

HEALTHY PLANT-BASED COOKING SERIES #1

PUT THE FIRE OUT! THE AMAZING ANTI-INFLAMMATORY POWER OF PLANT-BASED EATING

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POSITIVE CHOICE
INTEGRATIVE
WELLNESS CENTER


thrive
SAN DIEGO, CA

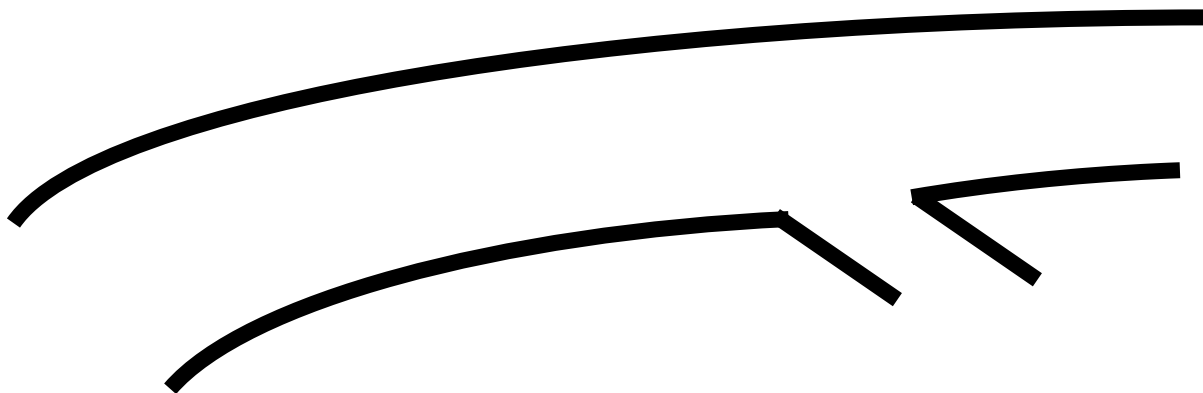
Objectives for this class:

- Learn how inflammation is created and promoted in the body and how chronic high levels can adversely affect health.
- Discuss how certain foods can affect levels of inflammation in the body.
- Learn tips on how to select high quality produce at the grocery store and how to properly store them to maximize their nutrients.
- Learn preparation and cooking techniques that help maximize the anti-inflammatory quality of plant foods and how to get more into your meal plan.
- Learn simple recipes for the “Five S’s” of plant based eating: Salsas, Salads, Soups, Steam-Sautés, and Smoothies.
- Practice mindfulness while tasting the healthy creations.
- Have FUN!

**“Let food be thy medicine and medicine be thy food”
-Hippocrates**

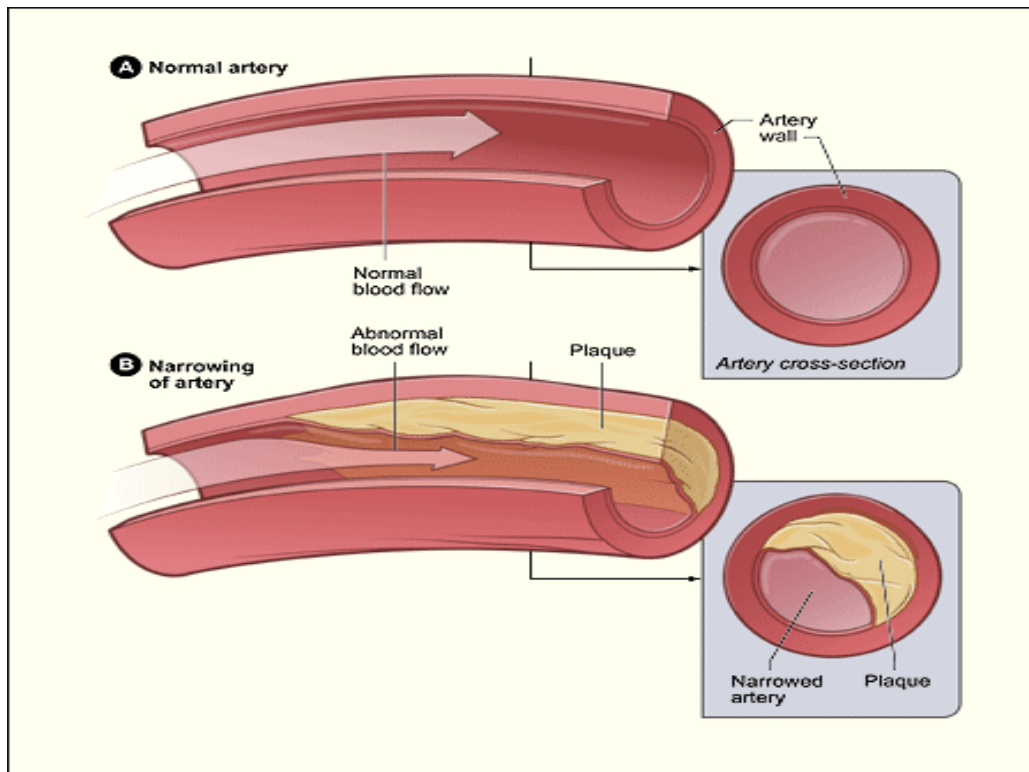
What is so bad about inflammation?

(Draw along!)



GOOD

BAD



How does food decrease inflammation?

Food can be your strongest ally in fighting illness and preventing disease. To understand how, let's start from the very beginning of how many diseases begin: free radicals.

What is a *Free Radical*?

Living cells are continuously burning fuel for energy. A by-product of this process are compounds referred to as *free radicals*. Free radicals interfere with healthy cells, causing damage to the cell structure. Sometimes this damage is on the cell membrane, which causes an inflammatory response. Inflammation is the first step in heart disease. Other times the damage occurs with the DNA center of the cell, causing uncontrolled growth. This is how precancerous polyps and tumors begin to form. In other words, free radicals are **BAD NEWS!** Free radicals can also be found in air pollution, car exhaust, toxic chemicals found in foods, compounds formed when meats are grilled and charred, and tobacco smoke. They are virtually everywhere and are a part of living.



Antioxidants: The Body's Weapon against Free Radicals

Since it is nearly impossible to completely avoid free radicals, it is important that we consume a diet high in *antioxidants*. Antioxidants are compounds that are naturally found in certain foods that neutralize and dispose of free radicals, limiting the harm they can do inside the body. The following is a list of the most antioxidant-rich vitamins and minerals, along with some food sources that contain them:

- Vitamin A: dairy foods, dark green, and yellow/orange vegetable (beta carotene form).
- Vitamin C: citrus fruits, broccoli, asparagus, berries.
- Vitamin E: leafy greens, cold pressed oils, nuts, legumes, whole grains.
- Selenium: grains, meat, tuna.
- Zinc: meat, seafood, grains.
- Coenzyme Q-10: meat, poultry, fish.

The Power of Plants

Certain plants have high concentrations of chemicals that can act as potent antioxidants. These compounds are collectively called *phytochemicals* (or phytonutrients). Different colors of plant-derived foods represent different classes of phytochemicals. For this reason, it is important to eat a variety of colors of fruits and vegetables every day. Below is a list of colors, their associated phytochemicals and examples of food sources:

Know Your Colors		
Food Color	Phytonutrients	Best food sources
Green	Thiocyanates, indoles, lutein, zeaxanthin, sulforaphane, isothiocyanates	Cabbage, beet greens, collard greens, arugula, broccoli, Brussels sprouts, kale, mustard greens.
Yellow	Limonene	Lemons and other citrus fruits.
Orange	Carotenes	Mangos, carrots, apricots, cantaloupe, peppers, squash, sweet potatoes, yams, pumpkins.
Red	Lycopene	Tomatoes, watermelons, pink grapefruit.
Purple	Resveratrol, ellagic acid, anthocyanins, quercetin	Red wine, grapes, grape juice, strawberries, raspberries.
Brown	Genistein, phytosterols, saponins, protease inhibitors	Soybeans, mung beans, peanuts, dried beans.
White	Allium, allyl sulfide, quercetin	Chives, leeks, garlic, onions, apples.

Important points to remember when buying produce

- Choose dark rich colors.
- Reject leafy greens that are yellow, wilted, have holes, or discolored.
- Reject moldy, leaky or rotten produce.
- Small-sized produce sometimes pack more nutrition.
- Purchase seasonal produce.
- Shop at Farmer's Markets.
- _____
- _____
- _____

Prep/Cooking Techniques

- Tearing vs knife cutting leafy greens.

- Raw vs cooked produce.

- Cooking methods – Boiling loses a lot of nutrients and is the worst method to use.

Storing Produce

- Micro perforated bags.

- Refrigerate vs Room Temperature.

- Freezer.

The FIVE S's to Increase Anti-Inflammatory Foods into your Meal Plan:

Salsas, Salads, Soups, Steam-Sautés, and Smoothies

1. Salsa – Pico De Gallo

Ingredients

2 to 3 ripe vine tomatoes
1 bunch cilantro
1 serrano pepper and yellow chili
1 clove garlic
3 stalks green onions
lime
salt

Directions:

Mince or dice all ingredients except the lime and salt. Combine and place in medium size bowl. Mix together. Squeeze lime juice into bowl and add salt to taste.

Notes:

2. Lentil Soup

Ingredients:

1 tablespoon avocado oil
½ cup chopped onion (yellow or brown)
2 carrots, chopped
2 celery stalks chopped
1 cup chopped spinach, kale, or chard
4 cloves garlic, finely chopped
1 ½ cups dry lentil beans, cleaned (pick through to remove rocks and soil) and rinsed
4 cups low sodium broth, vegetable or chicken
4 cups water
½ teaspoon ground cayenne pepper
1 teaspoon ground cumin
½ teaspoon ground turmeric
1 large bay leaf, snapped in half
1 tablespoon Bragg's Liquid Aminos

Directions:

In a large heated soup pot on medium heat, add avocado oil. Add onion, celery and carrots and sauté for 2 minutes. Lower heat to medium low then add garlic and bay leaf, sauté for 2 more minutes until garlic and onions create fragrant aroma. Be careful not to burn garlic. Add broth and water and turn up heat until broth comes to a simmer. Add lentil beans. Leave pot uncovered. Stir the beans, however do not over stir. Adjust heat to maintain gentle simmer for 40 to 45 minutes. Taste the beans to see if they are done. (Older beans take longer to cook.) Slowly add water as needed for desired thickness. Stir in spices, Bragg's Liquid Aminos, and simmer for 10 more minutes. Stir in spinach at the very end.

Add toppers for extra nutrition boost and flavor: Chopped tomatoes, cilantro, avocado, greens

Notes:

3. Quinoa Salad with Garbanzo Beans**Ingredients**

1/2 bunch red leaf lettuce chopped
2 leaves of Swiss chard chopped
1 bunch baby bok choy chopped
1 red bell pepper sliced
1 yellow squash chopped
2 to 3 stalks green onions chopped
1 cup garbanzo beans
1/4 cup raw pumpkin seeds
1 cup cooked quinoa
2 to 3 tablespoons olive oil
1/2 to 1 tablespoons apple cider vinegar
juice from 2 lemon wedges
1 to 2 teaspoons light soy sauce (Bragg's Liquid Aminos)

Directions

In a salad bowl, mix vegetables, garbanzo beans, pumpkin seeds, and quinoa. Pour a generous amount of salad dressing over the salad and toss.

Salad Dressing: Using a separate small bowl mix apple cider vinegar, lemon and herbs. Then add olive oil. Add a dash of salt, pepper or soy sauce to taste. Experiment with the amounts to suit your taste.

Notes:

4. Steam Sauté**Ingredients:**

1 medium squash, sliced thin
½ cup broccoli florets
1 chopped onion
5 to 6 ounces cubed extra firm tofu
1 cup baby bok choy stalk, chopped (white part)
1 cup baby bok choy leaves, chopped
4 finely chopped garlic cloves
1 chopped medium ripe vine tomato
6 to 8 basil leaves cut chiffonade (ribbons)
1 lime wedge
½ – 1 tsp Turmeric
½ – 1 tsp cumin
Pinch of cayenne pepper – optional
Bragg's (Liquid Aminos) or light soy sauce to taste
½ cup light vegetable or chicken broth

Directions:

Using medium heat add 2 to 3 tablespoons of vegetable or chicken broth to a 12" sauce pan. Carefully place the onions in the pan, add a very small amount of Braggs and juice from lime wedge then cover with a lid. Check often and if liquid starts to evaporate add in more broth in small increments. After a few minutes and when the onions become translucent, add Tofu, turmeric, more Braggs and juice from the lime wedges. Check liquid. Mix. Cover. Let steam for a few minutes. Add broccoli, squash, bok choy stalk, bell pepper, and garlic to the pan. Add a bit more Braggs, cumin, cayenne pepper, and juice from the lime wedge. Mix. Check liquid, add broth if needed. Cover. Let steam for another 2 to 3 minutes. Check liquid often. The final step is to uncover add bok choy leaves, tomatoes and basil. Mix. Then turn off heat. Keep uncovered. Try it over Quinoa or Brown Rice.

Notes:

5. Superfoods Smoothie

Ingredients (20 oz. yield)	Calories	Carbs	Fat	Protein
Mixed Berries (blueberries, strawberries, cherries, frozen unsweetened), 1 cup	68	17	0	0
Almond Butter (raw, unsalted), ½ Tbsp.	49	2	4	1
Greek Yogurt, plain, 0% fat, ½ cup	65	5	0	12
Kale or Spinach, raw, ½ cup	17	3	0	1
Protein Powder-100% Whey Isolate, vanilla (18g)	70	2	1	14
Almond Milk, vanilla unsweetened, 2 cups	60	12	3	9
Totals	373	41	10	37

Notes:

THIS SESSION'S HEALTHY *HEAVY HITTERS*

Bok Choy

Background:

A member of cabbage family, Bok Choy contains over 70 antioxidant phenolic substances that scavenge free radicals, making them an anti-inflammatory powerhouse.

Nutritional Power Sources:

Phenolic compounds, antioxidants, omega-3, zinc, beta carotene.



How to choose:

Firm, bright green, moist hardy stems,

How to store:

Micro perforated bag in crisper, do not cut until ready to cook.

Best cooking methods:

Raw is best. To cook, cut the Bok Choy first, then sprinkle lemon juice over the leaves and let rest for 5 minutes to increase nutritional value. Then steam for no more than 3 minutes.

Blueberries

Background:

Native to North America, blueberries are full of phytochemicals that prevent tumor formation, decrease blood pressure and arterial plaque build-up, reduce inflammation, and even slow age-related dementia (even better than some medications).

Nutritional Power Sources:

Anthocyanins (powerful antioxidants), vitamin C, fiber.



How to choose:

Choose organic fresh, reject moldy, soft, leaky, or shriveled. If frozen, choose flash frozen, then flash thaw them in microwave.

How to store:

Best kept in the container in which they were purchased, inside crisper drawer in refrigerator.

Best cooking methods:

Cooked blueberries are actually better than raw, since heat makes the anthocyanins more bioavailable. Low heat is best. Blueberry juice is less refined than other juices and very healthy. Fantastic for smoothies.

Broccoli

Background:

A member of the cabbage family, broccoli possesses several healthy disease fighting compounds. It tends to respire quickly after harvest and loses much of its nutrients during shipping and storage, so the fresher the better.

Whole heads are more nutritious than cut up florets. Look for chilled broccoli on ice in the grocery store.

Nutritional Power Sources:

Glucosinolates, antioxidants, calcium, fiber, sulphurophanes.

How to choose:

Always choose the freshest broccoli by looking for dark green crowns and tightly closed buds. The stem should not be yellowing, but be firm and bright green. The cut end should be moist and smooth, not brown.

How to store:

Chill immediately after purchase, and consume within 1 to 2 days. Store intact in a micro perforated bag in the crisper drawer. This will preserve antioxidant activity.

Best cooking methods:

Raw is best, as frozen and cooked is less nutritious. If cooking is desired, steam for less than 4 minutes for best nutrition.



Garlic

Background:

A member of the Allium, or onion family, garlic is a potent cancer fighter, as well as antiviral and antibacterial (as strong as penicillin in certain doses). This is all thanks to the strong sulfur compounds that give it its signature smell.

Nutritional Power:

Allicin – a powerful sulforophane. Also contains B vitamins, calcium, iron and zinc.

How to choose:

Look for plump bulbs, tightly encased in their papery skin. Bulbs should be firm, without brown spots, mildew, or signs of sprouting.



How to store:

Garlic stays fresh longer in the refrigerator wrapped in netting. An open paper bag can also be used. Garlic needs good circulation, so do not place in the crisper, but rather on a shelf in the fridge. Keep away from heat generating appliances and light. If possible, use a Garlic Keeper (a pot with side holes and lid).

**Best cooking methods:**

As long as you crush and let rest for no more than 10 minutes, garlic can retain most of the nutrients with variety of cooking methods.

Kale**Background:**

A member of the Brassica (mustard) family and first cultivated in 2,000 BC, kale is one of the most nutrient-dense foods on the planet. In fact, it rates highest in antioxidant capacity on many established scales. Its high levels of phytonutrients help fight cancer and heart disease, the two major killers of American adults.

**Nutritional Power Sources:**

Glucosinolates, the carotenoids lutein and zeaxanthine (which are potent antioxidants), calcium, potassium, iron and fiber.

How to choose:

Look for kale with firm, deeply colored leaves and moist hardy stems. Leaves should look fresh, not wilted, and be free from small holes or signs of browning and/or yellowing. Choose kale bunches with smaller-sized leaves. These will be tenderer and have a milder flavor than bunches with larger leaves.

How to store:

Place briefly in an ice bath to clean, remove moisture with a salad spinner, then place in micro perforated bag in refrigerator crisper.

Best cooking methods:

Cut the kale then let rest for 5 minutes. Sprinkle lemon before letting it rest to maximize nutritional value. Eat raw if possible. If cooking is desired, steam for less than 5 minutes.

Olive Oil

Background:

Originated in Asia Minor, Turkey 5,000 years ago. The oil is actually from the flesh of the olive (which is technically a fruit) and not the seed. It is one of the healthiest plant fats out there due to its high monounsaturated fat content.

Nutritional Power Sources:

Monounsaturated fats, omega-3s, luteolin (a potent anti-cancer phytochemical), polyphenols (powerful antioxidants), vitamin E and squalene (may be beneficial to cholesterol levels).

How to choose:

Choose brands from Italy, Greece, and Spain, unfiltered olive oil has the highest nutrition. *Cold pressed* is best, as heat can minimize nutritional value. *First pressed* is also most nutritious.

How to store:

Keep olive oil away from light and heat, in an oxygen free container. Olive oil has a shelf life of about 60 days, so only buy small amounts at a time. Refrigeration will slow degradation process.

Best cooking methods:

Heat will destroy much of its nutritional value, so best used raw as a dressing.



Tomatoes

Background:

Tomatoes are a fruit that contain extremely high concentrations of lycopene, a potent anti-cancer phytochemical. Their use as a food originated in Mexico, and are now a staple in the American garden. Research has looked at effect tomatoes have in decreasing the risk of prostate cancer, heart disease, diabetes. They are also anti-inflammatory.



Nutritional Power Sources:

Lycopene is the major player, but tomatoes are also a good source of vitamin C, potassium, quercetin, lutein (may help keep eyes healthy with aging), and salicylates which have an anticoagulant effect in the blood.

How to choose:

Choose small dark red varieties like cherry, grape, or currant. The skin should be smooth, without cracks or bruises. Best picked from the vine when ripe for maximal nutritional value.

How to store:

Keep at room temperature, not in the refrigerator.

Best cooking methods:

To maximize nutrition cook (or *stew*) over very low heat. Thirty minutes of cooking can actually increase lycopene by 50%.

Turmeric**Background:**

Turmeric is an ancient root from Indonesia and India and is part of the ginger family. It is possibly one of the most potent naturally occurring anti-inflammatory agents in the world, comparable in strength to many drugs on the market. Turmeric helps boost the immune system, may benefit type 2 diabetics with blood sugar control, might improve memory, enhances metabolism, and can help fight cancer.

**Nutritional Power Sources:**

Curcumin, which is a very potent antioxidant and gives turmeric its yellow/orange color.

How to choose:

In powder form, choose organic, making sure the powder has an even color, and also comes from a reputable source. If choosing the whole root form, it should be firm, with no spots and skin intact.

How to store:

Store powder in a cool, dry, dark place. Root form can be stored in an open brown bag inside the crisper.

Best cooking methods:

The powder form has highest curcumin levels. Can be used on anything as a spice or seasoning to boost anti-inflammatory value. The root can be used in a tea, sauté, or cut and used like ginger.

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