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# Nutrition Services

## Whole Foods: The building blocks of Health

Whole foods are naturally made up of a complex web of nutrients that all work together. Like a talented orchestra, nutrients provide what your body needs to thrive. In a whole food you will find a balanced combination of: Carbohydrates, fats, protein, vitamins, minerals & **FIBER!!**

Much of the food available to us is either **processed or refined** meaning that some or many parts of the whole food **have been removed**. This often leads to important musicians missing from the orchestra, leaving only a few, or perhaps just a single instrument, to carry out the job of the whole group.

**Examples of whole foods are: fruits, vegetables, grains, meat, eggs, nuts & seeds**



## What Does Research Say?

For optimal health,  
**2/3 of your plate**  
should be plant foods.

## What is a plant food?

- Fruit
- Vegetables
- Whole Grains
- Mushrooms
- Nuts
- Seeds
- Legumes/Dried Peas
- Herbs/Spices

## What is a Phytonutrient?

("phyto" is Latin for plant)

Phytonutrients (or phytochemicals) are "Non-nutrient" compounds found in all plants. This means that phytonutrients don't give us energy like carbohydrates, fats and protein. They also don't contribute vitamins or minerals to our body.

In the plant, they serve two main functions:

- A natural defense mechanism
- Enhance the plants reproductive effectiveness.

For people, phytonutrients have been studied for their disease-fighting properties. Studies point to various roles that phytonutrients play in our health:

- Serve as antioxidants
- Keep our immune system healthy
- Enhance cell-to-cell communication
- Alter estrogen metabolism
- Cause cancer cells to die
- Repair DNA
- Detoxify carcinogens

As an added bonus, phytonutrients provide color, aroma and flavor, making food delicious and beautiful!



## Phytonutrients in your diet...

### Recipe Idea

#### Shredded Carrot and Beet Salad

##### Ingredients:

2 tablespoons fresh squeezed orange juice  
2 teaspoons fresh squeezed lemon juice  
2 teaspoons extra virgin olive oil  
½ teaspoon minced fresh ginger  
¼ teaspoon sea salt  
1 cup peeled and shredded carrot  
1 cup peeled and shredded red beet  
2 tablespoons chopped fresh mint



##### Directions:

Whisk the orange juice, lemon juice, olive oil, ginger, and salt together until thoroughly combined. Put the carrots in a mixing bowl, drizzle with half the dressing, and toss until evenly coated. Place the carrots on one side of a shallow serving bowl. Put the beets in the mixing bowl, drizzle with the remaining dressing, and toss until evenly coated. Place the beets in the serving bowl next to the carrots for a beautiful contrast of red and orange. Top with the chopped mint before serving.

From *The Cancer Fighting Kitchen* by Rebecca Katz (Random House, 2009)

### Ways to Get More Phytonutrients Into Your Day!

- **Make a homemade pizza** and use a wide variety of vegetables for topping: broccoli, spinach, mushrooms
- **Heat leftover brown rice** and add chopped apple, nuts and cinnamon
- **Add fruit** to oatmeal
- **Stuff an omelette** with vegetables
- **Add grated, shredded or chopped vegetables** (zucchini, spinach, carrot) to lasagna, potatoes, pasta sauce and rice dishes
- **Fill your refrigerator** or counters with raw vegetables and fruits ready to eat.



### Colorful Snacks

- Hummus with carrots, celery and red bell pepper
- Pineapple, orange and banana parfait with vanilla yogurt
- Dried fruit and almonds
- Medium pear with walnuts
- Apples and cheese
- Celery and nut butter (almond, cashew, etc.)

### Challenge!!

Eat **3 cups** of veggies and **1.5 cups** of colorful fruits daily!

#### Examples of 1 cup of vegetables:

- 2 cups raw or 1 cup cooked greens (spinach, collard greens, kale, etc)
- 12 baby carrots
- 1 medium potato
- 2 stalks celery
- 1 large sweet potato
- 10 broccoli florets

#### Examples of 1 cup of fruit:

- 1 medium pear or grapefruit
- 1 large banana
- 1 small apple
- 2-3 medium plums
- 8 strawberries

### Sample Phytonutrient Rich Menu

**Breakfast:** oatmeal with blueberries, walnuts, cup of green tea

**Lunch:** minestrone soup with tomatoes, zucchini, kale, celery, onions and garlic; slice of whole grain toast with avocado & tomato

**Dinner:** halibut, swiss chard, and brown rice or quinoa with pesto.

#### Resources:

- <http://extension.missouri.edu/hesfn/phytochemicals/colorwheeltable.htm>
- [www.meatlessmonday.com/](http://www.meatlessmonday.com/)
- [www.fruitsandveggiesmatter.gov/](http://www.fruitsandveggiesmatter.gov/)



### *Examples of Phytonutrients:*

**Flavonoids** – quercetin (apples, onions); genestein (soy)

**Carotenoids** – lycopene (tomatoes); beta carotene (carrots)

**Anthocyanins** – strawberries and blueberries



#### **Green:**

Avocado, kiwi, limes, green pears, arugula, broccoli, celery, leeks, cucumbers, endive, peas, parsley, spinach, kale



#### **Red:**

Red apples, blood oranges, cherries, red grapes, raspberries, beets, red peppers, radishes, rhubarb, tomatoes

### **Color, Color, Color!!!**

Phytonutrients give food their vibrant colors. By eating foods with a variety of colors, you make sure you get a wide spectrum of these important compounds.



#### **White:**

Bananas, brown pears, garlic, jicama, kohlrabi, parsnips, potatoes, turnips, ginger, cauliflower



#### **Blue/Purple:**

Blackberries, blueberries, purple figs, eggplant, purple peppers, purple grapes, purple fleshed potatoes



#### **Yellow/orange:**

Apricots, cantaloupe, grapefruit, lemon, mangoes, pineapples, persimmons, tangerines

