WELCOME TO THE FATIGUE REDUCTION DIET!

There are around 3 million breast cancer survivors today. Fatigue is a problem faced by many survivors. A diet with lots of leafy green vegetables, fruits, whole grains, and healthy fats such as fish, nuts, and seeds may help lessen the effects of feeling tired!

This booklet and the study dietitian will help you learn how to make room in your diet for foods that can help fight fatigue. Welcome to the study and THANK YOU for participating.



We greatly appreciate your willingness to help with this research. Thank you again!

FATIGUE REDUCTION DIET FOR BREAST CANCER SURVIVORS

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FATIGUE REDUCTION DIET

- 50% of all grains should be whole
 - At least 3 serving/day
- 5 servings of vegetables/day
 - o 1 serving dark leafy green
 - o 1 serving yellow or orange
 - o 1 serving of tomato
 - o 2 others or more of the above
- 2 servings of fruits/day
 - At least 1 serving high in vitamin C
 - o 1 other or more of the above
- 2 servings/day
 - o Fatty fish
 - Nuts and/or seeds
 - o Oils



GRAINS

Of the grains you eat, at least half should be WHOLE grain. This is usually 3 servings/day.

What foods are in the grain group?

Any food made from wheat, rice, oats, cornmeal, barley or another cereal grain is a grain product. Bread, pasta, oatmeal, breakfast cereals, tortillas, and grits are examples of grain products.

<u>Refined grains</u> have been milled, a process that removes the bran and germ. This is done to give grains a finer texture and improve their shelf life, but it also removes dietary fiber, iron and many B vitamins. Some examples of refined grain products are:

- White flour
- Degermed cornmeal
- White bread

- Flour tortillas
- White rice
- Pretzels

- Cornbread
- Pasta

Note: Some of these products may be made with whole grains. Check the ingredient list for the words "whole grain" or "whole wheat" to decide if they are made from a whole grain.

<u>Whole Grains</u> contain the entire grain kernel- the bran, germ, and endosperm. When reading Nutrition Facts on labels, look for good to high sources of dietary fiber = 3 to 5 grams fiber/serving. Also check the Nutrition Fact label for whole grain foods to be listed first, since ingredients are listed in descending order of amounts. Some whole grains and their serving sizes are:

- Bulgur, cooked (cracked wheat) (1/2 cup)
- Oatmeal, cooked (3/4 cup)
- Brown rice, cooked (1/2 cup)
- Cereals, unsweetened, ready-to-eat (3/4 cup)
- Popcorn, popped (3 cups)
- Whole-wheat bread (1 oz. slice)

- Whole-wheat pasta, cooked (1/2 cup)
- Whole-grain crackers
 - o Triscuits (6 crackers)
 - o Ryvita (2 crackers)
- Whole-wheat tortillas or lavash (1 oz .or ½)
- Whole-grain corn chips (1 oz. or about 12 chips)
- Whole-grain bagel or English muffin (1/2 bagel)

PRACTICAL TIPS FOR INCLUDING MORE WHOLE GRAINS IN YOUR DIET

Whole Grain Cereals

Cheerios Raisin Bran
Granola Shredded Wheat

Grape-Nuts Total

Oatmeal Wheat Germ Muesli Wheaties Whole Grain Snacks

Popcorn

Ryvita crackers Triscuits

WASA crackers

Wheat Thins, multi-grain Whole Grain Fig Newtons Whole Grain Chips Ahoy Whole Wheat Ritz crackers

Brown Rice

Instant brown rice cooks the same as instant white rice For regular rice, brown rice needs more cooking Time (40-60 min).

Whole Wheat Pasta

Although it may look dark while dry, whole wheat pastas

Lighten after cooking and can be easily substituted for white flour pasta, which may make it palatable to kids. Several brands make whole wheat pasta, like Hodgson Mills and Barilla, but selection may vary by store.



DARK LEAFY GREEN VEGETABLES EXAMPLES

Eat 5 or more servings of vegetables a day with at least 1 dark leafy green

One serving is 2 cups raw leafy greens ½ cup cooked ½ cup juice

- Kale
- Spinach
- Collard greens
- Beet greens

- Swiss chard
- Turnip greens
- Broccoli
- Loose leaf lettuce

- Parsley
- Bok Choy
- Dandelion greens
- Mustard greens













ORANGE AND YELLOW VEGETABLES EXAMPLES

Eat 5 or more servings of vegetables a day with at least 1 serving orange or yellow

One serving is 1 cup raw ½ cup cooked ½ cup juice

- Acorn Squash
- Butternut Squash
- Hubbard Squash
- Pumpkin
- Carrot
- Sweet Potato or Yam

- Bell peppers (red/yellow/orange)
- Summer Squash
- Spaghetti Squash









WAYS TO PREPARE TOMATO EXAMPLES

Use at least 1 serving a day

One Serving is: 1 medium or 1 cup fresh ½ cup canned ½ cup juice ¼ cup dried

Roast

• Salad

• Sauce

• Dip

• Stew

• Bake

• Pesto

• Fry

• Pickle

• Grill

• Soup

• Skillet



The tomatoes can be fresh or canned

TOMATO TIPS

• Local farmer's market will provide the most fragrant and ripe tomato varieties

Kerry Town, Ann Arbor Market Hours

January - April, Saturdays 8am-3pm

May - December, Wednesday & Saturday 7am-3pm

June-October, Wednesday Evening Market 4pm-8pm

Ypsilanti Farmers Markets

Season: May 3 – December 25 Time: Tuesday: 2 p.m. - 6 p.m. and

Saturday: 9 a.m. - 1 p.m.

Location: Tuesdays at Ferris and Hamilton, Ypsilanti. Saturdays at 100 Rice St., Ypsilanti

• At grocery stores seek tomatoes with a deep rich color indicative of better taste and higher lycopene content.

- To speed up the ripening place tomato in a paper bag with an apple or banana and the ethylene gas emitted by these fruits will hasten up the ripening.
- The antioxidant lycopene found in tomatoes is fat-soluble, cook with a touch of olive oil or pair with avocados.
- Store tomatoes at room temperature and out of direct sunlight.



OTHER VEGETABLE EXAMPLES

Eat 5 or more total servings of vegetables a day with at least 2 other

- Artichoke
- AsparagusBamboo
- ShootsBeets
- Cabbage
- Corn
- Eggplant

- Taro Root
- Sauerkraut
- Rhubarb
- Parsnip
- Kohlrabi
- Green Beans
- Jicama

- Celery
- Broccoli
- Brussels Sprouts
- Okra
- Zucchini(with skin)
- Nori (seaweed)
- Peas(green or snap)

- Water Chestnut
- Sugar Snaps
- Rutabaga
- Radish
- Pea Pods
- Mushrooms
- Green Peppers

- Fennel
- Cucumber
- Chayote
- Cauliflower
- Bok Choy
- Bean Sprouts
- Baby Corn



PRACTICAL TIPS FOR INCLUDING MORE VEGETABLES IN YOUR DIET

Add more veggies to dishes you already love

- Chop spinach, cooked carrots and layer zucchini into lasagna.
- Stir broccoli florets in macaroni and cheese
- Toss veggies into an omelet or quesadilla

Add them to soups

• Add raw or frozen vegetables while cooking or heating the soup (broccoli, kale, carrots, etc.)

Serve them raw

- Dip broccoli into light onion and ranch dressing
- Raw veggies can be milder than cooked with a crispier texture

Sneak them into spaghetti and pizza

• Chop broccoli, carrots, celery into the sauce (the smaller you chop, the less likely anyone will notice)

Drink your veggies

- Blend your own with carrots and mango, tangerine or orange juice
- Good juices on the market include V-8

Slip them into salads

• Replace lettuce with spinach

Increase the fun!

- Stuff bell peppers or mushrooms with a savory filling
- Fill celery sticks with omega-3 enriched peanut butter

FRUIT EXAMPLES

Eat 2 servings/day
At least 1 serving/day high in vitamin C (Starred below)

One Serving is:

1 medium or 1 cup fresh

 $\frac{1}{2}$ cup canned

½ cup juice

1/4 cup dried

Apples
Apricots
Bananas
Blackberries
Blueberries
Cantaloupe*

Cranberries
Cherries
Grapefruit*
Grapes
Guavas*
Figs

Honeydew melon
Persimmons
Lemons*
Limes*
Mangos*

Melons

Nectarines
Oranges*
Papayas*
Peaches
Pears

Kiwis* Pineapple Star Fruit

Plums Prunes Raisins

Raspberries
Strawberries*
Tangelos*
Tangerines*
Watermelon



OMEGA-3 FATS

2 servings/ day

- Omega-3 fats are thought to have benefits for many aspects of health including cardiovascular diseases, immune function, inflammation and cancer.
- Omega-3 fats come from nuts and seeds, flax and fish.
- Omega-3 fats are essential: this means our body cannot make fats in their diets.
- Try replacing other fat sources in your diet with omega-3 fats!



OMEGA-3 FATS

Eat 2 servings/day from the Omega-3 Groups: Seeds and/or Nuts, Oils and Fish Try to vary from which groups you choose your 2 servings EXAMPLE DAY: 1 TBSP flaxseed (ground) and 1TBSP canola oil

Seeds and Nuts Group		Oils Group	Fish Group
		1 TBSP	3oz~size of a deck of cards
Flaxseed (ground)	1TBSP	Flax oil	Salmon Lox Trout
Chia seed	1TBSP	Canola oil	Bluefish Herring Whitefish
Walnuts	14 halves	Soybean oil	Anchovies Bass Sardines
Peanut butter	2 TBSP	Walnut oil	2-12-2-12









PRACTICAL TIPS FOR INCLUDING MORE SEEDS AND NUTS IN YOUR DIET

- Flax remember to grind it (coffee grinder is useful)
 - o Pre-ground flax spoils. Keep it in the refrigerator or freezer
 - o Unground flaxseed has a coating that doesn't allow our bodies to absorb the oils
 - Add it to cooked oatmeal, pancake batter, or yogurt
 - o Flax has a nice nutty flavor!
 - o Flaxseed oil cannot be used in cooking! Best used as a dressing!
- Chia seeds are packed with omega-3!
 - o Sprinkle them on salads
 - O Use as a thickening agent for dressing, sauces, or jams
- Nuts- Walnuts are full of omega-3s.
 - o Sprinkle on salads or yogurts
 - Walnut oil cannot be used in cooking!
- Whole grain toast with omega-3 enriched peanut butter





COOKING BY COLOR

GREEN

- Overcooking kills nutrients in green foods, such as broccoli.
- Cook by lightly sautéing or steam to activate beneficial enzymes.
- Do not microwave nor boil due to the intense heat.

RED

 Cooking releases the carotenoid lycopene from the plant cells walls and helps your body absorb it.

ORANGE

 Bake, broil or steam sweet potatoes with their skin on to better retain nutrients

Wild Salmon

- Baking
- Broiling
- Poaching
- Steaming
- Grilling
- Frying will deplete the fish of nutrients