

# A Basic Lifestyle Guide after Treatment for Breast Cancer

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Breast cancer continues to be the most common non-skin cancer in women, with one in eight experiencing a diagnosis at some point in their life. Risk factors for breast cancer diagnosis vary, but include a family history, lack of exercise, and obesity.

Weight gain after treatment for breast cancer is unwanted, as it has been associated with an increased risk of the cancer recurring. For instance, women that gain over about 10 pounds after diagnosis are 1.5 times more likely to experience recurrence of their breast cancer, and are 1.6 times more likely to die from their cancer.<sup>1</sup> Risk factors for breast cancer recurrence, like diagnosis, include weight gain, excess body fat, and lack of exercise. Metabolic syndrome can largely increase the risk of recurrence and double the risk of breast cancer spreading throughout the body.<sup>2</sup> Metabolic syndrome is characterized as three of the five following:

1. High blood sugar
2. Excess stomach fat (abdominal obesity)
3. Low high-density cholesterol (known as HDL)
4. High blood pressure
5. High triglycerides (fats produced by the liver when dietary sugar and carbohydrates are too high<sup>3</sup>)

## Blood Sugar and Insulin:

There are several reasons why metabolic syndrome can impact women with breast cancer. As levels of sugar within our blood rise, our body fights hard to lower them. These efforts include releasing a hormone known as insulin which helps to “pull” sugar from our blood and into our cells. While insulin is a normal hormone within the body, too much of it can be a bad thing. Cancer cells depend on insulin and sugar to support their growth and repair. They



Goodwin et. al. Fasting Insulin and Outcome in Early-Stage Breast Cancer: Results of a Prospective Cohort Study. JCO. 2001

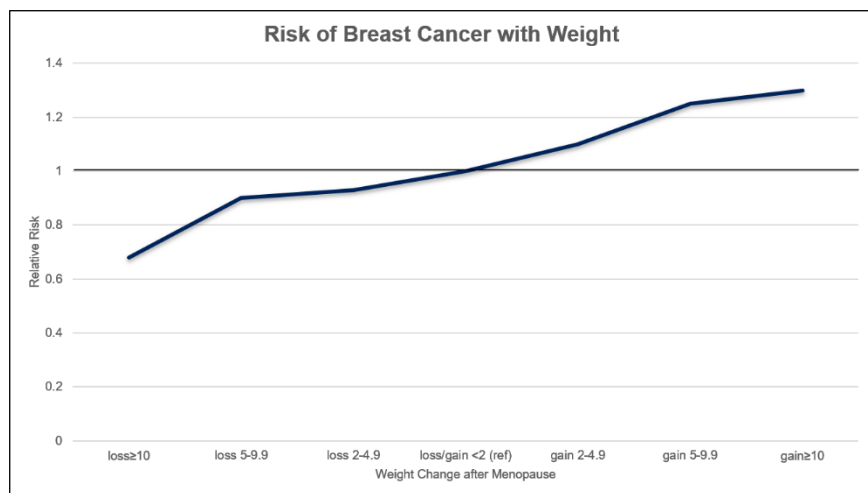
rely on other energy sources as well, but too much blood sugar and insulin seem to be very good at supporting their development.

For instance, elevated blood sugar in non-diabetic women with breast cancer is associated with poorer outcomes and an increased risk of death.<sup>4</sup> We also know that the insulin levels of women with breast cancer while fasting are correlated with an increased risk of the cancer spreading and also with an increased risk of a woman dying after the diagnosis of breast cancer.<sup>5</sup> If we chronically have too much sugar in our blood and have to release large amounts of insulin, over time our cells can become less sensitive to the insulin and levels will gradually rise. Insulin signals to cancer cells to grow, thus we want to minimize having too much.

### Body Fat:

We previously thought that fat tissue within the body, known as adipose tissue, was simply present to burn as fuel or keep the body warm, but newer studies have shown us

that this fatty tissue secretes hormones like estrogen and increases inflammation, both of which can fuel breast cancer cells or promote an environment that can support their emergence and growth.<sup>1</sup> Everyone must have some body fat, but too much can be harmful for several aspects



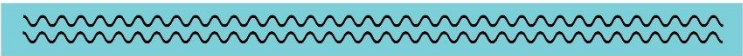
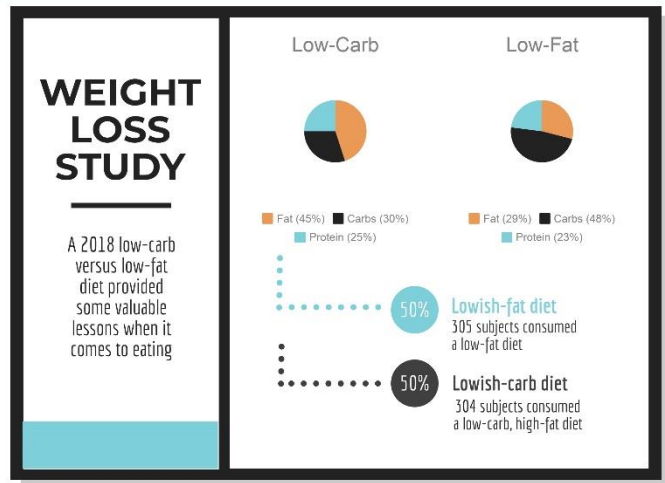
of health, including breast cancer risk.<sup>6,7</sup> Weight gain after menopause is associated with an increased risk of breast cancer with each stepwise increase in weight.

In other words, we want to aim to follow a lifestyle that allows us to avoid being overweight or gaining excess body fat. There are now dozens of randomized studies assessing weight loss in patients without cancer. These overwhelmingly show that a low-fat diet that instructs us to count and minimize calories is difficult to follow and for most, ineffective in the real-world setting. A diet that minimizes carbohydrates and does not involve counting calories has been superior to a low-fat/calorie restricted diet 28 times,

they have tied 29 times, and a low-fat diet has never been shown to be superior. Many old recommendations promote a low-fat diet and calorie counting. This approach is difficult for most women to follow and is rarely successful, so don't feel bad if this did not work for you in the past. However, moving forward, we should use some strategies that work and leave us less hungry with less tendencies to overeat. A recent very large and expensive study has provided us insight into what happens when we stop counting calories and instead focus on eating real food. The recent randomized study in the *Journal of the American Medical Association* revealed much better success with the approach of not viewing food as a mathematical equation, but instead an important and cultural part of living, while focusing on food quality instead of quantity. Tangible actions in this study included: never calorie counting, eating nutrient-dense foods, limiting processed foods like sugar, bread, and pasta, cooking with family, avoiding eating while driving, no snacking, and focusing on high-quality whole foods like grass-fed meat. This seemed to provide patients the ability to control their food, and for patients with addictive eating habits, help to remove foods

# FOCUSING ON FOOD FOR HEALTH

When scientists tell us to stop focusing on calories and instead focus on real food, everyone benefits



that are the worst culprits in creating a glucose/insulin roller coaster accompanied by more overeating.

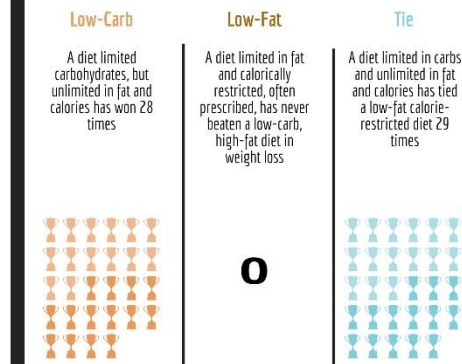
While the above may sound like bad news, the good news is that all these factors can be positively changed through a healthy lifestyle, including by increasing activity levels and focusing on nourishing foods.

### The Good News:

Regardless of the exact significance of high blood sugar and the detriment in survival that accompanies it in multiple cancer types, what these studies are systematically telling us is to limit those foods that dramatically raise our blood sugar levels. Along these lines, it certainly seems reasonable to try to limit excess sugar spikes and the amount of insulin our pancreas is forced to secrete after a meal to lower our blood sugar. Over time, chronically elevated blood sugar and insulin levels are associated with poor outcomes after cancer treatment in multiple studies.<sup>8</sup>

Exercise and activity levels also help to lower blood sugar and insulin levels.<sup>9</sup> Removing simple carbohydrates from the diet is a straight-forward and effective method of

**ON AVERAGE, ALL PARTICIPANTS LOST 12-13 POUNDS AT ONE YEAR**



### FOOD IS NOT A MATHEMATICAL EQUATION



Counting calories has failed to sustain weight loss in nearly all studies  
Instead, focusing on food quality and its role as an important social and cultural component of our lives may provide greater health benefits  
Reducing packaged and processed foods and simply carbohydrates is beneficial for us all

#### SOURCE:

Gardner, CG et. al. Effect of Low-Fat vs Low-Carbohydrate Diet on 12-Month Weight Loss in Overweight Adults and the Association With Genotype Pattern or Insulin Secretion. The DIETFITS Randomized Clinical Trial. JAMA 2018.

reducing all of the elements of metabolic syndrome and improving insulin sensitivity (i.e. we secrete less insulin after a meal).<sup>10</sup> This gives women two weapons against metabolic dysfunction, and through a healthy diet and lifestyle, you can take the driver seat in the fight against cancer.

### **Hunger:**

Avoiding foods that increase hunger can help us to avoid overeating. For instance, a breakfast high in simple carbohydrates, like bread, cereal, or pastries, causes blood sugar to rise rapidly which causes an increase in insulin from the pancreas. These often-consumed breakfast foods can easily derail our health and lead to weight gain. Furthermore, blood sugar then drops afterwards, often leaving us hungry again by mid-morning.<sup>11</sup> These “empty” foods with minimal nutrition are best left avoided entirely, and instead replace them with more nutrient-dense foods that can help provide vitamins while reducing hunger. Instead of a bowl of cereal, make an omelet with green vegetables.

For lunch, avoid sandwiches on bread (either white or wheat), and instead eat a plate of greens, colorful vegetables, or spinach salad with a source of protein and fat like salmon, whole fat cheese, or meat along with olive oil. This will be higher in healthy fats that will provide the body with ample nutrition while avoiding increases in hunger. While it is best to avoid deserts, when you are craving something sweet, turn to dark chocolate with a higher fiber and fat amount and lower sugar amount. For example, 75% dark chocolate provides healthy benefits and nutrition and will leave you less hungry than milk chocolate, which is mostly sugar.

Please read on for some easy strategies on the following pages.

## Basic Dietary Strategies:

### 1. Avoid “empty” foods

- In other words, avoid the foods that trigger fat growth, insulin release, and overeating by limiting sugar, sweets, bread, pasta, and “empty” foods that provide no nutrition but instead leave us craving more.
- Eat plenty of green-leafy and colorful vegetables instead of rice, wheat, and potatoes.

### 2. Focus on real foods

- At the end of the day, we eat foods to provide us nutrition. Thus, like in the study above, eat real foods that need to be cooked and avoid anything in a box or package that is processed.
- Avoid the center of the grocery store and focus on the outside aisles that contain fresh fish, meat, and vegetables.

### 3. Eat with family and friends, cook your meals, and never eat on the run

- Cooking meals and enjoying them with family will help us to avoid prepackaged and processed foods.
- Furthermore, it will show the importance of cooking and eating healthy, wholesome meals to our children.

## “Next Step” Dietary Strategies:

### 1. Turn towards the healthiest sources of foods

- Scientific studies reveal that butter and cheese made from cows that eat only grass (grass-fed cows), eggs from chickens that can roam the pasture eating bugs, and meat from wild game and grass-fed and finished beef has higher amounts of nutrients that help fight cancer like omega-3 fats and conjugated linoleic acid. These fats can help lower inflammation as well.<sup>12</sup>
- Eat plenty of green-leafy and colorful vegetables instead of rice, wheat, and potatoes.

### 2. Eliminate trouble foods

- Knowing ourselves is very important. It is helpful to avoid those foods that cause us trouble by leading to increased hunger or overeating. For instance, if you are unable to eat just one cookie, it is best to avoid them outright.
- Stick to berries and fruits that are eaten with the skin, as these generally result in less sugar spike afterwards. Also, keep higher carbohydrate foods to be eaten around activities and exercise as our body is better able to process them after exercise.

### 3. Cook with low heat and stable fats and oils

- Now that you are cooking your meals, avoid charring the foods or cooking over 350° in the oven. Do not fry foods and avoid seed oils for cooking as the heat damages them.
- Avoiding burning and charring foods on the grill as this can create potentially dangerous chemicals.
- Use spices and marinades, which provide even more health benefits to cooked foods.

## Basic Exercise Strategies:

### 1. The more activity the better

- Exercise does not have to be at the gym. Walking, hiking, yardwork, gardening, washing your car, and general activity throughout the day is the goal.
- Go for frequent walks with friends and family as this provides both physical and mental benefits.
- Limit time in front of the television or social media time vacuums like Facebook.

### 2. Engage in some sort of resistance or weight training

- Lifting heavy objects periodically helps to strengthen the bones and build muscle.
- Using our muscles to lift heavy objects or engage in resistance training releases anti-inflammatory chemicals that can help reduce our risk of cancer.<sup>13</sup>

### 3. Build an exercise community

- Find and motivate friends and family to go for hikes and walks and join gym or other groups to help motivate each other to exercise and lift weights.

### 4. View Exercise and weight lifting as a normal part of life

- One woman described weight lifting to me as like brushing our teeth: we need to do a little bit every day regardless if we want to or not.
- Make exercise and some weight training a normal part of the day.



## “Next Step” Exercise Strategies:

### 1. Join a gym or fitness group

- There are many of these such as CrossFit, Orange Theory, Barre Code, or many groups on Meetup.com.

### 2. Set weight and exercise goals with a trainer/expert

- Aim to continue to progress in your workouts, including increases in weights lifted and stamina.

### 3. Aim to build muscle

- Though women often get scared about “getting too muscular” from lifting weights, it is difficult for most women to gain too much muscle.
- However, studies reveal that women are quite capable of gaining healthy muscle from gym workouts.<sup>14</sup>
- As the benefits of muscles are plenty, aim to increase lean muscle mass through the dietary strategies above and weight lifting.

## Moving forward:

Start slow and continue to progress. Small changes can lead to large benefits. Most women feel much better after improving their diet and exercise habits. Better energy levels and the feeling of accomplishment often accompanies these positive lifestyle changes. So, enjoy the benefits as you improve your health and fight breast cancer!

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