Breast Cancer Nutrition A to Z: Prevention to Survivorship

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Breast Cancer

- Most frequently diagnosed cancer in women
- Second leading cause of cancer death in women
- Data suggests that 1 in every 8 women will be diagnosed with breast cancer in their lifetime
- Men can also develop breast cancer although it is 100 times more common in women

Risk Factors for Breast Cancer

- Female gender
- Increasing age
- Weight gain after age 18
- Being overweight or obese
- Use of combined estrogen and progestin hormone therapy
- Very dense breast tissue
- High bone mineral density
- Biopsy confirmed hyperplasia
- Never having children or having a first child after age 30
Breast Cancer Prevention

1/4 to 1/3 of cancer could be prevented by:

**Healthy Diet**

- Foods of plant origin offer many nutritious benefits
  - Eat >= 5 servings of variety of non-starchy vegetables & fruits daily
  - Consume whole grains and legumes with every meal
  - Limit refined starchy foods

- Choose lean protein sources and plant-based proteins
  - Limit intake of red meat to < 18 oz/week
  - Avoid processed meat

- Stay hydrated during the day
  - Limit alcoholic drinks:
    - Men <= 2 drinks/day
    - Women <= 1 drink/day
  - Avoid intake of sugar-sweetened beverages

**Physical Activity**

- Engage in physical activity for at least 30 minutes every day
- As fitness and strength improves, aim for either of the following:
  - At least 60 minutes of moderate physical activity (i.e. brisk walking, <10 miles per hour)
  - At least 30 minutes of vigorous physical activity (i.e. jogging/running, >10 miles per hour)

- Limit sedentary activities and get moving!
Body Composition

- Maintain body weight within the normal range from age 21
- Avoid weight gain & increases in waist circumference in adulthood

Breastfeeding

- Can help reduce a mother’s risk of pre- and postmenopausal breast cancer
- Recommend exclusive breastfeeding for first 6 months after baby is born
- Exclusive breastfeeding – giving babies no other nourishment including water, except for vitamin drops when necessary

Treatment Can Include:

- Surgery
- Chemotherapy
- Radiation
Goals During Treatment

Symptom management
Promote healing

Maintain:
• Strength
• Energy
• Weight
• Overall nutritional status

Surgery Goal: Adequate nutrition for healing
• Adequate Calories
• Adequate Protein

Chemotherapy/Radiation Side Effects Impacting Nutrition
• Appetite Loss
• Nausea/Vomiting
• Fatigue
• Constipation/Diarrhea
• Mucositis (mouth sores)
• Taste changes
• Fatigue
Decreased Appetite

- Smaller, more frequent meals
- Drink calorie containing liquids
  - Protein shakes
- Avoid filling up on fluids at meals

Nausea/Vomiting

- Smaller, more frequent meals
- Eat bland foods such as white toast, bland flavors/plain yogurt, and broth
- Eat/drink room temperature foods
- Stay well hydrated

Constipation/Diarrhea

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<th>Constipation</th>
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<tr>
<td>Drink plenty of fluids</td>
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<td>Eat high fiber foods</td>
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<td>Take prescribed stool softeners and/or laxatives</td>
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<table>
<thead>
<tr>
<th>Diarrhea</th>
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<tbody>
<tr>
<td>Drink plenty of fluids</td>
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<tr>
<td>Smaller, more frequent meals</td>
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<tr>
<td>Avoid foods high in sugar and fat</td>
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Mucositis

- Choose easy to chew foods
- Softer, more moist foods
- Add sauces/gravies/etc. to foods to help soften
- Avoid rough, spicy, and acidic foods

Taste/Smell Changes

- Taste Changes
  - Choose foods based on your taste
  - Try tart foods/drinks
  - Add extra seasonings to foods
  - Use plastic utensils
- Smell Changes
  - Serve room temperature or cool foods
  - Use cups with lids
Bone Health

Some medications are associated with bone loss.

Adequate calcium and vitamin D is recommended:

- Calcium Recommendation:
  - Age 19-70: 1000 mg/day
  - Age 71 or older: 1200 mg/day

- Vitamin D Recommendation:
  - Age 19-70: 600 IU/day
  - Age 71 or older: 800 IU/day

Weight/Physical activity

- Intentional weight loss up to two pounds per week in those overweight or obese
- Avoiding unintentional weight loss
- Encourage light physical activity

Lifestyle

Tips to Make Good Nutrition a Habit
Prevention Lifestyle

- Establish a monitoring schedule with your physician
- Decide what your goal is (increasing plant-based foods, wt. loss, exercise)
- Building support (dietitian, group class)
- Building habits
- Enjoy the rewards

Weight Loss

- Plan at least one meal everyday
- Emphasize plant foods
- Measure for a day or more
- Journal often
- Get adequate sleep

Weight Loss

1 pound = 3,500 calories

To lose 1 pound in a week, reduce intake by 500 calories each day. To lose ½ pound in a week, reduce intake by 250 calories each day.
### Weight Control: Change up your usual recipes

- **Double the vegetables** (soups, casseroles, salad toppings, tacos, sandwiches, stir-fry, condiments)
- **Add side dishes of fruits and vegetables** (raw, steamed, salads, condiments)
- **Swap for your usual ‘base’ ingredient** (zucchini noodles, cauliflower crust, bean patties)

### How-to Shop for Meal Planning

- **Shop Online**
- **Start with a list of foods you know how to use**
- **Diversify fresh, frozen**
- **Add something seasonal**

### How-to Meal Plan

**Weight Loss**
- Include vegetables and fruits as entrees: salads, grilled portobellos, stuffed peppers or tomatoes
- Use fruits and vegetables as snacks: fruit, lettuce wraps, veg and dips
- Aim to have 2 plant-based side dishes: choose a fruit and vegetable

**High Protein**
- Include main dishes with protein
- Purchase protein snacks
- Include protein side dishes
Meal Services

Eat Fit Go/Jenny Craig
- Healthy, balanced meals
- High cost
- Consider using to supplement busy days of the week

Hello Fresh/Blue Apron
- Caution: food can sit too long, arrive spoiled, unsafe during treatment

During Treatment: Adding Protein
- Add meats, poultry, fish to casseroles or mixed dishes
- Add beans, lentils, seeds, grains, nuts
- Try concentrated milk (Fairlife)
- Try bone broth
- Add tofu to ingredients
- Greek yogurt
- Add cheese
- Add eggs

Comparison of Protein Grams in Liquids

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<tr>
<th></th>
<th>Almond Milk</th>
<th>Coconut Milk</th>
<th>Soy Milk</th>
<th>Milk</th>
<th>Almond Milk</th>
<th>Bone Broth</th>
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<tbody>
<tr>
<td>Protein Grams</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>13</td>
<td>15</td>
<td>12</td>
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Nutrition Supplements

- Make it your own
- Change up the flavors with added ingredients
  - Frozen fruit
  - Crystal light, coffee flavorings
- Budget friendly alternatives
  - Make your own
  - Shop sales
  - Shop bulk

Optimal Nutrition
Choosing Whole Foods
Choose Whole Foods

Highest nutrient value (vitamins, minerals, fiber, phytonutrients)

Lowest Cost

Include Whole Foods as Snacks - Limit Snacks Overall

- 150 Calories
- 30 grams carbohydrate

Fast Food Diet
- Breakfast: Fast Food/Pastries
- Lunch: Subway
- Dinner: Hot Dog and potato salad or cheese and crackers or Take Out

Plant Based/Weight Loss Friendly
- Breakfast: Banana and Almonds
- Lunch: Greek Yogurt and Berries
- Dinner: Whole Wheat Tortilla, hummus, baby carrots and peppers, feta cheese and cucumbers with oil and vinegar

Making it Easy: No Cook Meals

- Breakfast: Banana and Almonds
- Lunch: Greek Yogurt and Berries
- Dinner: Whole Wheat Tortilla, hummus, baby carrots and peppers, feta cheese and cucumbers with oil and vinegar
Alcohol

- Social drinks only <3/week
- Dilute drinks to stretch in social settings (club soda, ice, mixers)
- Aim for beer or wine vs liquor
- Explore other ways to relax (exercise, hobbies, ice breakers at parties)
- Celebrate special occasions and just enjoy (a little)

hara hachi bu
hara-hachi beeyou

“eight parts out of a full 10”
In other words...
only eat to the point where you are about 80% full

THRIVING
with Nutrition

• Variety
• Moderation
• Enjoyment
THANK YOU!

SOURCES

• https://www.cancer.gov/types/breast/patient/breast-prevention-pdq


• Oncology Nutrition for Clinical Practice Oncology Nutrition Dietetic Practice Group;2013

Questions?