it. Finding a time that works for you and making it a consistent part of your day can help you do that.

Food as Medicine in the Spotlight

AICR remains at the forefront of promoting nutrition for cancer prevention and survivorship.

AICR is the leading authority on lifestyle, nutrition and cancer. This reputation has been earned over the past 40 years of dedicated work spent highlighting how lifestyle can change your risk of developing and dealing with cancer.

Before it was in vogue, AICR believed in the idea of “food as medicine”—meaning that nutrition plays a role in cancer prevention and survivorship.

AICR was founded in 1982 because we recognized that nutrition could reduce the risk of getting cancer. Our original goal was to raise awareness, but soon we funded research to answer important questions about how lifestyle impacted cancer risk.

AICR Supports Food as Medicine

The link between nutrition and cancer has not always been the accepted fact that it is today. The positive progress came largely through AICR’s legacy of research and advocacy. Now, food as medicine is a topic that appears in magazine headlines, research studies and even has its own annual conference.

Here’s how AICR promotes food as medicine:

Melissa Habedank, MPH, vice president of AICR, attended the Food as Medicine Policy Summit in May 2023, where she met with White House staff to share more information about AICR.

Following the Summit, the White House suggested that AICR contribute in a more formal way to its National Strategy on Hunger, Nutrition and Health. AICR worked with the CDC and the White House to draft a commitment as to how AICR will

A healthy lifestyle—combining healthy eating with avoiding tobacco, limiting alcohol and getting regular physical activity—can prevent about 42 percent of today’s cancers.

work toward accomplishing the goals of the National Strategy between 2023 and 2030.

Also following the Summit, Habedank was invited to chair the next Food as Medicine Policy Summit, which took place in November 2023. She opened and closed the Summit and spoke as a panelist for the session *Demonstrating the Effectiveness of Food as Medicine Approaches on Specific Disease States*.

Habedank also chaired and spoke at the Future of Cancer Care Summit, where she ensured that “food as medicine” was on the agenda.

AICR serves on the Stakeholder Advisory Group for Tufts University’s Friedman School of Nutrition Science and Policy. They are looking into food as medicine pilot interventions in cancer care.

AICR has a popular blog and social media channels, which share messages about food as medicine to keep readers educated and informed. Read more at www.aicr.org/resources/blog/.

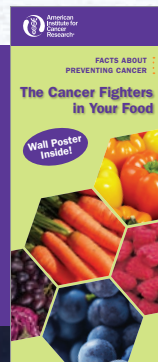
Food as Medicine:

Food as medicine means that nutrition plays a role in promoting health, preventing disease and treating illness. Importantly, food as medicine does not mean that food replaces other treatment options, such as medication, chemotherapy or radiation. Food is used in conjunction with and to support appropriate medical therapy. Healthy eating is part of—not used instead of—health care.



FREE OFFER ▶

The Cancer Fighters in Your Food sums up the latest information about cancer-fighting compounds found in plant foods.



Touched by Cancer: Patricia Fail's Story

How one cancer survivor gives back so she can help others.

For decades, cancer dominated Patricia Fail's life. She lost her husband to prostate cancer in 1996. She lost her grandmother, aunt and cousins to cancer. Her current husband, Bob Ward, had a lung removed in 2018 to treat lung cancer. And in 1999, Patricia developed a rare tumor in her leg, which was treated with radiation and surgery. So, Patricia's commitment to the fight against cancer isn't without basis.

Since her own battle with cancer and after losing so many loved ones, Patricia has learned to cherish "how precious life is." She says, "The thing I appreciate most is other people. I just try to appreciate people whether they are on my radar screen or not. I've become a lot more sensitive about how people treat each other."

Patricia grew up in Kansas, where her early years of education were in a one-room schoolhouse. Always enchanted by science, Patricia studied biology and earned a master's degree and two PhDs, one in physiology and another in dairy science. She was surrounded by scientists working on cancer.

For 30 years, Patricia worked on testing chemicals and their effects on the reproductive system. She and Bob are now enjoying retirement in Florida. They understand the importance of eating well and staying physically active to prevent secondary cancers. They walk two or three times a week and plan to join a health club that offers personal training and fitness classes.

AICR extends a huge thank you to Patricia and Bob for their generous donations to cancer research.

FREE OFFER ▶ AICR's brochure, *When a Loved One Dies: The Next Steps*, gives you practical and valuable information for a time when you or someone close to you needs comforting direction.



ASK THE FINANCIAL EXPERT...

Q: For several years I have been making annual gifts to AICR from my IRA as part of my required minimum distribution. I read recently that I could use this gift to establish a charitable gift annuity. Can you tell me more about this option?

A: Thank you for your gifts that support our research efforts. You are correct that you can now direct your IRA gifts (a qualified charitable contribution) to fund a charitable gift annuity. Donors may make a one-time election to transfer up to \$53,000 (adjusted for inflation in 2024) to establish a gift annuity. Gift annuity payments may be made only to the donor and/or spouse.

Payments from the gift annuity must begin in the year of the gift (no deferred gift annuities). Unlike gift annuities funded with cash or appreciated securities, which may offer tax-free or favorably taxed capital gain payments, recipients are fully taxed at ordinary income tax rates on payments from IRA gift annuities. Qualified donors may contribute up to a maximum \$105,000 in 2024 from an IRA, which can consist of outright gifts and a charitable gift annuity (e.g., \$53,000 for a gift annuity plus \$52,000 cash). These gifts can satisfy part or all of a donor's required minimum distributions. Donors must be age 70½ or older to make qualified charitable contributions.

Questions? Please contact AICR at 1-800-843-8114.

Can the Blue Zone Diet Help You Live Longer?

Plant-based eating can help prevent chronic disease.

We all know someone who seems like they must drink from the fountain of youth. They act younger than their years, are always active and remain healthy despite their age. Could their secret be their Blue Zone habits?

What Are the Blue Zones?

Blue Zones are five areas of the world with the largest percentage of people who live to age 100 or longer. They include:

- Loma Linda, California
- Nicoya, Costa Rica
- Ikaria, Greece
- Sardinia, Italy
- Okinawa, Japan

The Blue Zones were identified by Dan Buettner, a journalist who partnered with National Geographic and the National Institute on Aging to study habits of people living in these regions.

The Blue Zone science is “light” compared to research funded and published by AICR. But Buettner’s bestselling books and recent Netflix documentary *Live to 100: Secrets of the Blue Zones* has boosted the popularity of this concept. AICR had to check it out, even though clinical studies are lacking.

What Is the Blue Zone Diet?

A Blue Zone diet plan isn’t an on-and-off diet. It’s a long-term way of eating. Although the cuisines differ from region to region, they have several things in common, which also fit with AICR’s Cancer Prevention Recommendations:

- Meals and snacks feature lots of fruits and vegetables. Blue Zone diets aren’t necessarily vegan, but they are plant-forward.

- Protein comes from beans and a small amount of fish. Centenarians include at least a half-cup of lentils, chickpeas, soy and beans daily, and eat red meat a few times a month.
- A generous handful of nuts is enjoyed daily.
- Whole grains replace refined white flour. Whole wheat, barley and oats are popular choices.
- Dessert is reserved for special occasions.
- Water is the primary thirst-quencher, along with tea and coffee. You won’t find sweetened soft drinks on Blue Zone menus.

It’s easy to notice similarities between a Blue Zone diet and other healthy eating patterns, such as the Mediterranean diet and AICR’s New American Plate. While the Blue Zone diet isn’t backed by research, other studies show that plant-based diets with a reduced emphasis on meat, added sugars and highly processed foods, help lower cancer risk.

More Than a Longevity Diet

Beyond diet, people in Blue Zones follow several healthy lifestyle habits, which may account for their lifespan:

- They incorporate physical activity into their daily routine by gardening, running errands on foot, hiking or riding a bike.
- They live purposely and have a reason to get out of bed each morning. Many do volunteer work or care for others.
- They participate in daily stress-reducing activities, like praying, meditating, practicing gratitude or taking a nap.
- They are closely connected to friends, family and a faith-based community.

There is no guarantee that Blue Zone lifestyle habits will help you hit the century mark, but it’s easy to see how these small, healthy habits add up to promote a longer, healthier and more vibrant life.

Can Feeding Your Microbiome Prevent Colorectal Cancer?



AICR research shows that nutrition may help keep colon cancer away.

You've heard the expression "you are what you eat," but your risk for colorectal cancer might depend on what your gut bacteria eat. Research suggests that your gut microbiome, which includes trillions of bacteria and other microbes living in your colon, plays a role in the development and progression of colorectal cancer based on your diet.

Colorectal cancer usually starts as polyps. These are abnormal growths in the lining of the large intestine. Over time, lifestyle factors, inflammation and genetics cause some cells lining the gut to grow abnormally and form polyps, which are abnormal growths in the lining of the large intestine. Some polyps may progress to become colon cancer.

By age 50, nearly half of us will have polyps detected during colon cancer screening. Some will be advanced precancerous polyps, according to AICR grantee Dr. Daniel Rosenberg, PhD, Director of the Colon Cancer Prevention Program at the University of Connecticut. He also notes that people under 50 are developing colorectal cancer at an alarming rate.

Dr. Rosenberg and his team have been studying the interaction between diet and the gut microbiome. They are particularly interested in how the interactions cause changes in the colon lining that may protect against cancer.

Feeding the Microbiome

Gut bacteria break down fiber and other compounds from fruits, vegetables, grains, legumes, nuts and seeds. In doing so, they produce metabolites with various health benefits. Certain plant foods also stimulate the growth and activity of specific gut bacteria, leading them to produce large amounts of anti-inflammatory and anti-cancer compounds.

Dr. Rosenberg's research focuses on plant compounds called ellagitannins, which are abundant in walnuts, berries and pomegranates. Gut bacteria

convert ellagitannins into urolithins, which are metabolites with powerful anti-inflammatory effects on colon polyps.

With a grant from AICR and the California Walnut Commission, Dr. Rosenberg's team conducted a small pilot study and found that eating a generous handful of walnuts daily (about ¼ cup) for three weeks can boost urolithin levels and reduce inflammatory markers in the blood.

"There is no question that walnuts cause significant changes to the inflammation going on in colon polyps, even in a short time," says Dr. Rosenberg. He says that not everyone produces the same amount of urolithins; some make none, while others produce large amounts. Certain strains of bacteria are responsible, and some people may not have the necessary microbes.

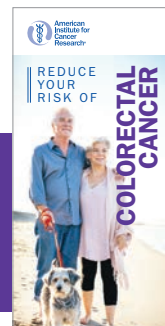
Using Food as Medicine

Dr. Rosenberg's AICR-funded study helped secure a \$3.5 million grant from the National Institutes of Health to further his research. He hopes to find more evidence that consuming foods containing ellagitannins protects the colon. He'd also like to identify which gut microbes are responsible for converting ellagitannins to urolithins so they can be isolated, grown and used as a probiotic for people who don't have urolithin-producing microbes.

It may be years before we have a better understanding of the interplay between diet, microbiome and colorectal cancer, but this research supports AICR's Cancer Prevention Recommendations. Regardless of the mechanism, eating a high-fiber, plant-forward diet is an important way to reduce the risk of colon cancer.

UPDATED!

FREE OFFER ▶ AICR's popular brochure, *Reduce Your Risk of Colorectal Cancer*, tells you the risk factors and steps to avoid this common but preventable disease.



What's the Link Between Meat and Cancer?

AICR answers your questions about red and processed meat.

AICR offers 10 Cancer Prevention Recommendations to help reduce cancer risk. Recent studies show that these 10 strategies do effectively help reduce the chances of developing cancer.

One of the Recommendations is to limit consumption of red and processed meat. There is strong evidence that red and processed meat increase colorectal cancer risk. Processed meat should be avoided. Aim to eat no more than 12 to 18 ounces of red meat per week.

What is red meat? Red meat includes unprocessed beef, pork and lamb. Poultry such as chicken and turkey are not classified as red meat. Poultry and fish are not linked to an increased risk of cancer.

What is processed meat? Processed meat has been salted, smoked, cured or prepared with preservatives such as nitrites. Examples of processed meat include:

- Bacon
- Ham
- Hot dogs
- Sausages
- Pepperoni
- Deli meats

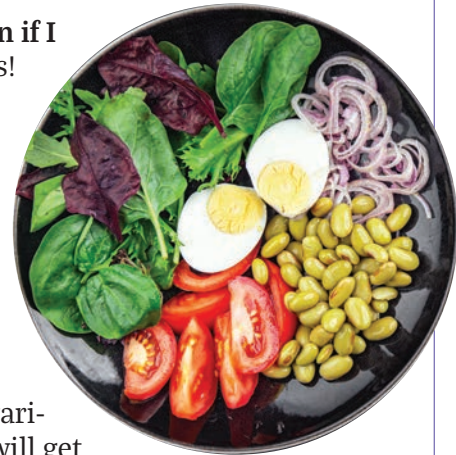


Why is meat linked to colorectal cancer? There are several reasons why eating meat increases colorectal cancer risk:

- Red meat is high in heme iron, which may promote colorectal tumors
- Cooking red meat at high temperatures leads to the creation of compounds such as heterocyclic amines, which increase cancer risk
- Nitrites used in processed meat may increase cancer risk

Can I get enough protein if I reduce meat intake? Yes!

There is lots of protein in poultry, seafood, dairy and eggs. Plus, you can choose plant-based protein such as tofu, edamame, beans, lentils, nuts and seeds. Grains and vegetables also add small amounts of protein. If you eat a variety of these foods, you will get enough protein daily.



Is canned chicken or tuna considered processed meat? No. Canning is a form of processing, but it's not what defines processed meat (which involves processes like smoking or curing).

Should I choose meat alternatives? Plant-based alternatives can range in nutritional value. Some are whole foods that are high in nutrients and minimally processed, such as tofu, black bean burgers and hummus. Others, such as processed soy deli meat or veggie hot dogs, are ultra-processed foods that vary in nutrient content and may be high in sodium. When choosing a meat alternative, make whole plant foods your first choice.

I'm going to a backyard barbeque. Should I choose the ultra-processed veggie burger or the beef burger?

Choose the one you prefer and enjoy every bite. Both can be eaten on occasion but are not recommended daily. If most of your meals contain whole foods, the occasional burger (whether meat-based or ultra-processed plant-based) is fine.

AICR RECOMMENDS CUTTING BACK ON RED AND PROCESSED MEAT.

Eat no more than 12 to 18 ounces (cooked weight) of red meat per week. That's about three portions per week as long as they are not much bigger than the size of a deck of cards. Eat little, if any, processed meat.

Nutrition:

Part of Your Cancer Treatment Plan



From day one, nutrition should be considered alongside treatment for improved outcomes.

After a cancer diagnosis, eating well can help you throughout chemotherapy, radiation therapy and surgery. Aim to follow AICR's Cancer Prevention Recommendations during treatment.*

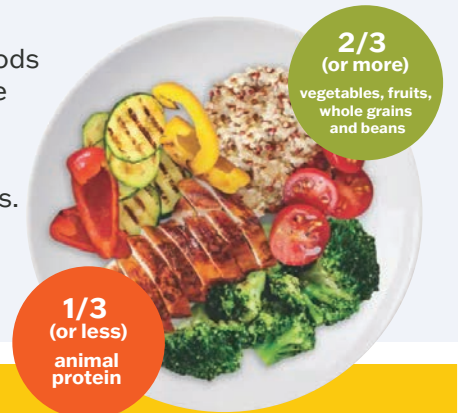
NUTRITION CAN HELP YOU:

- Heal and recover faster from treatments
- Reduce your risk of infection
- Support your immune system
- Build your strength and energy
- Tolerate side effects from treatments
- Maintain a healthy weight
- Replace or retain nutrients that are stored in your body
- Reduce your risk of cancer recurrence

***Work with a dietitian and your cancer care team to set up your personal nutrition plan.**

WHAT SHOULD I EAT?

- Fill 2/3 of your plate (or more) with plant-based foods, such as vegetables, fruits, whole grains and beans.
- Fill 1/3 of your plate (or less) with animal protein, such as fish, poultry or eggs.
- If you eat red meat, limit it to no more than 3 portions a week or about 12–18 ounces (cooked) in total.
- Eat little, if any, processed meat, such as deli meat, hot dogs, bacon or sausage.
- Limit consumption of fast foods and processed foods that are high in saturated fat, salt, refined starches or sugars.
- Limit sugar-sweetened drinks. Choose mostly water and unsweetened drinks.



Follow AICR's Cancer Prevention Recommendations after diagnosis for beneficial effects on survivorship and quality of life.

www.aicr.org

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