



Nutrition for Cancer Survivors

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One of the most powerful tools to combat inflammation comes not from the pharmacy, but from the grocery store.

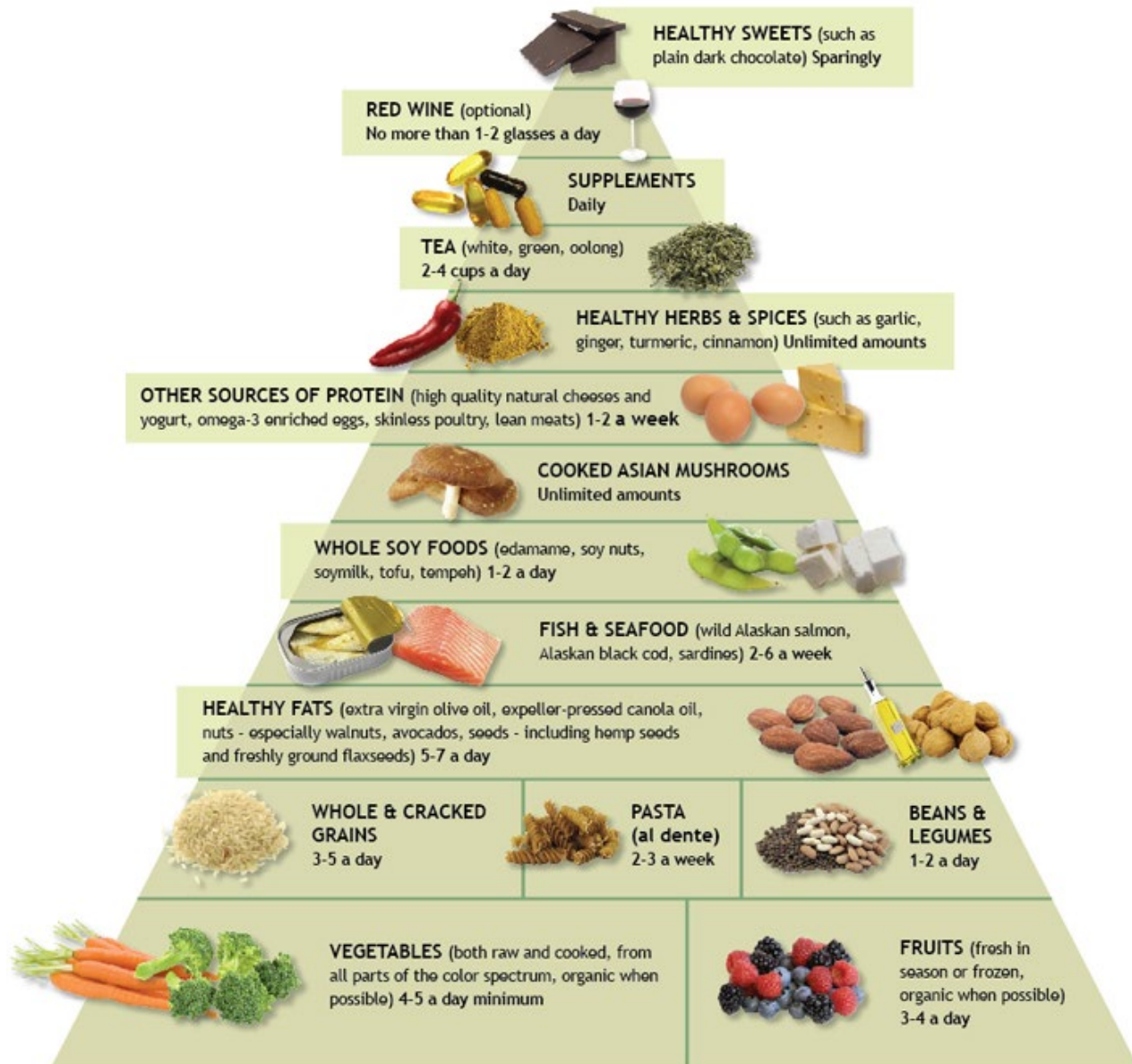
"Many experimental studies have shown that components of foods or beverages may have anti-inflammatory effects," says Dr. Frank Hu, professor of nutrition and epidemiology in the Department of Nutrition at the Harvard School of Public Health.

Why Inflammation?

- ❖ Many major diseases that plague us—including cancer, heart disease, diabetes, arthritis, depression, and Alzheimer's—have been linked to chronic inflammation.
- ❖ A eating pattern that emphasizes foods that are high in antioxidants, monounsaturated fats, and omega-3 fatty acids help reduce inflammation.

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- ❖ This is not a DIET! Although it may help in weight management. We are talking about a Lifestyle.
 - ❖ Lifestyle is way of living, thinking, and managing life.

Mediterranean Pyramid



Anti-Inflammatory Eating Pattern

- ❖ **Eat plenty of fruits and vegetables.**
 - Leafy greens, bok choy, celery, beets, broccoli, blueberries, pineapple, sweet potato, pumpkin, carrot, apricot, cherries, kale
- ❖ Minimize saturated and trans fats.
- ❖ Eat a good source of omega-3 fatty acids, such as fish or fish oil supplements and walnuts.

Anti-Inflammatory Eating Pattern

- ❖ Minimize intake of refined carbohydrates such as white breads, pasta, and white rice
- ❖ Eat plenty of whole grains such as brown rice, quinoa, barley and bulgur wheat.
- ❖ Eat lean protein sources such as chicken and fish; cut back on red meat and full-fat dairy foods. **Avoid processed meats**
- ❖ Include Asian mushrooms in recipes

Anti-Inflammatory Eating Pattern

- ❖ Chia seeds and flaxseeds or sunflower kernels and walnuts
- ❖ Spice it up. Ginger, Curry, Turmeric, and Cinnamon, garlic (crush), cumin .
- ❖ Drink Green tea up to 4 cups per day (unless your taking chemotherapy medication Velcade)

More components

- ❖ For sweet tooth choose dark chocolate-2 squares per day
 - Also experiment with deserts made with fruit, natural sweeteners like honey, maple syrup, or dates
- ❖ Eat 1 brazil nut per day for good source of Selenium
 - Eat other nuts as well like almonds, walnuts, cashews

Fruit and Vegetables

- ❖ Fill ½ your plate for each meal with combination of fruits and vegetables
- ❖ Asian Mushrooms like Shiitake, Maitake, and Reishi mushrooms pump up immune system and fight cancer!
- ❖ When selecting your meals for day think about eating a rainbow of foods; if you eat all the colors in rainbow you maximize health benefit from foods

– ROYGBIV!!

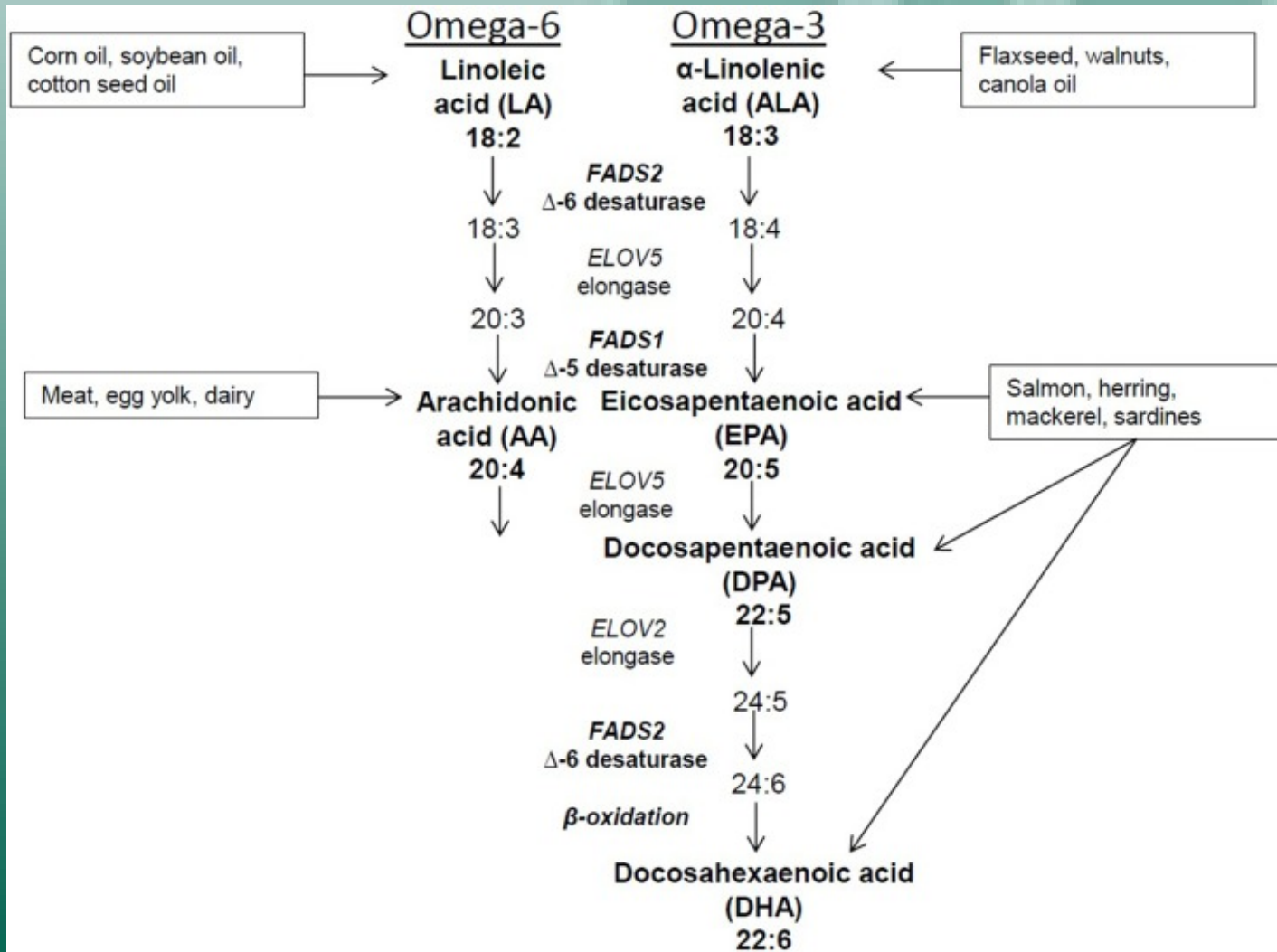
Why Whole Grains?

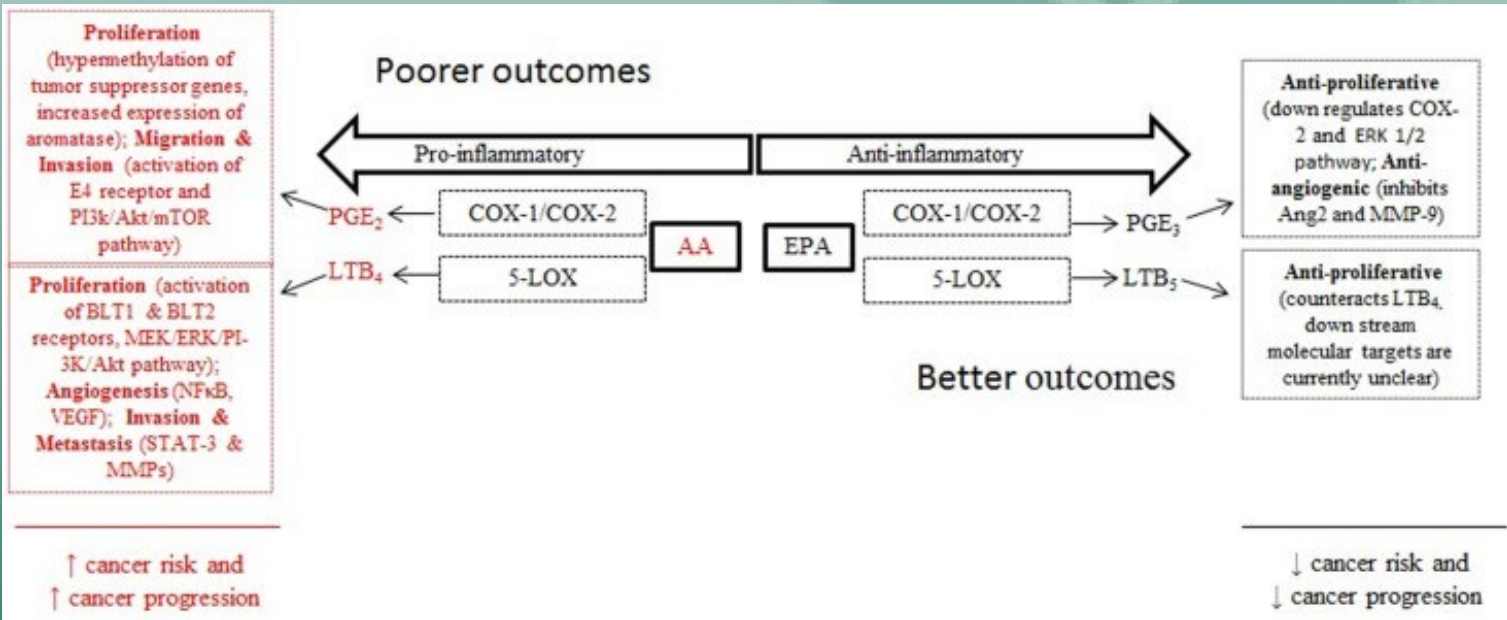
- ❖ Betaine found in whole grains has been linked to lower levels of inflammation by lowering homocysteine, c-reactive protein and tumor necrosis factor.
- ❖ Components of whole grains are also able to reduce estrogen in body protecting against breast cancer.
- ❖ High fiber foods are known to protect against colon cancer.

Anti-Inflammatory Grains

- ❖ Barley
- ❖ Buckwheat
- ❖ Millet
- ❖ Quinoa
- ❖ Brown Rice or Wild Rice
- ❖ Spelt
- ❖ Bulgur Wheat
- ❖ Don't forget high fiber starches like Beans and Peas!

Omega-6 vs. Omega-3





Foods High in Omega-3 fats

- ❖ Salmon
- ❖ Mackerel
- ❖ Tuna
- ❖ Halibut
- ❖ Walnuts
- ❖ Flaxseed oil or seeds (milled)
- ❖ Chia seeds
- ❖ Sardines
- ❖ Cod liver oil
- ❖ Herring
- ❖ Anchovy
- ❖ Oyster
- ❖ Mayonnaise made with canola oil

Monounsaturated Oils

- ❖ Olive oil
- ❖ Canola oil
- ❖ Peanut oil
- ❖ Safflower oil
- ❖ Sesame oil
- ❖ Avocados
- ❖ Peanut butter
- ❖ any nuts and seeds.

Smart Choices

- ❖ Salads: fill salad with avocado, seeds, olives and use vinegar dressing
- ❖ Use lean protein at meal and fatty fish 2-3 times per week
- ❖ For breading instead of flour and breadcrumbs use ground nuts based coating and bake.
- ❖ You can use greek yogurt instead of cream and look into recipes using tofu instead of cheese.

Anti-Inflammatory Proteins

- ❖ Salmon and other omega-3 fish
- ❖ Eggs
- ❖ Almonds, Brazil Nuts, Walnuts
- ❖ Beans
- ❖ Chickpeas
- ❖ Edamame
- ❖ Sesame Seeds
- ❖ Skinless Chicken

Research Findings-Protein Foods

Convincing Evidence of increased risk

- | | |
|------------------|------------|
| ❖ Red meat | Colorectal |
| ❖ Processed meat | Colorectal |

Probable Evidence of increased risk

- | | |
|-------------------------------|-------------|
| ❖ Cantonese-style salted fish | Nasopharynx |
| ❖ Diets high in Calcium | Prostate |

Research Findings-Protein Foods

Limited-Suggestive Evidence of increased risk

- ❖ Red meat Esophagus, Lung, pancreas, endomet.
- ❖ Processed meat Esophagus/Lung/Stomach/Prostate
- ❖ Foods with Iron Colorectal
- ❖ Smoked foods Stomach
- ❖ Grilled/BBQ Stomach
- ❖ Milk and dairy Prostate
- ❖ Cheese Colorectal

Research Findings-Protein Foods

Decreases Cancer Risk

- | | |
|---------------------|------------|
| ❖ Fish | Colorectal |
| ❖ Vitamin D in food | Colorectal |
| ❖ Milk | Colorectal |
| ❖ Milk (suggestive) | Bladder |

Potential to decrease Cancer Risk

- ❖ Beans, peas, and Legumes Colorectal
 - Diet high in fiber convincingly lowers risk

Human studies show soy foods do not increase risk Breast Cancer and in some cases, research suggests soy may lower all cause mortality

Processed Meat

- ❖ What is processed meat?
 - Meats, usually red meats, preserved by smoking, curing, salting, or addition of preservatives
 - Generally includes: Ham, bacon, pastrami, salami, sausages, bratwursts, hot dogs, frankfurters sometimes minced meats if preserved with chemicals.
 - Dietary nitrates and nitrites are probable human carcinogens because they are converted to the carcinogen N-nitroso.

Cooking Concerns

- ❖ When muscle meats like beef, pork, fowl, and fish are cooked at high temperatures cause amino acids to react and form Heterocyclic amines
- ❖ There are 17 identified heterocyclic amines which may pose a cancer risk

Cooking Concerns

- ❖ Temperature is critical factor: frying, grilling, and barbecuing produce most
- ❖ Burning food produces polycyclic aromatic hydrocarbons especially when cooking over wood-another potential carcinogen
- ❖ Cook at lower temperatures like oven roasted or baking

Cooking Concerns

- ❖ To reduce production of heterocyclic amines when grilling:
 - Marinate
 - Pre Cook
 - Trim the fat to avoid flare-ups and charring
 - Mix it up cut meat in small portions and mix with veggies
 - Grill vegetables and fruit which produce no HCA

Spice it up!

- ❖ Turmeric
- ❖ Garlic
- ❖ Basil
- ❖ Rosemary
- ❖ Cloves
- ❖ Ginger
- ❖ Fennel
- ❖ Anise
- ❖ Cardamom
- ❖ Cilantro/coriander
- ❖ Cinnamon
- ❖ Cumin
- ❖ Nutmeg
- ❖ Oregano
- ❖ Parsnips
- ❖ Peppermint

Other Lifestyle Components

- ❖ Adequate Sleep-try to get 8 hours of sleep nightly
- ❖ Exercise if you are not already exercising start with 10 minute increments to your tolerance goal is at least 30 minutes up to 60 minutes moderate intensity exercise most days of the week
- ❖ Management of stress! Stay calm stress hormones increase inflammation in body

Do I need to buy Organic?

- ❖ Many argue that chemicals on foods when eaten over long periods of time are carcinogenic and increase inflammation
- ❖ There is no scientific evidence that chemical residue causes cancer or that organic foods reduces cancer risk.
- ❖ If you want to buy organic remember organic cookies and snacks are still high in sugar and fat.

Dirty Dozen List

- ❖ Environmental Working Group produces a ranking of foods (Dirty Dozen List) with least and most pesticide residue.
- ❖ Using the Dirty Dozen List is good resource for choose which foods to buy organic and which foods are ok conventional.

What does this look like?

Breakfast: Pumpkin Pie spiced oatmeal topped with walnuts, clementine and almond milk

Lunch: Caesar salad wrap with roasted chicken whole grain wrap and cup of butternut squash soup.

Dinner: Lemon dill salmon with curry brown rice and steamed garlic broccoli

Snack: cup of greek yogurt with blueberry compote

*As a survivor, eat to nourish,
move to help you thrive, and
enjoy Life.Reclaimed!*

THANK YOU!!