

## Phytonutrients

### Whole foods

Whole foods are the building blocks of health and are rich in phytonutrients. Whole foods are naturally made up of a complex web of nutrients that all work together to provide what your body needs to thrive. Whole foods are free of additives and other artificial substances.

Examples of whole foods are: fruits, vegetables, grains, meat, poultry, fish, eggs, nuts, seeds, spices and teas.

Many of the food choices available today are either processed or refined meaning that some or many parts of the whole food have been removed. Processed foods do not offer the same high-quality nutritive value compared to whole foods.

### What is a phytonutrient?

“Phyto” means plant. Phytonutrients (or phytochemicals) are metabolically active or nourishing substances found in plants. Phytonutrients provide color, aroma and flavor, making food delicious and beautiful. Common examples include: carotene, lutein, and lycopene. Research indicates, for optimal health, 2/3 of your plate should be comprised of plant foods.

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

### What are common types of plant foods?

- Fruit
- Vegetables
- Whole grains
- Nuts
- Seeds
- Legumes/dried peas
- Herbs/spices

## Fill your plate with 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.

- **Red:** Red apples, blood oranges, cherries, red grapes, raspberries, beets, red peppers, radishes, rhubarb, tomatoes
- **Green:** Avocado, kiwi, limes, green pears, arugula, broccoli, celery, leeks, cucumbers, endive, peas, parsley, spinach, kale
- **Blue and purple:** Blackberries, blueberries, purple figs, eggplant, purple peppers, purple grapes, purple fleshed potatoes
- **Yellow and orange:** Apricots, cantaloupe, grapefruit, lemon, mangoes, pineapples, persimmons, tangerines
- **White:** Bananas, brown pears, garlic, jicama, kohlrabi, parsnips, potatoes, turnips, ginger, cauliflower

## Ways to increase phytonutrients in your diet

- Make a homemade pizza and use a wide variety of vegetables for topping: broccoli, spinach, mushrooms.
- Add chopped apple, nuts and cinnamon to plain yogurt.
- Add fruit to oatmeal.
- Stuff an omelet with vegetables.
- Add grated, shredded or chopped vegetables (zucchini, spinach, carrot) to lasagna, potatoes, pasta sauce and rice dishes.
- Include colorful snacks such as dried fruit medley and nuts, yogurt topped with mixed berries, fruit salad, celery with nut butter.
- Fill your refrigerator with raw vegetables and fruits ready to eat.

## Sample phytonutrient rich menu

- **Breakfast:** oatmeal with blueberries and walnuts and cup of green tea.
- **Lunch:** minestrone soup with tomatoes, zucchini, kale, celery, onions and garlic and a slice of whole grain toast with avocado and tomato.
- **Dinner:** halibut, Swiss chard, and brown rice or quinoa with pesto.
- **Challenge:** Eat 3 cups of vegetables and 2 cups fruits daily.

### Examples of 1 cup of vegetables

- 1 cup cooked greens (spinach, collard, kale)
- 12 baby carrots
- 1 cup green beans
- 2 stalks celery
- 1 medium sweet potato
- 10 broccoli florets

### Examples of 1 cup of fruit

- 1 medium pear or orange
- 1 banana
- 8 strawberries
- 2-3 medium plums

### Recipe: 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.

The Cancer Fighting Kitchen, Rebecca Katz (Random House, 2009).

### Resources

Meatless Monday Global: [meatlessmonday.com](http://meatlessmonday.com)

Fruits and Veggies More Matters: [uspm.com/fruits-and-veggies-more-matters](http://uspm.com/fruits-and-veggies-more-matters)

This education resource was intended to be given as part of a nutrition consult by a Fred Hutchinson Cancer Center dietitian. Questions? Ask a Fred Hutch dietitian at [nutrition@seattlecca.org](mailto:nutrition@seattlecca.org)