

SPRING 2024 | ISSUE 163 | www.aicr.org

## TIME-RESTRICTED Eating and Cancer 3

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the newsletter

LOOK INSIDE > FOR YOUR FREE BROCHURES



From Marilyn Gentry

Welcome to the Spring 2024 AICR NEWSLETTER. True to the season, our NEWSLETTER has undergone a fresh renewal. We listened to your feedback and are so proud to bring you more science and research with some new design features. Let us know what you think!

AICR is proud of our 10 Cancer Prevention Recommendations, and they are prominently featured in this issue. Learn more about these Recommendations on page 12 and take a deep dive into the Recommendation about reducing your intake of sugar-sweetened drinks on page 6.

This issue focuses on research and takes a closer look at intermittent fasting and personalized nutrition for cancer care, and answers your questions about cancer risk associated with alcohol, aspartame and ultra-processed foods.

To continue paving the way to a cancer-free world with AICR, please consider donating to our Monthly Giving Program. Your monthly support ensures that vital cancer research, prevention and survivorship programs continue in the fight against cancer.





## **Free Publications from AICR**

THE FACTS ABOUT
SUGARY DRINKS
AND YOUR
CANCER RISK
▶ This brochure
describes the link
between sugary
drinks, obesity and
higher cancer risk.



#### REDUCE YOUR RISK FOR ENDOMETRIAL CANCER ► Learn

about the risk factors, symptoms and prevention steps you can take based on emerging research into this type of cancer.



AICR GUIDE TO STORING FRESH PRODUCE ► This handy card lists the best ways to store many cancerfighting vegetables and fruits so they keep longer.

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#### CAN A REVOCABLE LIVING TRUST BENEFIT YOUR ESTATE? > This

brochure details how this type of trust may distribute your assets quickly and privately and protect you and your estate if you ever become disabled.



**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, PO Box 97167, Washington, DC 20090-7167.

AICR's Vice President, Melissa Habedank, MPH, chaired the inaugural Future of Cancer Care Summit in Tampa, FL in November, 2023. Habedank and Dr. Nigel Brockton, PhD, AICR's Vice President of Research, presented on a panel called Understanding the Role of Lifestyle across the Cancer Care Continuum.

Habedank also chaired the sold-out Food as Medicine Policy Summit in Washington, DC, and spoke on a panel called Demonstrating the Effectiveness of Food as Medicine Approaches on Specific Disease States.



**MELISSA HABEDANK AND NIGEL BROCKTON** 

EVENTS



## TIME-RESTRICTED EATING (TRE) AND CANCER: What's the Latest?

### Learn how personalized nutrition strategies like intermittent fasting may impact cancer treatment.

Could personalized nutrition enhance outcomes of cancer treatment? Just as treatment plans are now based on individual cancer characteristics, research is exploring personalized nutrition strategies-including intermittent fasting-to improve response to cancer therapy. Your donations help AICR fund this important work.

#### **Can Meal Timing Improve Treatment Response?**

Circadian rhythms are run by a master clock in the brain and other clocks throughout the body. These rhythms help regulate sleep-wake cycles, hormones and metabolic processes. While light and dark are the main cues for the clock in the brain, eating is a major cue for clocks in other body tissues.

Research in rodents suggests that radiation treatment response may vary based on how its timing aligns with circadian rhythms. Human studies suggest that radiation timing may influence side effects and outcomes.



Dr. Nicole Simone, Professor of Integrative Medicine and Nutrition Sciences at Thomas Jefferson University in Philadelphia, says research could ultimately show how TRE may prompt cancer cells to be in a circadian phase at which they are most vulnerable to destruction. Dr.

NICOLE SIMONE. MD

> Simone notes that cancer cells eventually adapt to TRE, so research may show how it could rotate with other nutrition strategies.

#### **Personalizing Support for Nutrition Strategies**

In an AICR-funded study called Txt4fasting, Dr. Kuang-Yi Wen, PhD, Associate Professor at Thomas Jefferson University, is investigating whether personalized telehealth coaching and interactive text messages help women following personalized TRE during cancer treatment.

This study is testing TRE to reduce cancer progression and cognitive side effects following radiation treatment of



brain metastases from breast cancer. The KUANG-YI WEN, PHD results of this pilot study will lay groundwork for a larger clinical trial on TRE during cancer treatment.

It's too soon to recommend TRE outside of clinical research settings, but researchers are making strides toward personalizing nutrition protocols during cancer care.

To-date, AICR and our affiliates have committed over \$280 million to biomedical research into the link between diet, lifestyle and cancer. With your donations, AICR will continue to fund research that moves personalized nutrition from theory to a standard approach to cancer treatment.

#### **TERMS TO KNOW**

Personalized nutrition means that the best diet for you may be different than the best diet for someone else. Individualized strategies consider differences in DNA, race, sex, health history, medical treatments, gut microbiome, food intolerances and more.

Intermittent fasting is one type of personalized nutrition strategy. It involves specific hours or days with little or no food or drink besides water. Researchers are investigating whether fasting before or after chemo or radiation therapy may reduce side effects or enhance treatment effectiveness.

Time-restricted eating is one type of intermittent fasting, which extends fasting to 12 to 18 hours a day, typically including overnight hours. Research in rodents shows that it can increase effectiveness and reduce side effects of chemotherapy. Human studies show some benefits for treatment tolerance and quality of life. More clinical trials are currently underway.

## RELIABLE RESEARCH: Using Science to Separate Fact from Fiction

## **Exploring cancer myths and sharing science-driven facts.**

Your donations help fund AICR research, which can answer common questions about cancer. Here are some questions that came up at our latest Town Hall meeting.

#### **Does Aspartame Cause Cancer?**

Don't worry. Diet soda is safe. While the International Agency for Research on Cancer and The Joint FAO/WHO Expert Committee on Food Additives (JECFA) classified aspartame as "possibly carcinogenic to humans," they found limited evidence that aspartame is carcinogenic. JECFA reviewed the general

health and nutrition risks of aspartame at usual consumption levels and found insufficient evidence linking aspartame to the risk of cancer. JECFA concluded that the previously established acceptable daily intake of 0-40mg/kg body weight should not change. That is the equivalent of between nine and 14 cans of diet soda per day, assuming no other intake from other sources. AICR's Cancer Prevention Recommendations

include limiting sugar-sweetened beverages and choosing mostly water or natural unsweetened drinks such as tea, coffee or fruit-infused water.

#### If My Parents Had Cancer, Does That Mean I Will Get Cancer Too?

No. Some types of cancer are genetic, but parents having cancer does not mean their child will get cancer. About five to 10 percent of cancers are caused by gene mutations that are inherited from your parents. Lifestyle has an even stronger effect of reducing cancer risk in those at higher genetic risk.

Most cancers are not inherited. In fact, 90 to 95 percent of cancers are caused by mutations that

happen during your lifetime. The mutations are caused by the natural aging process or from ongoing exposure to environmental factors, such as tobacco smoke and radiation.

Over 40 percent of cancers can be prevented with healthy lifestyle choices. Start by following AICR's Cancer Prevention Recommendations. The guidance from AICR promotes a balanced eating plan, sufficient physical activity and maintaining a healthy weight. Turn to page 12 to read more about the effectiveness of following the AICR Recommendations.

#### **Does Drinking Alcohol Increase Cancer Risk?**

Yes, alcohol intake is linked to an increased risk of certain types of cancer, including breast, colorectal

and liver cancers. There is no "safe" amount of alcohol that does not increase risk of at least some cancers.

To reduce cancer risk, AICR recommends not drinking alcohol at all. Cancer risk increases with

- **ONE DRINK IS DEFINED AS:**
- •12 ounces of beer
- 5 ounces of wine
- 1½ ounces of 80 proof distilled spirits such as vodka

the amount of alcohol consumed. If you do choose to drink, we recommend limiting intake to within national guidelines, which are no more than one drink a day for women, or two drinks a day for men.

Alcohol may increase cancer risk by making it easier for other cancer-causing compounds (such as tobacco smoke) to get into the cells and cause DNA damage. When alcohol is broken down in the body, compounds are formed that can directly damage the DNA, which can lead to cancer.

**FREE OFFER** > Reduce Your Risk for Endometrial Cancer tells you about the known risk factors, including consuming too many refined carbohydrates and sugary drinks, symptoms and prevention steps for this disease. To order a free copy, check box 1 on the Free Information Request Card.



TOP PHOTO BY VINK FAN/ADOBE STOCK; BOTTOM PHOTO BY WINDCOLORS/ADOBE STOCK



### **Nutrition and Physical Activity:** Part of Your Cancer Treatment Plan



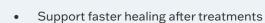


## From day one, nutrition and physical activity should be considered alongside treatment for improved outcomes.

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

#### ACTIVITY CAN HELP:

- Reduce symptoms of treatment-related side effects
- Elevate mood
- Reduce anxiety and depression
- Improve sleep
- Boost energy levels and reduce fatigue
- Maintain physical functioning
- Support bone health
- Improve quality of life



• Lower your risk of infection

**NUTRITION CAN HELP:** 

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



\*Work with your cancer health-care team to set up your personalized activity and nutrition plans.

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

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#### www.aicr.org

**The American Institute for Cancer Research Newsletter** is a publication of the American Institute for Cancer Research (AICR) published in Arlington, VA, telephone 800-843-8114. The American Institute for Cancer Research is a non-profit organization, federal tax #52-1238026.

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Occasionally we rent this list or exchange lists with other organizations in order to maintain an active donor file to support AICR's services. If you do not wish to participate in this program, please let us know. Director: Marilyn Gentry Editor: Cara Rosenbloom, RD Contributors: Lisa Andrews, MEd, RD, LD; Anne Danahy, MS, RDN; Barbara Dean, MPAS, PA-C; Cara Rosenbloom, RD Designer: Jennifer Paul Design



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For article sources, call or write AICR headquarters.

### NUTRITION

# Healthy Alternatives to Sugar-Sweetened Drinks

# Find out what dietitians drink to replace sugary soda.

AICR offers 10 Cancer Prevention Recommendations that help reduce cancer risk. One Recommendation is to "limit consumption of sugar-sweetened drinks." There is strong evidence that regularly drinking sugar-sweetened beverages is a cause of weight gain and obesity, which are conditions linked to at least 12 different types of cancer.

A recent study published in JAMA looked at sweetened beverage intake in post-menopausal women in relation to liver cancer. The researchers found that women drinking three or fewer servings of sugar-sweetened beverages per month had a lower incidence of liver cancer, and women who drank one or more sugar-sweetened beverages per day had a higher incidence of liver cancer and death from chronic liver disease.

Here are some ideas to help you cut back on sugary drinks and enjoy something new.

#### What Are Sugar-Sweetened Drinks?

Sugar-sweetened drinks include any beverages that are flavored with sugar, honey or other calorie-containing sweeteners. Soda is the leading source of sugar in the American diet, but there is also sugar in:

- Sweetened tea and coffee
- Fruit drinks
- Lemonade
- Milkshakes
- Energy and sports drinks

#### What Should I Drink Most Often?

AICR advises drinking mostly water and unsweetened drinks, such as tea or coffee. Studies show that polyphenols found in tea and coffee have cancer-fighting potential. Just don't overload them with sugar.

#### Dietitians Recommend These Unsweetened Beverages

We asked dietitians "what's your favorite unsweetened beverage?" Here's what we heard:

#### **Hot Drinks**

- Hot water infused with fresh mint, lemon, ginger and fennel seeds: Shauna Lindzon, RD
- Hot chai with cinnamon, cardamon and ginger: Shoba Balaji, MS, RDN, LDN
- Decaf espresso with a drop of vanilla extract: Maegan Taussig, MS, RD, LD
- Orange spice black tea: tea with orange rind, cinnamon, slice of orange: Supreeta Raj, RD
- Hot almond milk latte with cocoa powder: *Natalie Gillett, MS, RD*
- Coffee with cardamon and cinnamon: *Monique Taylor, RDN*
- Steamed soy milk with Earl Grey tea and a hint of vanilla extract: *Suren Chiu, RDN, LDN, CPT*



#### **Cold Drinks**

- Iced coffee with unsweetened vanilla almond milk: Sarah Sagullo, RDN, LD
- Iced hibiscus tea with frozen raspberries or blueberries as ice cubes: Lisa Markley, MS, RDN, LD
- Water infused with fresh lemon and sliced strawberries: *Elizabeth Prentice, MS, RD, LDN*
- Iced ginger and mint tea: Laura Dunkley, MS, RD, CDCES
- Water with watermelon slices and mint leaves: *Emily Kean, MBA, RD, LD*
- Iced unsweetened green tea steeped with fresh mint: Rosie Schwartz, RD

Dietitian Amy Keller, MS, RDN, LD, recommends serving drinks in fancy glasses for eye appeal. She says you can often find inexpensive wine glasses, Mason jars and tiki tumblers at your local thrift shop.

**Note:** If you are undergoing chemotherapy, check with your oncologist or pharmacist before adding herbs, spices or teas to your beverage rotation. Some may interact with medications.

<image><section-header>

FREE OFFER ► The Facts about Sugary Drinks and Your Cancer Risk describes the link between sugary drinks, obesity and higher cancer risk. To order a free copy, check box 2 on the Free Information Request Card.

## ARTIFICIAL INTELLIGENCE IN CANCER CARE: The Future Is Here

# Learn how AI is changing the fight against cancer.

Artificial intelligence (AI) allows machines to learn from data to make decisions and perform humanlike tasks. It might sound like science fiction, but AI is already integrated into many aspects of health care. Oncology stands to benefit from AI's advances. Experts are hopeful that AI can help improve cancer research, diagnosis, personalized treatment and care.

#### Al in Cancer Care Today

The most frequent uses for AI in oncology are for diagnosing and monitoring cancer. The technology helps radiologists accurately identify suspicious areas on a scan, thus reducing the chance of missing an early cancer.

Advanced AI applications also reveal cancer characteristics that are undetectable to the human eye, allowing for more targeted treatment plans. AI tools can also predict how a person will respond to various treatments.

#### AI Can Help with Lifestyle

AI tools can improve cancer survivors' outcomes and quality of life by helping people eat better, become more physically active and manage side effects.

With funding from AICR, Dr. Katie Schmitz, a cancer researcher at the University of Pittsburgh, examined whether a tablet-based virtual assistant called Nurse AMIE (Addressing Malignancies in Individuals Everyday) could help women with metastatic breast cancer manage symptoms.

Nurse AMIE checks with users daily about their sleep, pain, fatigue, distress and activity level. Based on the responses, Dr. Schmitz says the tool provides guidance to users on:

- Exercise
- Nutrition
- Cognitive behavioral therapy
- Sleep
- Mindfulness meditation
- Symptom management

It also alerts the oncology team when more intensive care is needed. An initial usability and feasibility study showed users had a positive experience with Nurse AMIE.

Some dietitians use AI tools to help assess patients' eating patterns and design meal plans. Patients can use AI-powered apps to accurately estimate the nutrient content of meals based on smartphone photos.

This research enabled Dr. Schmitz to secure further funding from the National Institutes of Health and National Cancer Institute for a follow-up study on the tool's effectiveness.

#### **AI Won't Replace Clinicians**

AI technology can't replace medical professionals. Instead, it helps improve efficiency and accuracy in their work. Virtual assistant tools like Nurse AMIE can also reach more patients for lifestyle interventions when clinics are short-staffed.

"There is a workforce shortage in nutrition, exercise oncology and cancer rehabilitation," says Dr. Schmitz. "AI interventions could ensure that more people living with cancer have access to personal-

ized support to improve quality of life, function and, in some cases, long-term survival."

#### The Future for AI in Oncology

Researchers are hopeful that soon AI tools will be able to predict where a person may develop a future cancer, shifting the focus to prevention instead of treatment. AICR is following the topic of AI in cancer prevention and treatment. The INSPIRE Research Challenge has attracted several grant applications proposing to use AI tools. Stay tuned to see how your donations will advance this innovative science.

# A Life of Adventure: John and Francille Firebaugh

## Learn how a Charitable Gift Annuity supports AICR research.

Married for 52 years, John and Francille Firebaugh live a life of adventure. Together they've been global travelers, foreign aid officers and devoted cancer research supporters.

After Francille graduated from Cornell University, she worked for The Ohio State University in the field of household economics and research. Always an explorer, she joined the Ohio Hiking Club and met John, where they cherished nature trails together for many years. John's work for the U.S. Department of Agriculture allowed them to travel all over the world.

The Firebaughs became AICR

donors in 2013. They chose AICR

because they like AICR's mes-

nutrition and physical activ-

cancer survivor, having gone

sage of prevention though diet,

ity. Francille is a 25-year breast

through chemotherapy and radi-

ation treatments. Now, she goes

for yearly check-ups and remains



FRANCILLE AND JOHN FIREBAUGH

Several years back, John chose to make a Cancer Fighters Charitable Gift Annuity that will provide payments for life for both he and Francille (a two-life annuity). The payments are fixed and will not change with interest rate and market fluctuations. And there are great tax benefits, too. John says, "It's a reliable investment until you die." Now that the charitable gift annuity rates have gone up, he has chosen to make a second twolife gift annuity.

cancer-free.

We are delighted to have such loyal supporters who help make a difference in the fight against cancer.

**FREE OFFER** > Can a Revocable Living Trust Benefit Your Estate? tells you how this type of trust may distribute your assets quickly and privately and protect you and your estate if you ever become disabled. To order a free copy, check box 3 on the Free Information Request Card.



#### ASK THE FINANCIAL EXPERT...

**Q:** I am no longer able to itemize my AICR donation on my income tax return. Are there other tax-wise ways of assisting your work?

**A:** There are several options that might allow you to receive a tax benefit from your generosity.

If you are age 70½ or older you can make a gift directly from your IRA. You will owe no tax on distributions up to \$100,000 annually. If you must take minimum distributions every year, these IRA gifts (called qualified charitable distributions) can satisfy some or all your withdrawals. This can reduce your income tax, even though no charitable deduction is allowed.

Consider bunching several years' gifts in one year. A donor who gives \$10,000 annually might give \$30,000 to satisfy three years' worth of gifts. It may allow the donor to itemize every third year. If you make your gift using appreciated stock, mutual fund shares or bonds, you can save more by avoiding the capital gains tax that would be due if the assets were sold.

You can fund a charitable gift annuity with a larger gift, while retaining fixed payments for life. A 70-year-old donor could contribute \$50,000 to a charitable gift annuity and receive annual payments of \$2,950 (5.9%) for life. Depending on how the gift annuity is funded, a portion of the annual payment may be tax-free or taxed at favorable capital gains tax rates for the donor's life expectancy. Plus, the donor would be entitled to a charitable deduction of about \$22,000.

**Questions?** Please contact Susan Derby in AICR's Office of Gift Planning at 202-600-3060 or s.derby@aicr.org.

## SIT LESS, MOVE MORE: The Power of Exercise

#### Whether it's a 10-minute walk or a 10-mile run, exercise helps with cancer care.

Exercise is medicine, and oncologists recommend taking it daily. Regular physical activity supports your immune system, reduces chronic inflammation and balances hormones, which all help reduce cancer risk. Being physically active also improves mental health. AICR has been advocating for physical activity since the first Expert Report in 1997.

#### **Making Strides Toward Better Health**

For those undergoing treatment, even small amounts of activity can help counter the side effects of chemotherapy. According to the American Society of Clinical Oncology, engaging in regular aerobic activity and strength training during cancer treatment reduces fatigue, maintains strength, reduces anxiety and depression and improves quality of life.

These benefits continue after treatment. Moreover, research suggests that breast, prostate and colorectal cancer survivors have a lower risk of dying from those cancers if they exercise regularly.

#### **How Much Exercise Is Enough?**

Whether it's for cancer prevention or survivorship, AICR encourages everyone to "move more and sit less," ideally for 150 minutes weekly. That averages about 30 minutes of activity most days of the week.

If that sounds daunting, don't despair. A recent study on more than 30 million people published in the *British Journal of Sports Medicine* looked at exercise and the risk of death from cancer and all causes. Researchers found that while 150 minutes is ideal, even half that amount, about 75 minutes per week (just 11 minutes a day), has health benefits and may help you live longer. As for the best type of exercise? Walking is easy and inexpensive. But swimming, aerobics, biking or anything that increases your heart rate and maintains muscle has benefits. The best exercise is one you enjoy and stick with.

**PHYSICAL ACTIVITY** 

#### **Taking the First Steps**

If you're not currently physically active, ask your health-care provider about the best type and amount of exercise that is right for you. They may recommend supervised physical therapy sessions or an exercise program at first. Start slowly and gradually build up as your strength and endurance improve.

Exercise is also more enjoyable when you do it with a buddy, so ask someone to join you for short walks or to train for a race. Whether you do a little or a lot, regular physical activity has powerful benefits and is a key part of cancer treatment and care.

#### AN EYE ON THE FINISH LINE

Diagnosed with breast cancer while pregnant, Emily Williams delivered a healthy baby girl five days after finishing chemo. Her oncologist encouraged exercise during treatment to help reduce side effects.

"I stayed active throughout my treatments and up to the day my water broke," says Williams. She credits exercise with improved strength and mental well-being, and faster surgery recovery.

An avid marathoner, Williams focused on the finish line throughout her treatment and pregnancy. She couldn't think of a better way to celebrate the gift of her new life and her daughter's than by joining TeamAICR to raise \$6,500 for a cancer-free future while training for the London Marathon.



### NUTRITION

# Ultra-Processed Foods and Cancer—What's the Connection?

### A new study links ultra-processed food to increased cancer risk.

Ultra-processed food refers to packaged, super-palatable, portable foods like candy, fast food and sugar-sweetened beverages. They're in the news because studies link consuming high amounts with increased cancer risk.

#### Processed vs. Ultra-Processed Foods

A lot of food is "processed" before it's sold, and it's not a bad word. Processes such as fermentation and canning can improve a food's nutritional value and extend its shelf life. Some ultraprocessed foods (UPFs), such as sweetened yogurt or breakfast cereal, provide beneficial nutrients to the diet. Not all processed food is harmful.

Food scientists and the World Health Organization use the NOVA classification system to categorize foods into four categories based on how processed they are: Health organizations recommend choosing more of the foods in group one and less of the UPF foods in group four. Yet, Americans currently get about 57 percent of calories from UPF, and that's too high. The US Dietary Guidelines don't address exactly how much UPF is fine to eat, but they do advise reducing added sugar, trans fats and sodium in the diet.

### New Study Links UPF with Cancer

A recent study on UPF was partially funded by the World Cancer Research Fund, which is AICR's partner organization. The study found that each 10 percent point increase in consumption of UPF is linked with an increased incidence of overall cancer, especially breast and ovarian cancers.

Similarly, a recent meta-analysis also found that a "10 percent increment in the diet's proportion of UPF was associated with increased risk of overall cancer and breast cancers."

Chronically consuming UPF may lead to overweight or obesity, which raises the risk of certain cancers. Studies also link certain additives, preservatives and contaminants in UPF with increased cancer risk. Plus, a high consumption of UPF often comes along with low intake of foods that reduce cancer risk, such as vegetables, fruits and whole grains.

AICR's Cancer Prevention Recommendations suggest eating a diet rich in whole grains, vegetables, fruits and beans (group 1 foods) and limiting consumption of sugar-sweetened drinks, fast foods and other processed foods that are high in fat, starches or sugars (group 4 foods).

Over the past 10 years, 38 studies have been conducted to measure the effectiveness of the AICR Cancer Prevention Recommendations and found they are effective at reducing cancer risk-with reductions of up to 60 percent for some cancers.

#### **NOVA Food Classification System**

**Group 1:** Unprocessed or minimally processed foods: fruits, vegetables, nuts, whole grains, fish, poultry, etc.

**Group 2:** Processed culinary ingredients: oil, sugar and salt used to improve flavor of group 1 foods.

**Group 3:** Processed foods: group 1 foods after group 2 foods have been added, such as salted nuts or canned beans and fish.

**Group 4:** Ultra-processed foods: foods that go through industrial processing and contain added salt, sugar, additives, etc. Examples are candy, pastries, fast food (burgers, pizza) and salty snacks.

# Food Truck Serves Healthy Food with a Side of Education

# Learn how AICR resources educate people about cancer and nutrition.

AICR is an advocate for the power of a nutritious diet for cancer prevention, and this sentiment is shared in an innovative way in Ohio. Chefs and dietitians at The Ohio State University Comprehensive Cancer Center run the Mobile Education Kitchen (MEK), a fully equipped food truck that serves up healthy meals with a side of nutrition education.

MEK travels throughout central Ohio on a mission to educate the public about making better food choices to reduce the risk of cancer, and they use AICR resources as part of their protocol.

#### **MEK's Outreach**

Brightly adorned with vegetables and fruits, the food truck commutes to events like health fairs, festivals, schools, churches and other community gatherings, appearing on average at two to three events per week.

David Brue, the Associate Director of Culinary Outreach and Executive Chef at The Ohio State University Wexner Medical Center (OSUWMC) says MEK "helps patients and consumers by providing nutrition education that promotes cancer survivorship and cancer prevention through healthy eating."

Brue explains that the MEK gets a great response from the public, who are really interested in nutritious recipes and tips on how to eat healthy meals. Seeing the food preparation and tasting the recipes for themselves makes these life-changing eating habits feel more practical.

#### A Truck on a Mission

The MEK chefs and dietitians cook nutritious recipes, serve amazing food and provide tips for healthy grocery shopping. They feature AICR's Foods that Fight Cancer—such as leafy greens and beans—in every recipe.

Dietitian and Senior Culinary Educator at OSUWMC, Cameron Stauffer, RD, says, "Our fo-

cus is to teach people how to prepare these foods in quick, budget-friendly ways that taste delicious."

**H** 

COMMUN

Mobile Education Kitchen

THE MOBILE EDUCATION KITCHEN

Cooking demos provide samples of the recipes for the public to try. Who could resist corn mascarpone stuffed pasta with poached spring vegetables and basil vinaigrette? Or fan favorite farro salad with roasted eggplant?

AICR's Guide to Storing Fresh Produce is a popular teaching tool that MEK provides to the public.

Stauffer says, "Our audiences love that it can be referenced quickly." MEK experts suggest trying a new fruit or vegetable each week.

The MEK experts also promote AICR's Healthy10 Challenge of diet and lifestyle Recommendations that reduce cancer risk and help us live longer. They encourage people to incorporate a more plant-based diet sustainably.

MEK uses AICR resources because the team knows they are evidence-based, accurate and trustworthy. "AICR provides correct information," says Brue. "That's a big component to MEK. We want to make sure we are proving valid information."

Because of the generosity of donors like you, AICR can create resources, which MEK can confidently share with its community. In fact, AICR has more than 50 free resources, and has connected with more than three million patients through educational videos and news stories.

#### **Coming Together**

The Mobile Education Kitchen offers a unique service that combines creating and tasting wholesome, beneficial foods with hands-on education

for people of all ages. The MEK delivers AICR's message on cancer prevention through healthy eating and living.

**FREE OFFER** > The AICR Guide to Storing Fresh Produce card lists the best ways to store many cancer-fighting vegetables and fruits so they keep longer. To order a free copy, check box 4 on the Free Information Request Card.

### RESEARCH

## AICR'S CANCER PREVENTION RECOMMENDATIONS: More Evidence that They Work

### Research shows that following AICR's Cancer Prevention Recommendations reduces the risk of breast and lung cancers.

Each of the 10 AICR Cancer Prevention Recommendations is based on strong evidence, so you can expect that following them will lower your risk of cancer. Now, a new analysis has been published in the journal *Cancer*, which confirms the many benefits of following the AICR Recommendations.

The new analysis combines the results of 18 different observational studies. It concludes that lifestyles that align more closely with the AICR Recommendations do, indeed, lower the risk of breast, colorectal and lung cancers—three of today's most common cancers. And each step closer to meeting the Recommendations helps.

## Healthy Lifestyle Choices Help Prevent Cancer

Dr. Fiona Malcomson, PhD, is a lecturer in nutrition at Newcastle University in the UK and was the lead author on this paper. When asked what she considers

For each 1-point increase in adherence score (adhering to the Recommendations), Dr. Malcomson's team found:

- 11 percent lower risk of breast cancer
- 12 percent lower risk of colorectal cancer
- 8 percent lower risk of lung cancer

the biggest take-away from this research, Dr. Malcomson says, "I think the most important finding is the reduction in risk of specific cancers."

#### Adhering to the Recommendations Is Helpful

Even small lifestyle changes can help. The researchers found that a single-point or half-point

improvement in score significantly reduced cancer risk. Some small changes that can be made to get a one-point increase in score include:



### AICR's 10 Cancer Prevention Recommendations:

- **1.** Be a healthy weight
- 2. Be physically active
- **3.** Eat a diet rich in whole grains, vegetables, fruits and beans
- 4. Limit consumption of "fast foods" and other processed foods that are high in fat, starches or sugars
- 5. Limit consumption of red and processed meat
- 6. Limit consumption of sugar-sweetened drinks
- 7. Limit alcohol consumption
- 8. Do not use supplements for cancer prevention
- **9.** For mothers: breastfeed your baby, if you can
- **10.** After a cancer diagnosis: follow our Recommendations, if you can
- Get 30 minutes of activity per day instead of less than an hour per week
- Switch to water rather than drinking a sugarsweetened soft drink every day
- Limit fresh red meat to weekly amounts of 12 -18 ounces (cooked) or less. Eat little, if any, processed meat.

## Next Steps in Research on Lifestyle and Cancer Risk

When asked about the next steps to build on this analysis, Dr. Malcomson explained, "This analysis was the first step we needed for an analysis in the UK Biobank cohort. In that study, which is supported with funds from WCRF (AICR's partner organization), we're using the standardized Recommendations adherence score to look at risk of 14 lifestyle-related cancers as well as risk of all cancers combined."

Next, the team will look at cancer survival, because one of the Recommendations is to follow the Cancer Prevention Recommendations after a cancer diagnosis. AICR and WCRF are already working on the evidence base for associations between lifestyle and cancer survival, not just cancer prevention.