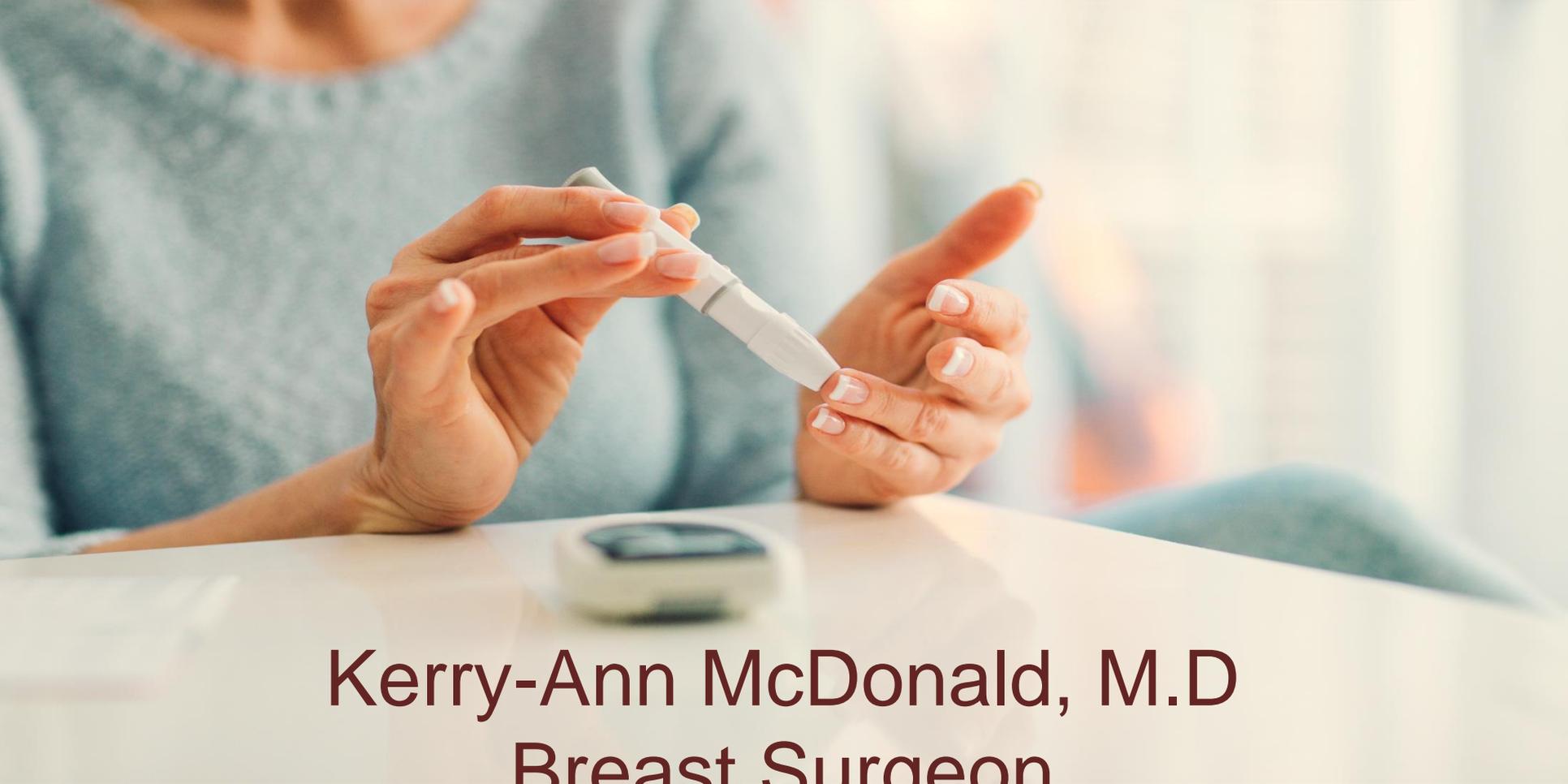


Lifestyle Considerations After Breast Cancer



Kerry-Ann McDonald, M.D
Breast Surgeon

Non-modifiable

Genetics
Environmental

Modifiable

Lifestyle
Diet



Our Focus!

Diet, Exercise, Lifestyle, and Cancer Prognosis (DELCaP) Study 2021



- A physical activity analysis study funded by the NCI
- Included 1,340 patients
- Participants completed questionnaires about the type, frequency, and duration of recreational physical activity they engaged in at four time points: during the month before diagnosis, during treatment, and at 1 and 2 years after study enrollment.
- Participants were followed for up to 15 years or until death, with a mean follow-up time of 89 months (7.4 years).

Diet, Exercise, Lifestyle, and Cancer Prognosis (DELCaP) Study 2021



- Using the questionnaire responses, the researchers determined whether participants had met the minimum 2018 Physical Activity Guidelines for Americans at each time point.
 - The guidelines recommend that adults engage in at least 2.5 to 5 hours of moderate-intensity physical activity OR 1.25 to 2.5 hours of vigorous-intensity aerobic physical activity per week.
- Women with breast cancer who met the minimum physical activity guidelines both before diagnosis and at the 2-year follow-up (after treatment) had a **55% reduced chance of their cancer returning and a 68% reduced chance of death from any cause (not just breast cancer)** compared with those who did not meet the guidelines at both times.
- Among patients who did not meet the guidelines before diagnosis but met them at the 2-year follow-up, **the chance of recurrence or death was reduced by 46% and 43%, respectively**, compared with those who did not meet the guidelines at both times.

Diet, Exercise, Lifestyle, and Cancer Prognosis (DELCaP) Study 2021



BOTTOM LINE:

- It's never too late to start exercising to derive benefits.
- These findings are good news for breast cancer patients, who can be overwhelmed by the physical activity guidelines, especially during treatment when they may be severely fatigued or in pain.
- However, to achieve optimal health benefits, patients and survivors should still strive to meet the guidelines when they are able.
- Move as often as you can, when you can!

Physical Well Being



- **30** minutes a day of aerobic exercise is all it takes!
- Examples include:
 - Walking
 - Jogging or running
 - Bicycling
 - Swimming
 - Using a treadmill and other aerobic equipment
 - For those overachievers: Incorporate strength training too....
- Aerobic Exercise is NOT:
 - Walking the dog
 - Golfing
 - Gardening
 - Housework
 - Yard work
 - Running around at work, at home or after your children

Physical Well Being



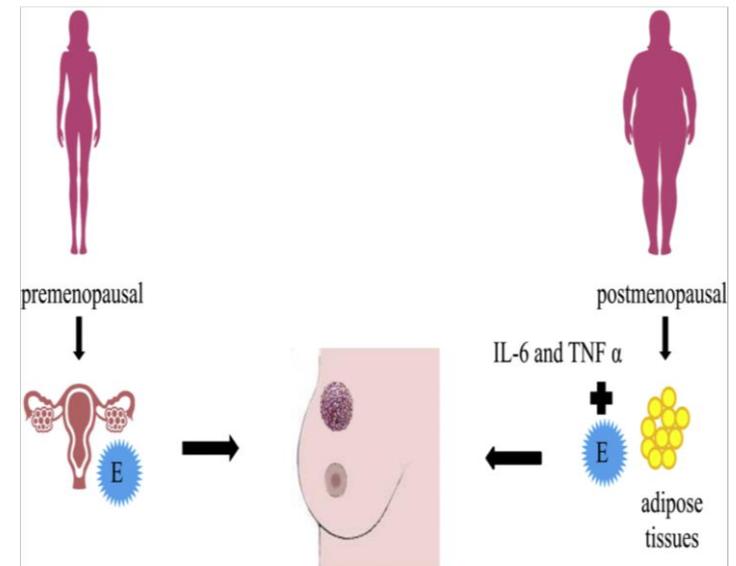
The following are some of the benefits of aerobic exercise:

- Increases energy
- Reduces risk of lymphedema
- Promotes sleep
- Improves cardiovascular fitness
- Improves mood
- Strengthens bones
- Reduces hot flashes
- Maintains ideal weight
- Keeps your gastrointestinal (GI) tract regular

Maintain a Stable Body Weight



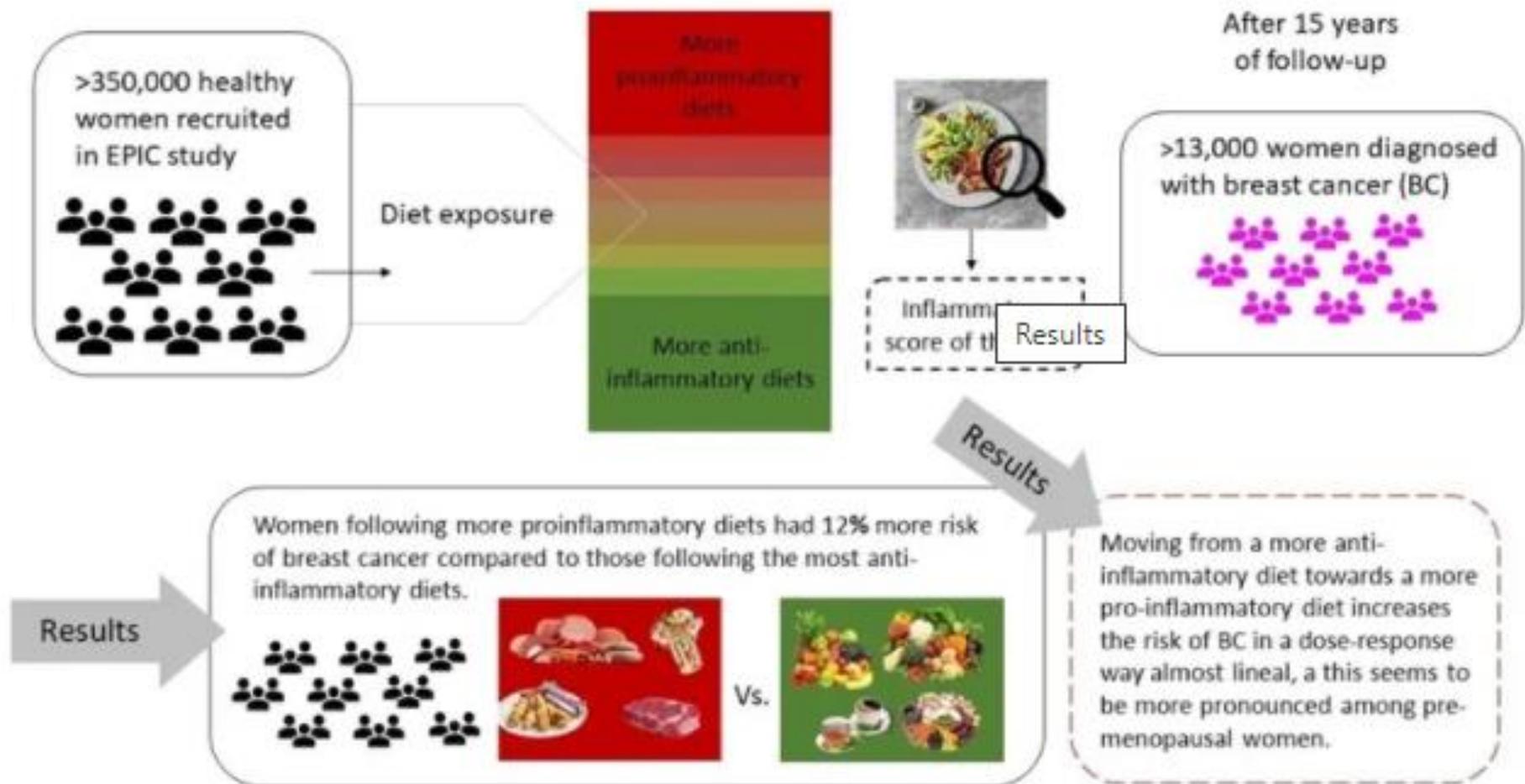
- Women who gain weight during or after treatment of breast cancer have been consistently shown to be at higher risk of breast cancer–related death.
- Several observational studies have shown that gaining weight during or after breast cancer treatment increases the risk of recurrence and reduces survival.
- **Adverse effects are greater for weight gains of 10.0% or higher of body weight.**
- Mechanism pictured here
- Keeping to a healthy weight is mandatory for breast cancer risk reduction.
- Ask your doctor what is considered a healthy weight range for your height and body type.
- If you're within the range, proper diet and exercise can help you maintain it.
- If you need to lose weight, ask your doctor about safe ways to modify your diet and increase your physical activity level.
- **BOTTOM LINE:** Women who are overweight are more likely to have their breast cancer come back. Maintaining a healthy weight is something you can do to reduce your chance of a recurrence as well as optimize your overall health.



EPIC Study 2021: European Investigation into Cancer and Nutrition



- Researchers found that women who eat a diet rich in foods that increase inflammation may have up to a **12% higher risk** of breast cancer than those who follow an anti-inflammatory diet.



EPIC Study 2021: European Investigation into Cancer and Nutrition



- The increase in breast cancer risk due to pro-inflammatory diets was more pronounced among premenopausal women.
- The association did not vary by breast cancer hormone receptor subtypes.
- Factors such as body mass, physical activity or alcohol consumption did not appear to affect the relationship between inflammatory diets and breast cancer.
- These results provide evidence that inflammation from diet is a key factor in the risk of developing breast cancer (not cause and effect).
- As a next step, the researchers plan to evaluate the association of the inflammatory potential of diet and other dietary patterns with breast cancer survival using participants in the EPIC study.

Building an Anti-Inflammatory Diet



- **Increase Fiber**

- Oats, freekeh, millet, quinoa, brown rice, spelt berries, wheat berries and 100% whole grain pastas and breads.
- Include beans and lentils in your diet at least four times per week.

- **Eat a RAINBOW of fruits and vegetables**

- Eat a minimum of 7 servings a day by including fruits and vegetables at every meal. (One serving is a medium sized fruit, one cup of berries, one-half cup of cooked or raw vegetables or one cup of salad greens.)
- Choose a variety of colorful produce to consume a wide variety of anti-inflammatory phytochemicals (e.g., dark leafy greens, oranges, berries and cherries, sweet potato and mango, tomatoes and eggplant).



Building an Anti-Inflammatory Diet



- **Include Polyphenols**

- Group of phytochemicals found in plant foods has strong anti-inflammatory properties.
- Also thought to feed so-called good gut microbes.
- Excellent sources include berries, red grapes, tea (green, white, oolong, black), apples, cocoa, onions, kale, broccoli, citrus fruit and soybeans (should not avoid all soy products).

- **Boost Omega-3s**

- Eat fatty fish such as salmon, sardines, anchovies and trout at least twice a week to get DHA (docosahexaenoic acid) and EPA (eicosapentaenoic acid), strong anti-inflammatory fatty acids.
- Plant sources of omega-3 fatty acids, called ALA (alpha linolenic acid), include chia seeds, ground flax, flax oil, hemp seeds, walnuts, walnut oil, canola oil and soybeans.



Building an Anti-Inflammatory Diet



- **Add herbs and spices**

- Many herbs and spices, which contain polyphenols, have been shown to reduce inflammation, especially ginger and turmeric.
- Garlic, cayenne, parsley, mint, oregano, basil, rosemary and thyme also have anti-inflammatory properties.

- **Consider your oil**

- For baking and sautéing over medium-high heat, use extra virgin olive oil, a rich source of anti-inflammatory monounsaturated fat.
- Olive oil also includes anti-inflammatory phytochemicals.
- Other sources of monounsaturated fat: avocado oil, almond oil, canola oil, avocado, almonds, cashews, hazelnuts and peanuts.



Stop Eating CRAP



- Processed Foods
 - Lower in nutrients and higher in refined sugars, flours and unhealthy fats.
 - Loaded with artificial ingredients that can increase CRP levels which leads to inflammation
 - Examples include: fast food, packaged and instant foods, processed meats like deli-meats, bacon, sausage, hotdogs and pepperoni.
 - Avoid sodas, candy, and sports drinks.
- Pro-inflammatory foods:
 - Red and processed meat: pork, beef, lamb, deer, buffalo. Limit to 18 oz. or less a week.
 - High-fat foods such as butter, margarine, and frying fats.
 - Sweets including sugar, honey, and foods high in sugar.



Alcohol and Breast Cancer



- While some research suggests that drinking wine may support heart health, drinking alcohol has **NOT** been shown to reduce cancer risk.
- There's strong evidence that alcohol consumption increases the risk of an initial diagnosis of both pre- and post-menopausal breast cancer.
- Alcohol intake by cancer survivors has also been shown to increase risk of recurrence.



- Among women who were diagnosed with breast cancer after menopause, those who drank 4 or more alcoholic drinks a week had an increased risk of recurrence compared to non-drinkers.
- A drink is defined as 12 ounces of beer, 5 ounces of wine or 1.5 ounces of liquor.
- Reasons why alcohol consumption may lead to breast cancer include:
 - Alcohol is empty calories and can lead to unwanted weight gain. Excess fat can lead to increased cancer risk.
 - Alcohol can increase levels of estrogen and other hormones associated with breast cancer.
 - Alcohol users are more likely to have increased amounts of folic acid in their systems, which can lead to increased cancer risk.
- The American Cancer Society recommends cancer survivors limit alcohol intake to no more than 1 drink a day.