

Fact or Fiction: Cancer Nutrition Myths

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DANA-FARBER/BRIGHAM AND WOMEN'S



CANCER CENTER



The Power of Nutrition

- Prevention, Treatment, Survivorship
- Symptom Management
 - Nausea, Fatigue, Bowel irregularities, Taste & Appetite changes
- Weight management
- Boost energy levels
- Support immune system
- Overall health and wellness

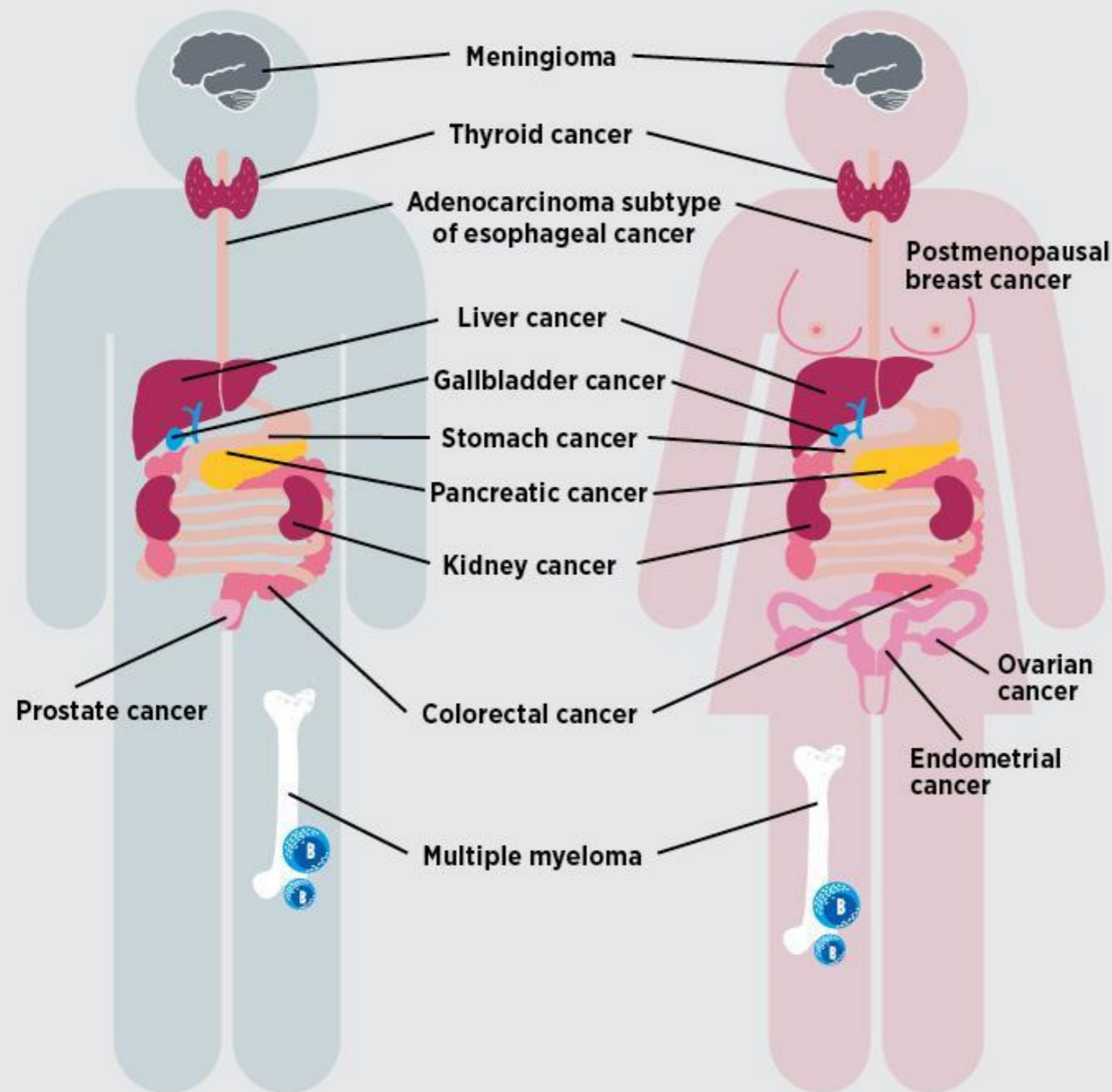


	American Cancer Society	American Institute for Cancer Research	National Comprehensive Cancer Network	Susan G. Komen Foundation	Blogs	Holistic providers
2.5 cups of fruits and veggies every day	✓	✓	✓	✓	✓	✓
Choose 100% whole grains over refined grain products	✓	✓	✓	✓		✓
Limit red meat and processed meat	✓	✓	✓	✓	✓	✓
Limit trans and saturated fats			✓	✓	✓	✓
Limit alcohol to 1 drink per day	✓		✓	✓		
Maintain "healthy weight"	✓	✓	✓	✓		

	American Cancer Society	American Institute for Cancer Research	National Cancer Institute	Susan G. Komen Foundation	Blogs	Holistic providers
Alkaline diet					✓	✓
Coffee enema					✓	✓
Vegan diet					✓	✓
Antioxidants					✓	

FIGURE 6

WEIGHING THE EVIDENCE: CANCERS CAUSED BY OBESITY



Fourteen types of cancer—the adenocarcinoma subtype of esophageal cancer, advanced prostate cancer, meningioma, multiple myeloma, and colorectal, endometrial, gallbladder, kidney, liver, ovarian, pancreatic, stomach, thyroid, and postmenopausal breast cancers—have all been directly linked to being overweight or obese.

American Association for Cancer Research (AACR) Cancer Progress Report 2016

Eat & Drink a Rainbow!



Plant Based Diet

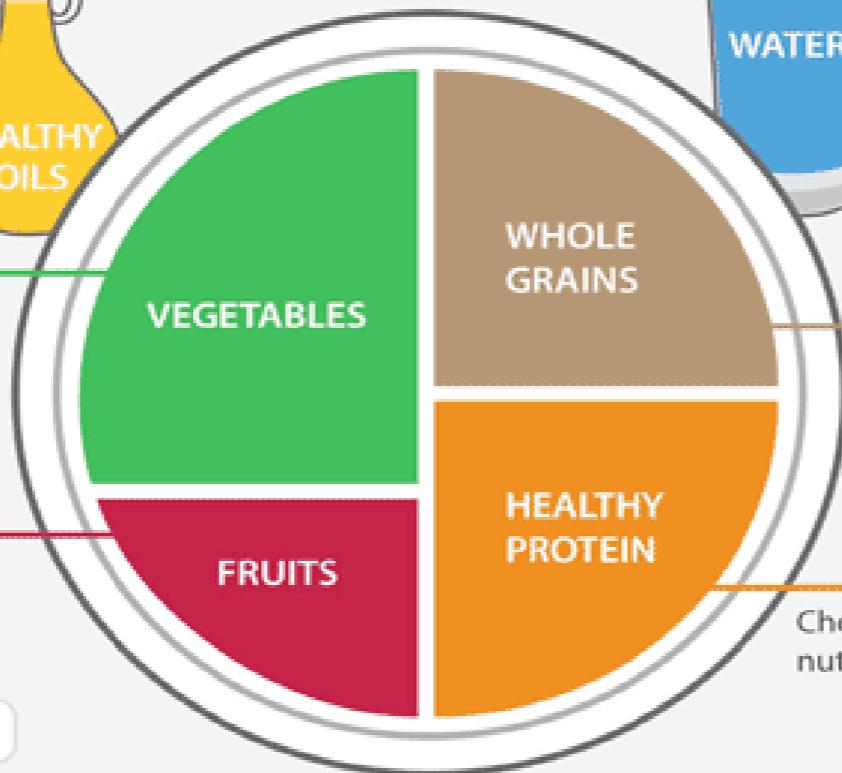
- Plant based foods provide a variety of Phytonutrients Each with unique benefits

HEALTHY EATING PLATE

Use healthy oils (like olive and canola oil) for cooking, on salad, and at the table. Limit butter. Avoid trans fat.



The more veggies – and the greater the variety – the better. Potatoes and French fries don't count.



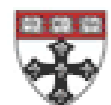
Drink water, tea, or coffee (with little or no sugar). Limit milk/dairy (1-2 servings/day) and juice (1 small glass/day). Avoid sugary drinks.

Eat a variety of whole grains (like whole-wheat bread, whole-grain pasta, and brown rice). Limit refined grains (like white rice and white bread).

Choose fish, poultry, beans, and nuts; limit red meat and cheese; avoid bacon, cold cuts, and other processed meats.



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Harvard School of Public Health
The Nutrition Source
www.hsph.harvard.edu/nutritionsource

Harvard Medical School
Harvard Health Publications
www.health.harvard.edu



Top Cancer Fighting Foods

- * Carrots, Sweet Potatoes & Squash (beta-carotene)
- * Strawberries, Cherries, Raspberries, Walnuts (Ellagic acid)
- * Broccoli & Kale (Indole-3-Carbinol, Cruciferous family)
- * Lemons, Limes & Oranges (limonene) - go for zest!
- * Berries, Bell Peppers, Cauliflower, Kiwi, Tomato (Vitamin C)



Bright Orange = Big Nutrients!



Carotenoids



□ Sources

- Pumpkin
- Carrots
- Squash
- Broccoli
- Leafy greens
- Tomatoes
- Corn
- Peppers
- Sweet potato
- Mango
- Guava
- Apricots
- Peaches
- Cantaloupe
- Watermelon
- Citrus

□ Benefits

- Beta-carotene, Alpha-carotene, cryptoxanthin, lycopene, lutein, and zeaxanthin:
 - Linked with prevention of colon, prostate, breast, and lung cancer
 - May reduce the risk of recurrence of breast cancer
 - May prevent degeneration of the eye



Cruciferous Vegetables

- ▶ Broccoli, Cauliflower, Cabbage, Brussels Sprouts, Radishes, Arugula, Kale, Collard Greens, Mustard Greens, Wasabi
- ▶ Potent phytochemicals:
- ▶ Sulforaphane, Indole-3-Carbinol, 3,3'-diindolylmethane (DIM)
- ▶ Promote natural Liver Detoxification
- ▶ Support Immune System



Food Synergy:

Combining plant-based foods can make all the difference

- * Cooked tomato + olive oil = lycopene absorption enhanced
- * Turmeric + black pepper = 1000% absorbability
- * Plant based iron + Vitamin C = like heme
- * Protein + carbs = blood sugar control



Sample Meal Plan

Breakfast: Oatmeal mixed with almond milk, walnuts & fruit



Lunch: Salad with plenty of tomatoes, free range chicken breast or chickpeas, almonds with an olive oil, lemon and herb dressing



Snack: Handful of mixed nuts with fresh fruit OR hummus & veggies

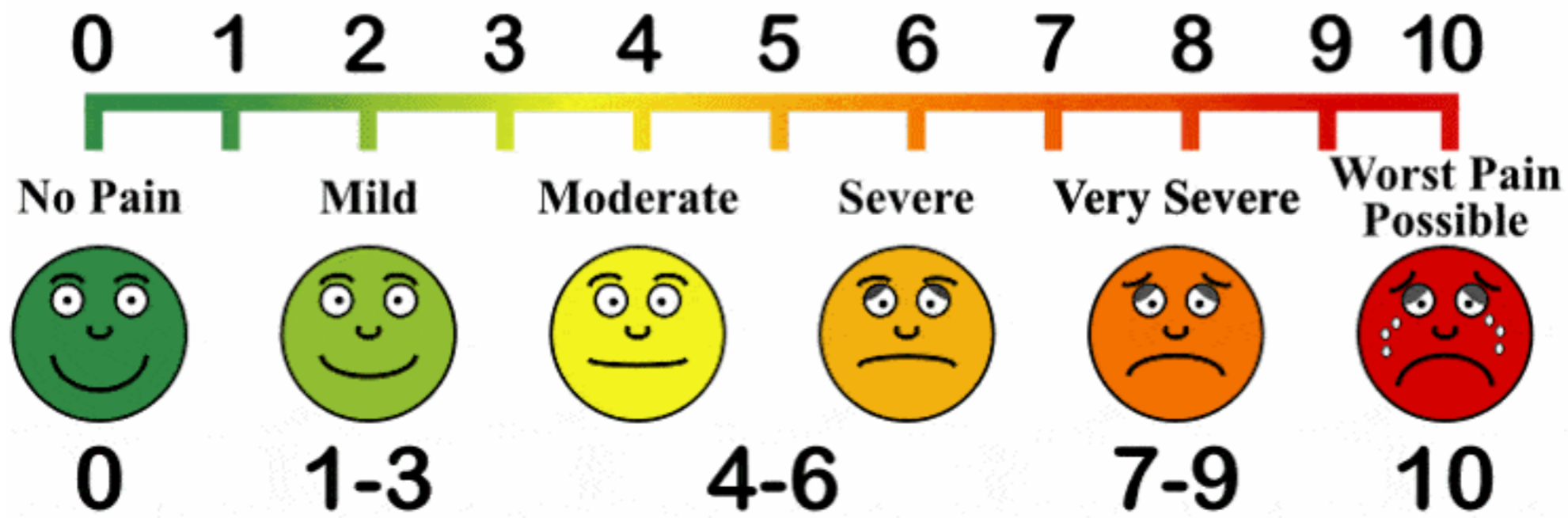


Dinner: Fillet of wild-caught fish with quinoa and a side of steamed kale or broccoli



Symptom Management

- ▶ Nausea
- ▶ Bowel Concerns (constipation, diarrhea, gas, bloating, pain)
- ▶ Fatigue
- ▶ Taste Changes
- ▶ Mouth Sores
- ▶ Peripheral Neuropathy



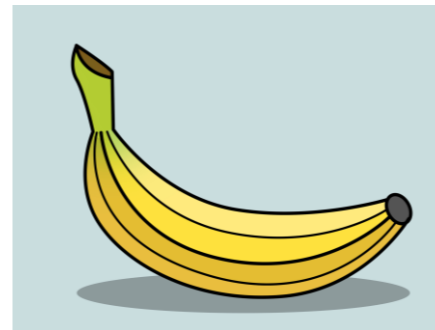
Nausea Management

- Lemon & Ginger
- Small, frequent meals =
 - Avoid the “empty stomach” trigger
- Salt is your friend
- Easy to digest foods - potatoes are not “bad”
- Address constipation, reflux



Bowel Concerns

- Constipation's role in reflux
- Hydration
- Senna Tea
- Proper fiber balance
- Walking & activity
- Small, frequent meals
- Protein Power
- Probiotics & Feeding your microbiome



Taste Changes



- ▶ Include Tart, Sour Flavors
- ▶ Avoid Metal
- ▶ Hydrate with natural flavors
- ▶ Season meals with herbs
- ▶ Consider cooler temperatures
- ▶ Link with smell & taste

Fatigue

- ▶ Sleep hygiene
- ▶ Small, frequent patterns
- ▶ Hydration
- ▶ Movement
- ▶ Nourishment
- ▶ Medication timing



Healthy Smoothies

- * Great way to hydrate with Phytonutrients!
- Promotes fullness and hunger or craving control
- Stabilizes blood sugar
- * Electrolyte and protein rich
- * Combine fruits & veggies
- * Help fatigue, bowel irregularities, nausea, taste changes
- Have fun being creative!







Highly Customizable

Diet & Cancer = Controversies

- Dairy
- Sugar
- Organics
- Grass-fed vs. Conventional Red Meat
- Wild vs. Farm Raised Fish
- Alcohol
- Alkaline Diets
- Ketogenic Diets
- Intermittent Fasting



Dairy & Cancer: Risk Reducer or Enhancer?

- Data inconclusive and cancer specific*
- Prostate cancer
 - Calcium & whole milk linked to  prostate cancer risk, progression
- Colorectal cancer
 - Dairy & dietary calcium most likely protective  risk
- Breast cancer
 - Evidence inconsistent - unlikely related to overall risk
- Ovarian cancer
 -  risk overall & serous subtype with lactose intake
 - Pre- & post-diagnosis milk/lactose intake = poorer survival time
- Bladder cancer - Limited evidence fermented dairy  risk

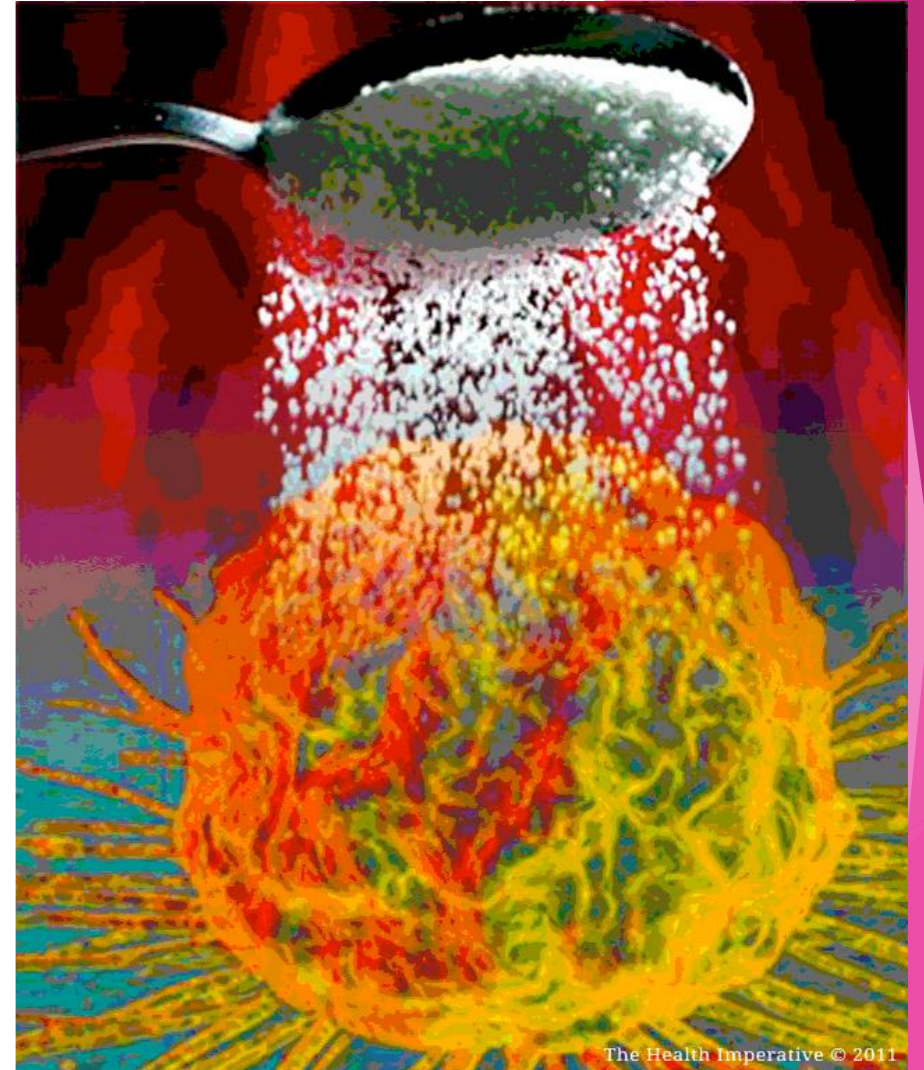
Recommendations on Dairy



- Role of fermented dairy products (certain cheeses, yogurts, Kefir, etc..) and microbiome health
- Seek high quality and moderation
 - HSPH Limit to 1-2 servings/day vs. 3
- Low Saturated Fat for heart disease prevention
- Not all or nothing, may be dose dependent

Sugar

- Fruit & “Natural Sugar”
- Sugar sweetened beverages
- Added Sugars
- Artificial sweeteners
- GI/GL/Insulin
- Take home messages



Take Home Messages on Sugar

- Eat balanced meals and snacks.
- Include a protein-rich and fiber-rich food with each meal and snack.
- Stay well hydrated.
- Include walking and other physical activity regularly.
- Eat plenty of vegetables and other plant-based foods.
- Choose fresh or whole fruit over dried fruits and fruit juices. Add fresh/frozen fruit to plain Greek yogurt instead of purchasing flavored options with fruit already included.
- Choose whole grains and starchy vegetables like quinoa, brown rice or sweet potatoes over refined grains like white rice, breads and potatoes.
- Use fresh or dried herbs and spices, like cinnamon, to flavor foods and add nutrients.
- Focus on getting adequate sleep and managing stress levels.

Is Organic Better? Eat Locally!

EWG'S SHOPPERS GUIDE TO PESTICIDES IN PRODUCE™

DIRTY DOZEN™

2013 DOZEN™ 2013

APPLES	NECTARINES IMPORTED
CELERY	PEACHES
CHERRY	POTATOES
TOMATOES	SPINACH
CUCUMBERS	STRAWBERRIES
GRAPES	SWEET BELL PEPPERS
HOT PEPPERS	

PLUS

- COLLARDS & KALE*
- SUMMER SQUASH & ZUCCHINI*

*PESTICIDES OF SPECIAL CONCERN



EWG'S SHOPPERS GUIDE TO PESTICIDES IN PRODUCE™

CLEAN FIFTEEN™

2013 FIFTEEN™ 2013

ASPARAGUS	ONIONS
AVOCADO	PAPAYAS
CABBAGE	PINEAPPLES
CANTALOUPE	SWEET PEAS FROZEN
CORN	SWEET POTATOES
EGGPLANT	
GRAPEFRUIT	
KIWI	
MANGOS	
MUSHROOMS	

QUESTIONS ABOUT PESTICIDES IN PRODUCE? VISIT US AT FOODNEWS.ORG



Organic Label Does Not Guarantee It's Healthy



Wild Fish & Grass Fed Beef vs. Conventional

	Type	Amount	Reason
Beef	Grass-fed beef.	<18 oz/week; consume in moderation as part of a balanced diet with other plant-based foods; coincides with AICR dietary guidelines.	Grass-fed beef contains an improved nutrition profile and is more environmentally sustainable than grain-fed beef. Beef should be consumed in moderation given the proposed risks of consuming red meat in relation to the development of chronic diseases.
Fish	Wild caught salmon as well as other high-fat fish.	At least twice per week; coincides with AHA and WHO dietary guidelines.	Wild salmon contains lower levels of contaminants than farm-raised salmon and is more environmentally sustainable. High-fat fish should be included in the diet because of its EPA and DHA content, which are proposed to prevent against chronic diseases.
Other Sources of Dietary Protein	Poultry, lean meat, eggs, legumes, tofu, beans, and nuts.	Consume in moderation as part of a balanced diet; should make up 1/4 th of the balanced plate.	Dietary protein promotes satiety and helps regulate blood sugars. Plant-based sources of protein as well as lean meats contain less saturated fat and are higher in fiber, which may be beneficial for the prevention of chronic diseases.

Alcohol & Breast Cancer

- ▶ Breast Cancer Risk Specifically
 - ▶ ↑ Risk with 3-6 Drinks/week (<1/day) or 10% for every 10 gm
 - ▶ Higher with early or later in life exposure
 - ▶ Daily consumption of alcohol increases the risk
- ▶ Moderate drinking - Low risk for alcohol problems - General
 - ▶ Women - <2 drinks per day
 - ▶ Men - <3 drinks per day
 - ▶ People age ≥ 65 - <2 drinks per day
- ▶ 14 to 15 grams of alcohol (0.5 to 0.6 fl ounces) =
 - ▶ 12 ounces of beer
 - ▶ 5 ounces of wine
 - ▶ 1.5 ounces of 80 proof liquor



Alcohol & Breast Cancer

- Insignificant differences between type of alcohol and risk



- Consuming Folic Acid may help reduce associated risk
 - Especially ER- Breast Cancers
 - Multivitamin Recommended
 - US Food Supply Fortification



Alkaline Diets

- ▶ Promote avoidance of processed foods, excess meats & dairy and abundance of plant-based foods
- ▶ Biologic Plausibility: Can You Change Your Blood pH?
- ▶ Reliability of home testing
- ▶ Bottom Line



Battle of the Dietary Fats: Low-Fat vs. Ketogenic Diets for Breast Cancer



- 50-20-10: High in healthy fats, moderate in protein, low in carbohydrates
- Allows body to burn fat for energy vs. carbs/sugars
- Therapeutic use in pediatric seizure treatment
- Popular use in weight loss, athletic performance
- Preliminary research investigating benefits for cancer patients*
- Data supporting Mediterranean Diet**
- Contradicts previous Low-Fat Dietary recommendations for Breast Cancer, especially for those with ER-***

Intermittent Fasting



- ▶ IF vs. Fasting, Cleansing & Detox Regimens
 - ▶ Cultural & Historical Prevalence
 - ▶ 12-16 hour window between eating (overnight)
 - ▶ Circadian IF regimens (100% total daily calories 8a-2p)
 - ▶ Focus on Eating Pattern/Timing
- ▶ Potential Benefits
 - ▶ Improved insulin sensitivity
 - ▶ Fat metabolism, appetite and hunger management
 - ▶ Preliminary research looking at potential benefits during chemotherapy treatment & in overall survivorship.
- ▶ Potential Risks
 - ▶ Meeting elevated nutrition needs during treatment
 - ▶ Logistics of scheduling, meal prep, family/cultural eating patterns

Food vs. Supplement

- ✿ Many beneficial compounds have shown positive effects when they are consumed from food sources.
- ✿ Supplements may be harmful because they can provide too-high doses and can interact with treatment or other medications



Guide to Evaluate Supplements

- Safety First, Efficacy Second
- Communicating to patients that supplements are not federally regulated for purity, safety or content
- Natural Medicine Database
- ConsumerLabs.com
- Memorial Sloan Kettering Cancer Center's About Herbs app



Making it work

Shop for Ingredients Not Foods

Batch cook and freeze leftovers

Bring lunch, prepare the night before

Follow an eating schedule

Focus on Proportion, not Portion



How to build your healthy eating plan

- * Plant based diet
- * Timing of meals and snacks
- * Taste changes, likes & dislikes
- * Ease of preparation
- * Meet with a nutrition specialist to customize your plan.



Dana Farber Nutrition Media



- ▶ Bringing tech to patients, caregivers
- ▶ Patient filters recipes by goal, symptom, sensitivities, selects recipe & can build shopping list & share
- ▶ Started website in 2007, recipes, Ask the Nutritionist, recipes, resources
- ▶ Award-winning App launched in 2010
 - ▶ Free, available iphone & android
- ▶ *>>>32,000 downloads, featured in Oprah Magazine
- ▶ You Tube Videos - Eating Well During Cancer Series - Bell Ringer Silver Award 2015
- ▶ Social Media, blogs & Web Chats, Twitter chats



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