

ANTI- INFLAMMATORY DIET

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ACUTE VS. CHRONIC INFLAMMATION

Acute inflammation:

Positive signal that the body is working to heal itself

Symptoms include redness, swelling and pain

Happens quickly and subsides as the tissue heals

Chronic Inflammation:

Happens over days, months, years

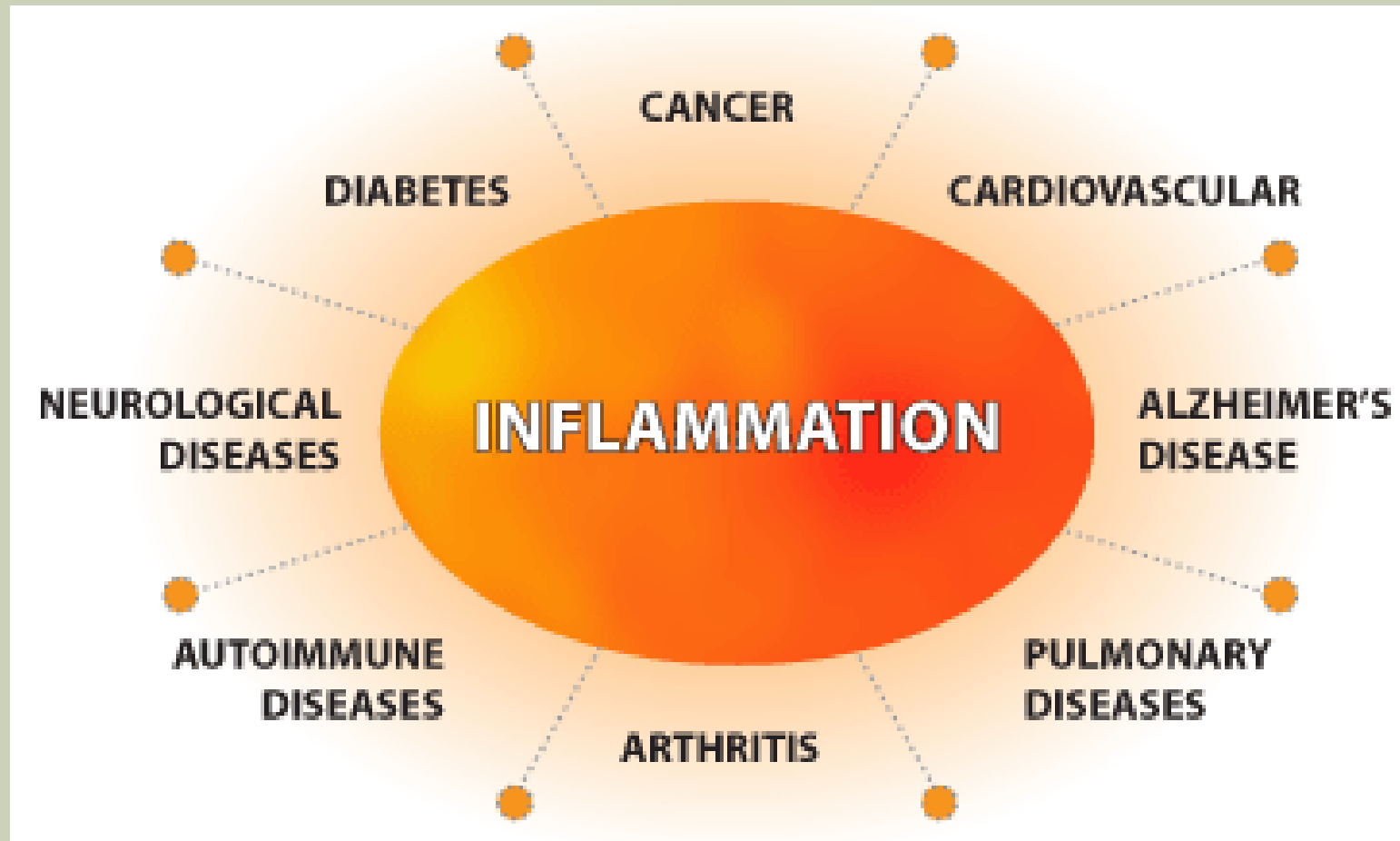
Signs are less obvious

Persistent and leads to severe and progressive tissue damage and inflammatory diseases

SYMPTOMS OF CHRONIC INFLAMMATION

- Digestive problems
- Chronic fatigue
- Moodiness/depression
- Food cravings
- Insulin resistance/blood sugar issues
- Rashes/skin issues
- Weight gain
- Headaches
- Allergies

DISEASES LINKED TO INFLAMMATION



ROOT OF INFLAMMATION

Gut: Intestinal permeability/leaky gut

Digestive system contains immune cells that prevent toxins and pathogens from entering the bloodstream. Modern invaders – smoking, lack of exercise, high fat meals, high calorie meals, sugar, trans fats – irritate the innate immune system

Digestive lining should be woven tightly. If it becomes too permeable, undigested nutrient particles, toxins or bacteria can get into your bloodstream. This triggers the immune system and lead to inflammation

Even “healthy” food not digested properly can be a cause of inflammation

REPAIRING THE GUT

- Elimination diet—common inflammatory foods that activate the immune system: gluten, dairy, sugar, and alcohol
- Proper nutrients
- Probiotics
- L Glutamine—healing for lining of digestive tract
- Fish Oil or Flax Oil (Omega 3 source)
- Vitamin D-5000 works like a hormone in the body regulating calcium absorption and inflammation levels

MINDFUL EATING

- Chewing food really well can aid in the digestive process and make nutrients more available
- Body can attack food as a foreign invader if it is not digested properly and enters the blood stream
- Fights fatigue and leads to eating less and enjoying food more
- Mindless eating disrupts our digestive abilities by eliciting stress hormones. This can cause inflammation and weight gain

PRACTICE MINDFUL EATING

Pay attention: make an active choice about what you are eating

Plan ahead and prepare

Make a choice that prioritizes your health goals: traveling/guest, etc.

Questions to ask:

- Why? am I eating now: Am I hungry?
- What? Will this choice serve my wellness in the long run. Is this treat worth how I will feel later. Nothing tastes as good as healthy feels.
- How? Am I fully present eating or am I doing other things?

Try expressing gratitude: for food and farmers

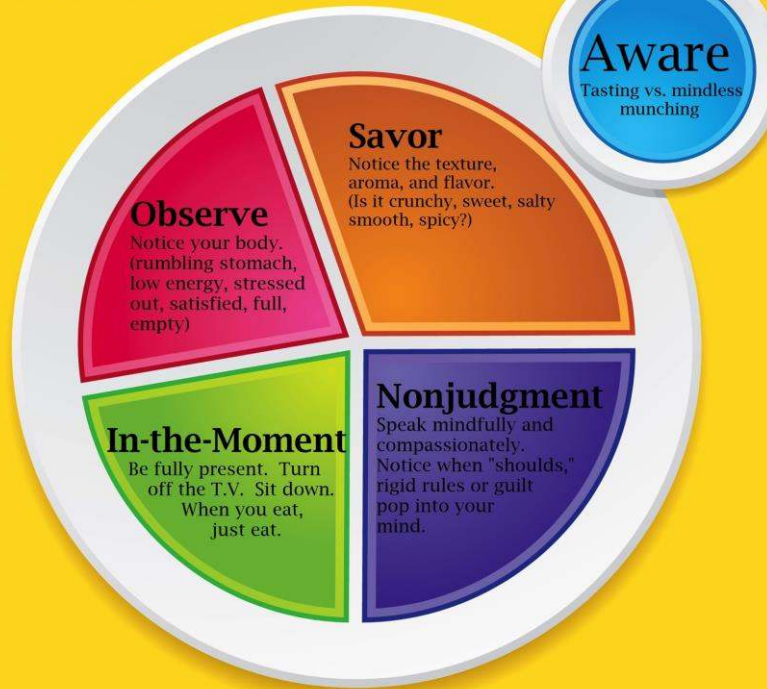
Chew, chew, chew and then chew some more...

Digestion begins in the mouth. Chewing helps enzymes in saliva do their job so we can effectively absorb nutrients.

MINDFUL EATING

Mindful Eating

www.eatingmindfully.com



Susan Albers PsyD 2012@ Eat, Drink & Be Mindful

PRO-INFLAMMATORY FOODS

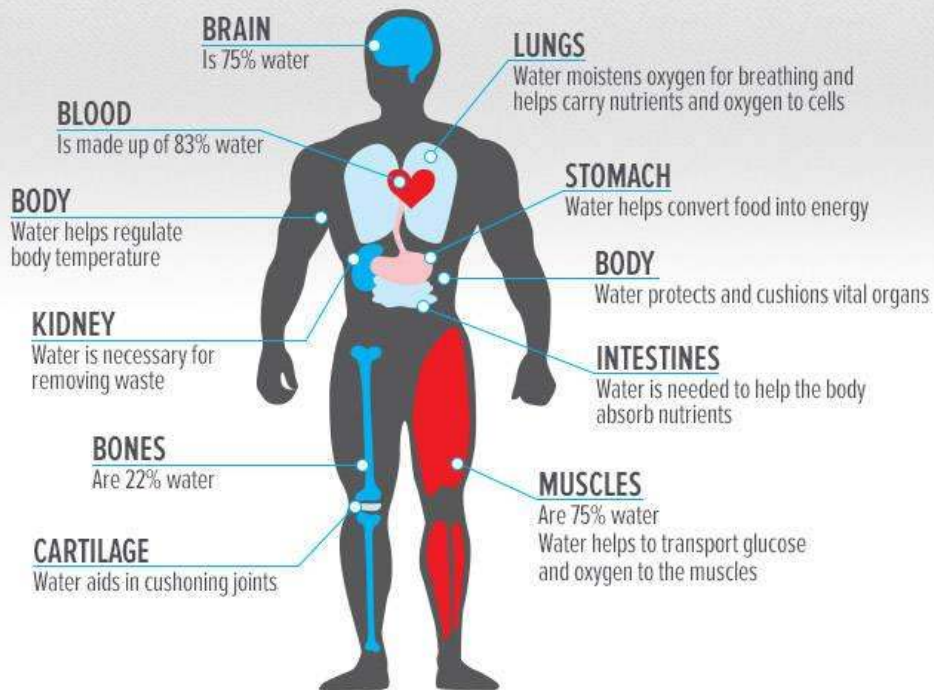
- S.A.D. Diet
- Refined and Processed Food
- Grain Fed meats and eggs
- Refined grains/over consumption of whole grains
- Sugars
- Inflammatory fats/cooking oils: vegetable oil, canola oil, soy oil or corn oil (high omega-6 content and very low omega-3 content)
- Sodas and alcohol
- Artificial sweeteners
- Additives
- Food Dye
- Anything your body may not recognize as food (chemicals)

HYDRATION

- Crucial for proper cellular function. Dehydration slows down nutrients absorption and metabolism. Affects the operation of every organ in body.
- Signs of dehydration: fatigue, foggy thinking, depression, joint pain, hunger, cravings, and weight gain.
- Formula for hydration: $\frac{1}{2}$ body weight in ounces per day.

HYDRATION

WATER IN THE BODY



SUGAR

Addiction: hard to address, but important to remove

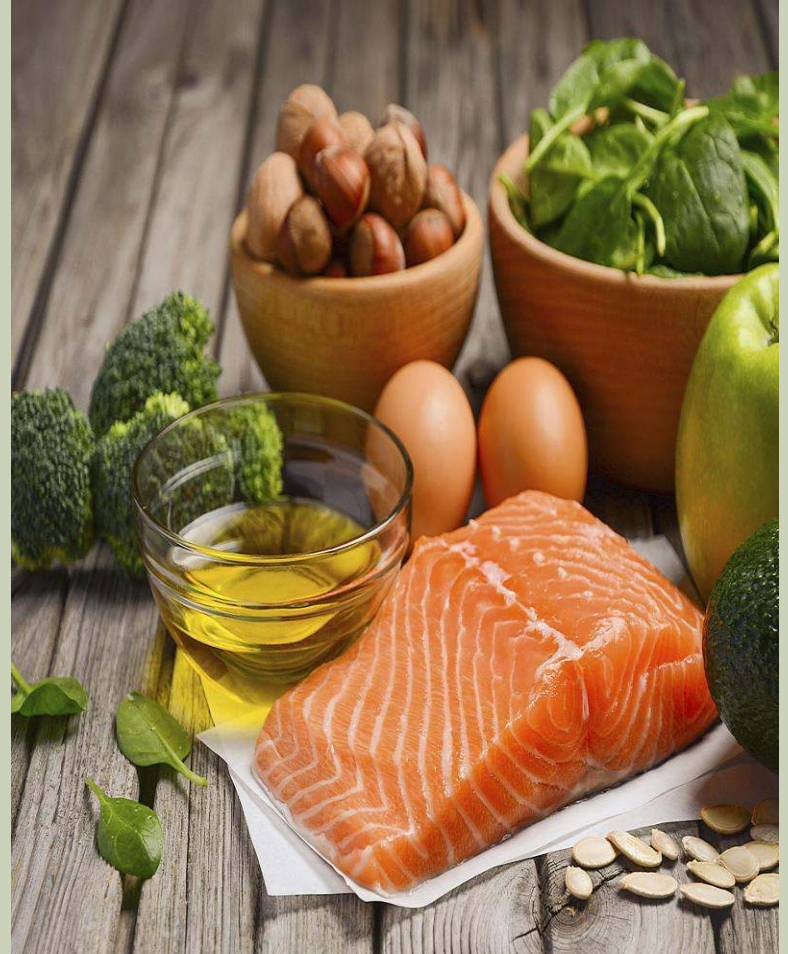
Increases inflammation—when blood sugar is high, the body produces more free radicals that trigger the immune system and damage cells and cause inflammation in the blood vessels.

Alters the hormone insulin (responsible for fat storage)-
increase in insulin = inflammation.



ANTI-INFLAMMATORY DIET

- Not a diet, but a lifestyle change
- Avoid super food and nutrient isolation
- Real/Whole Foods that exist in nature and have not been chemically altered
- 85/15 or 90/10 way of eating



ANTI-INFLAMMATORY FOODS

Plant Based Whole Foods Diet
Fats Mostly from Whole Foods

- Vegetables
- Fruits
- Nuts and Seeds
- Meats and Eggs
- Healthy Fats
- Water
- Spices and Herbs
- Herbal Teas
- Whole grains
- Spices
- Mushrooms
- Antioxidants
- Phytonutrients



ANTI-INFLAMMATORY DIET

Supports the body by providing the proper vitamins, minerals, essential fatty acids, dietary fiber, protective antioxidants and phytonutrients. Provides steady energy by stabilizing blood sugar.

People do tend to lose weight on it, but it is not intended as a weight loss plan.

Choosing and preparing foods based on how those foods will support optimal health.

Eating to thrive, not survive.

PROTEINS

Meat: Organic, Grass Fed, Hormone Free, Antibiotic Free

Bison

Beef

Chicken

Duck

Lamb

Turkey

Venison

Elk

Eggs (pastured)

Tempeh-Fermented Soy



GRASSFED VS GRAINFED

BEEF

Grassfed vs "Grainfed"

Most beef sold in stores & restaurants



Cattle eat their natural diet of grasses.



Cattle eat 90% corn 10% other forage, and cheap high-energy feeds like candy, starch, bakery waste, potato waste, pasta, chicken litter, meat processing waste...

No Antibiotics.



+ Antibiotics
29 million pounds used on American livestock in 2009 for illnesses & growth promotion.

No Hormones.



+ Hormones
Implants or injections are used to increase growth rate by 10-15%.

Cattle roam open pasture to feed.



Confined Feedlots
Restricting movement prevents cattle from using energy so that they fatten quicker.

Cattle naturally take 1.5-2 years to mature.



1 Year to Maturity
The combination of high-energy foods, drugs, and confinement turns cows into cheap meat in half the time.

Meat Composition of grassfed cows is significantly healthier when analyzed for fat and nutrient content:



2-4x more Omega 3
5x more CLA*
More Vitamins
More Minerals



4X MORE FAT
per 3 oz. serving

www.mcmichaelchiro.com

CLA is a healthy fat that has been linked to a reduced risk of cancer.
Research 1 - "B-Practical Feasibility in Dairy Cattle Diets in the Upper Midwest," published in 2006 by the College of Agricultural and Life Sciences at the University of Wisconsin at Madison by Todd D. C. K. & Bergstrom, D. M. Chittles, and G. R. Niswander. "Comparative of Milk and Meat Fatty Acid Profiles and Cholesterol Concentrations of Beef, Beef Cattle, Ewe, and Chicken." J Anim Sci 86, no. 6 (2002): 1902-11. J. Drewnowski, T. W. G. R. Arnold, et al. (1999). "Conjugated linoleic acid content of milk from dairy feed efficient cows." J Dairy Sci 82(10): 2146-56.

PROTEINS

Fish (Wild Caught is Best)

Canned Fish Should be in water and Mercury and BPA Free

Trout

Salmon

Sardines

Cod

Tilapia

Haddock

Halibut

Tuna

Grouper

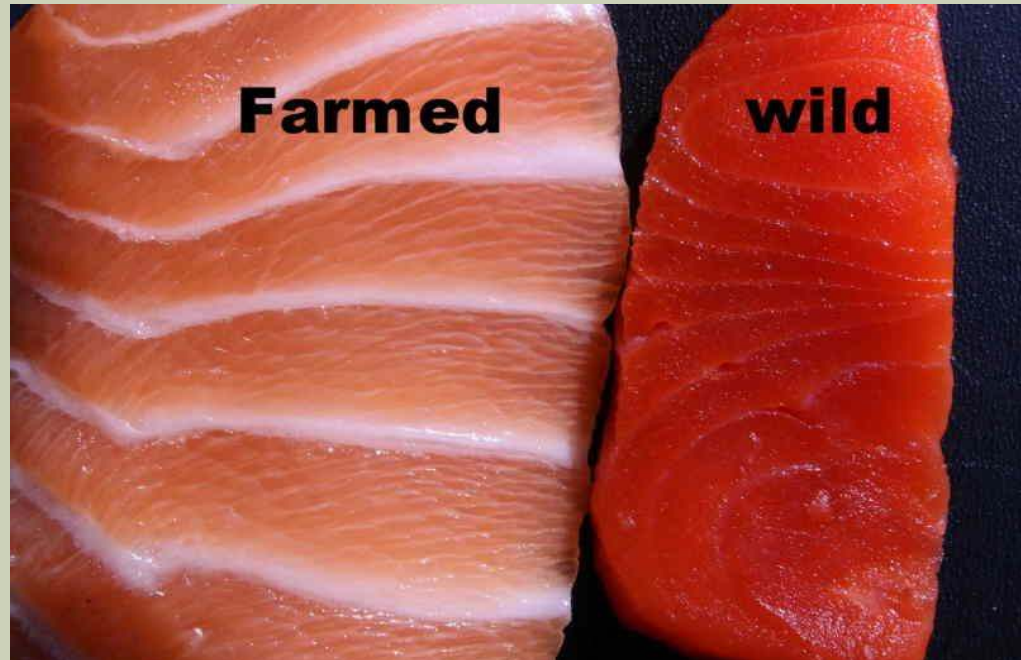
Sea Bass

Mackerel

Mahi Mahi

Red Snapper

Walleye



DAIRY AND “DAIRY PRODUCTS”

Dairy (Organic or Raw is Best)
Almond Milk (unsweetened)
Coconut Milk (unsweetened)
Organic Cow's Milk (raw)
Organic Cow's Cheese (raw)
Organic Greek Yogurt (plain)
Goat Milk
Goat Cheese
Goat Yogurt (plain)
Kefir
Sheep Cheese
Sheep Yogurt (plain)

Nutritional differences of raw milk vs. processed “Raw Milk is Whole”

raw milk has:	benefit:	in pasteurized milk:
phosphatase	essential for the absorption of calcium	destroyed
lipase	enzyme that aids in the digestion of fats	destroyed
immunoglobulin	helps improve asthma	destroyed
lactase producing bacteria	enzyme that helps digest lactose	destroyed
probiotic bacteria	strengthens immune system	destroyed
delicate proteins	tissue repair; muscle/bone strength	denatured
vitamins A, D & B-12	improve health	diminished
calcium	prevents osteoporosis; strengthens bones; helps weight-loss	inhibited
phosphorous	healthy teeth/bones	diminished

CARBOHYDRATES

Artichoke
Arugula
Asparagus
Beets
Bell Peppers
Bok Choy
Broccoli
Brussels Sprouts
Cabbage
Carrots
Celery
Collards
Cucumbers
Eggplant
Garlic
Green Beans
Kale
Mushrooms
Mustard Greens

Onions
Okra
Romaine Lettuce
Parsnips
Peas
Peppers (All)
Pumpkin
Radish
Spinach
Squash
Tomatoes
Turnip Greens
Watercress

CARBOHYDRATES

- Whole Grains in moderation
- Whole grain products instead of whole wheat
- Quinoa
- Brown Rice
- Wild Rice
- Beans (protein and carb)
- Whole Oats



CARBOHYDRATES

Fruits

Preferred: lower on the glycemic index

All Berries

Apple

Orange

Pears

Lemon

Lime

Moderation: higher on the glycemic index

Apricot

Banana

Cantaloupe

Cherries

Coconut

Figs

Grapefruit

Grapes

Mango

Nectarine

Papaya

Peaches

Pineapple

Plums

Pomegranate

Watermelon

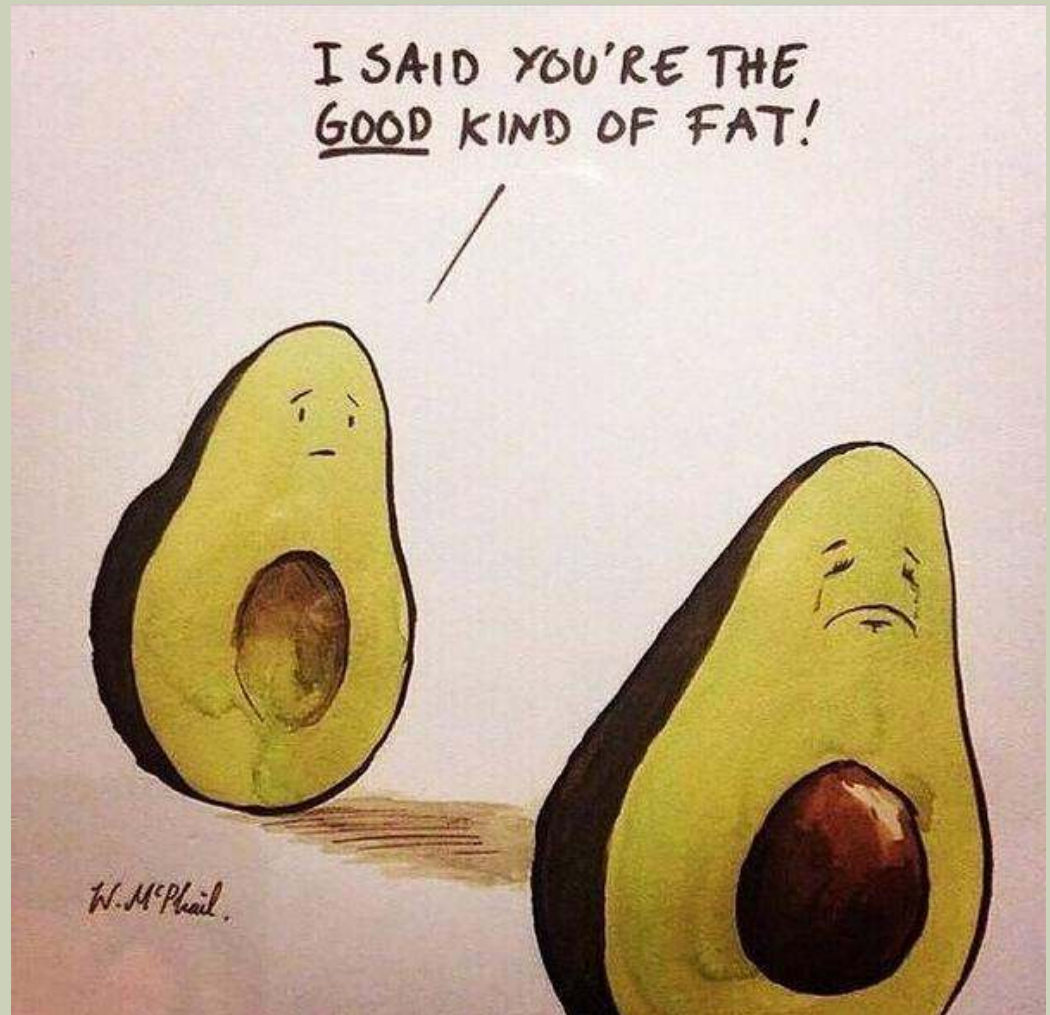
All other fruits

- Look up the the EWG dirty dozen list for most important foods to buy organic

<https://www.ewg.org/foodnews/summary.php>

HEALTHY FATS

Almonds
Brazil Nuts
Cashews
Chia Seeds
Hemp Seeds
Hazelnuts
Macadamia Nuts
Pecans
Pumpkin Seeds
Sesame Seeds
Sunflower Seeds
Nut/Seed Butters
Avocado
Olives



HEALTHY FATS

Best to get fats from whole foods

Oils to be used in moderation:

Avocado Oil

Almond Oil

Butter (Grass Fed)

Coconut Oil

Ghee

Flax Oil

Macadamia Oil

Olive Oil

Sesame Oil

Walnut Oil



HERBS AND SPICES

Basil

Black Pepper

Cayenne Pepper

Chili Pepper (capsaicin)

Cilantro

Cinnamon

Cloves

Cumin

Dill

Fennel

Garlic

Thyme

Mustard Seed

Nutmeg

Oregano

Paprika

Parsley

Peppermint

Rosemary

Sage

Tarragon

Thyme

Turmeric (curcumin)

CONDIMENTS

Apple Cider Vinegar

Guacamole

Hummus

Mustard

Mayo (Olive Oil, Avocado Oil, or Sunflower Oil based)

Organic Salad Dressings made with healthy oils (listed above)

Salsa- no sugar added

Sea Salt

Cultured- yogurt, sauerkraut, kimchi, and other cultured vegetables

BEVERAGES

Water (filtered is best)

“Spa” water

Broths- Homemade bone broth or veggie broth

Almond, Cashew, Hemp, Sunflower, Coconut, Pumpkin
Seed Milk (best to make at home to avoid the
additives)

Organic Low-Acid Coffee

Herbal Teas

Kombucha

Raw Vegetable Juices

Sparkling Water- unsweetened and in moderation

Green Tea- polyphenolic compounds

SWEETENERS AND TREATS

- Honey or Molasses
- Stevia
- Dark Chocolate- 72% or higher
- Dry Wine
- Dry Cider



COOKING METHODS

- An important, but overlooked component of nutrition is how food is cooked.
- Avoid modified proteins and fats called *advanced glycation end products* (AGEs).
- High levels of AGEs fire up inflammation leading to heart disease, obesity and arthritis. AGEs can also contribute to aging
- AGEs develop when food is cooked on high or grilled
- Best methods: Slow and low. Stew, poach, braise. Marinate if grilling. Liquid helps prevent AGEs.

BEANS

Starchy: consume in moderation.

Preparation techniques:

To avoid lectins, phytic acids and enzyme inhibitors:

Soak for **12 hours**, change the water and cook thoroughly on high heat, not low and slow.

Lectins: Proteins that bind to cell membranes and can cause damage to intestinal tissue if consumed in large amounts or in undercooked beans or grains.

Phytic acids bind minerals in the digestive tract, preventing their absorption.

Enzyme inhibitors- block enzymes that help break down food

GRAINS

Refined grains can cause the same inflammatory response as sugar. Use whole grain products: bran, germ and endosperm

Soak grains to get rid of phytic acid

Gluten: The gut can interpret gluten proteins as a threat to the body. The body launches an immune response that attacks the intestines, causes the malabsorption of nutrients.

Eating too many grains = eating less micro nutrients from other foods

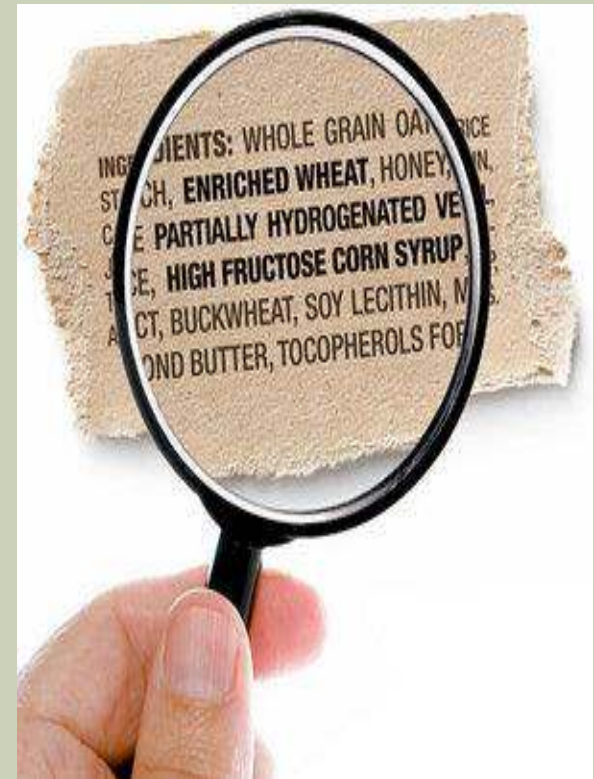
LABEL READING

Ideally: eating only foods that exist in nature

Realistically: plan to read some labels

Things to focus on:

- Look at ingredients not just nutrients
- Organic does not equal healthy
- Sugar amount: 4 grams = 1 teaspoon
- Sugar goes by many names so look out for any word ending in “ose,” e.g.
- Types of oils
- Additives
- “Natural” terms
- Heart healthy: green washing



EATING OUT

Can stay on healthy eating lifestyle and eat out/not a free pass for “cheating”

Ask about oils: hard to avoid bad quality oils in restaurants

Ask about quality/origin of food

If you would like to see something different at your favorite restaurant ask for it!

Seek out restaurants that support local foods and healthy community. There are plenty in Asheville.

ANTI-INFLAMMATORY IN A NUT SHELL

plant fats



animal fats



low-sugar fruits



non-starchy plants



properly raised animals



non-caloric beverages



RESOURCES

Anti Inflammatory Foods and Food Pyramid:

www.Dr.Weil.com

Glycemic Index

<http://www.health.harvard.edu/diseases-and-conditions/glycemic-index-and-glycemic-load-for-100-foods>

www.health.harvard.edu

Anti Inflammatory Shopping List-

<https://drasa.com/images/anti-inflammatory-diet.pdf>

Dirty Dozen List- https://www.ewg.org/foodnews/dirty_dozen_list.php

General Consumer Information

www.ewg.org