



BESTWEIGH CLASS 7

KINDS OF FRUIT

BERRIES: Are a fleshy fruit with many seeds inside. These include blueberries, grapes, cranberries, papaya, and even bananas.

DRUPES: Are fleshy fruits with a hard pit inside. Peaches, plums, olives, apricots, and cherries are in this group.

POMES: Are fleshy fruits with a thin skin and seeds in the center. Apples and pears are the main examples in this group.

HESPERIDIA: Are fruits with a leathery outside and fleshy fruit inside. Oranges, lemons, and cantaloupes are in this group.

FRUITS have beautiful shapes, colors, tastes and textures. Fruits are rich sources of vitamins and are low in fat and calories. Fruits are rich in a wide variety of phytochemicals. These are marvelous compounds that help prevent cancer, prevent free-radical damage to tissues, and are beneficial in so many ways.

For instance, blueberries are packed with cell-protecting antioxidants. The dark blue color in blueberries comes from a plant dye known as an anthocyanin. The anthocyanins also color cherries, plums, and red cabbage but the highest concentration is found in blueberries.

A BEST WEIGH FRUIT SERVING IS:

- 1 medium apple
- 1 medium banana
- 1 medium orange
- 1 melon wedge
- ½ cup of berries or chopped fruit
- ¾ cup of fruit juice.

Blueberries are possibly the most potent antioxidant food you can eat. Antioxidants neutralize free radicals and protect their cellular targets, absorbing the damage themselves. The stronger and more numerous the antioxidants, the greater the protection.

MAJOR NUTRIENTS IN SELECTED FRUITS

(100 Gram Portions)

Nutrient	Apple	Banana	Peach	Orange
Water	84.6 gm	74.3 gm	87.7 gm	87.1 gm
Calories	56 Cal	92 Cal	43 Cal	46 Cal
Protein	0.28 gm	1.03 gm	0.70 gm	0.70 gm
Fat	0.42 gm	0.48 gm	0.09 gm	0.21 gm
Carbs	14.4 gm	23.4 gm	11.1 gm	11.5 gm

NUTRIENT QUIZ

1. What is the water content of fruits? _____
2. What about calories? _____
3. What is the fat content? _____
4. How much protein is there? _____
5. Are the Carbs complex or simple? _____

Answers: 1. 74-87% water, 2. Low, 3. Low, 4. Low, 5. Simple

MINERAL QUIZ

1. Which fruit has the most potassium? _____
2. Which are low in sodium? _____
3. Which has the highest calcium? _____
4. Do fruits have much iron? _____
5. Which has the most zinc? _____

Answers: 1. Banana, 2. all, 3. Orange, 4. No, 5. Banana

MINERAL CONTENT OF SELECTED FRUITS

(100 Gram Portions)

Mineral	Apple	Banana	Peach	Orange
Calcium	4 mg	6 mg	5 mg	43 mg
Iron	0.07 mg	0.31 mg	0.11 mg	0.09 mg
Potassium	113 mg	396 mg	197 mg	169 mg
Sodium	0 mg	1 mg	0 mg	0 mg
Zinc	0.04 mg	0.16 mg	0.14 mg	0.08 mg

VITAMIN CONTENT OF SELECTED FRUITS

(100 Gram Portions)

Vitamin	Apple	Banana	Peach	Orange
Vitamin C	4,000 mcg	9,100 mcg	6,600 mcg	45,000 mcg
Thiamin B1	17 mcg	45 mcg	17 mcg	100 mcg
Riboflavin B2	10 mcg	100 mcg	41 mcg	40 mcg
Niacin	91 mcg	540 mcg	990 mcg	400 mcg
Vitamin A	44 IU	81 IU	535 IU	200 IU

VITAMIN QUIZ

1. Which has the most Vitamin C? _____
2. Which has the most Vitamin A? _____
3. What is the color of Vit. A Fruits? _____
4. Which has highest Niacin? _____
5. Which has the most Vit. B1? _____

Answers:

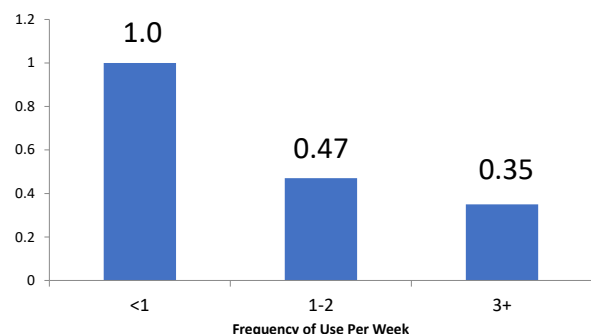
1. Orange, 2. Peach, 3. Orange, 4. Peach, 5. Orange

DRIED FRUIT PROTECTS. Some fruits are consumed after being dried. Raisins and dates are examples of this. This graph shows that the risk of dying of cancer of the pancreas, the 4th leading cause of cancer death in the U.S. for both men and women, is drastically reduced by including dried fruit in the diet. For those eating dried fruit three times a week there was a 65% reduction in the risk of dying of pancreas cancer.

P.K. Mills, et.al., Dietary Habits and Past Medical History as Related to Fatal Pancreas Cancer Risk Among Adventists, Cancer, 1988, 61: 2587-2585. Significance $p=0.009$.

Pancreas Cancer Mortality

by use of Raisins, Dates, Dried Fruit
34,000 Seventh-day Adventists 1973-1988



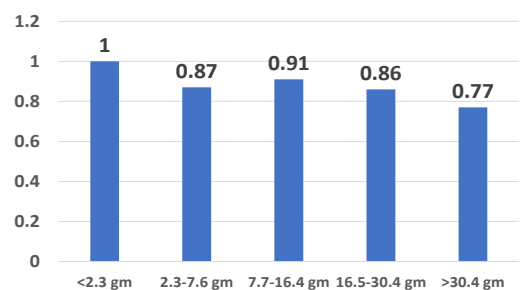


CITRUS FIGHTS BREAST CANCER

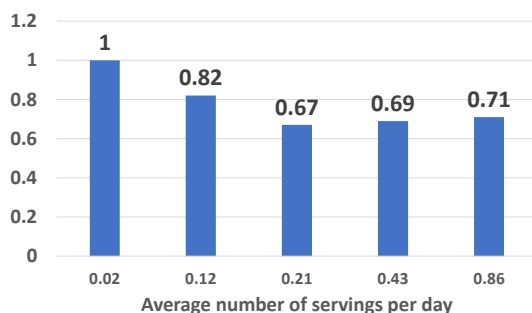
Breast cancer is the most common cancer in women. In a case-control study in China it was found that the highest daily intake of citrus resulted in a 23% reduction in the risk of breast cancer.

Ping-Ping Bao, et. al. Fruit, Vegetable, and Animal Food Intake and Breast Cancer Risk by Hormone Receptor Status, Nutrition and Cancer Ausugs 2012, 64(6): 806-819. Significance $p=0.003$.

Breast Cancer Risk
by grams/day of Citrus in the Diet



Risk of Coronary Heart Disease in
Women by Citrus Servings per day



CITRUS FIGHTS HEART DISEASE

In another large prospective study it was found that even modest amounts of daily citrus (0.21servings) in the diet resulted in a 33% reduction in the risk of developing coronary heart disease. This didn't get any better even with more citrus in the diet.

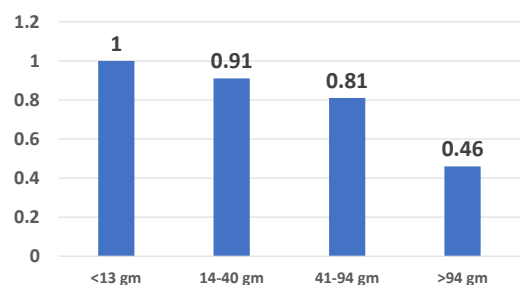
S.N. Bhupathiraju et. al. Quantity and variety in fruit and vegetable intake and risk of coronary heart disease, American Journal of Clinical Nutrition 2013; 98:1514-1523. Significance $p= <0.0001$

CITRUS FIGHTS BLADDER CANCER

Bladder cancer is the 4th most common cancer in men but is not as common in women—but does occur. In a very large study that included over 100,000 men and women it was found that women with the highest intake of citrus had a 54% reduction in the risk of developing bladder cancer.

Song-Yi Park, et. al. Fruit and Vegetable Intakes are Associates with Lower Risk of Bladder Cancer among Women In Multiethnic Cohort Study, The Journal of Nutrition 2013, 1283-1292. Significance $p=<0.001$

Bladder Cancer in Women for
Citrus by grams/1000 kcal/day





HOW MANY KINDS OF VEGETABLES ARE THERE?



ALLIUM	CRUCIFEROUS	LEAFY GREEN	YELLOW-ORANGE-RED	LEGUMES
Onion Garlic Chives Scallions Shallots	Cabbage Cauliflower Broccoli Brussels Sprouts Kale Turnip	Lettuce Spinach Collards Chard Arugula Endive	Sweet potato Carrots Pumpkin Squash Tomato Peppers	Kidney beans Lentils Soybeans Green beans Chickpeas Peas

Vegetables are divided into five basic groups. There are a wide variety of vegetables within each group. Vegetables have unique health imparting qualities. A healthful diet will include vegetables from each of the five groups on a regular if not daily basis. Study this table that compares a few select nutrients found in a few select vegetables. Comparing 100 gram portions. (A bit too big for the garlic) Most boiled without salt.

NUTRIENT CONTENT OF SELECTED VEGETABLES					
Nutrient	Onions	Broccoli	Spinach	Carrots	Pinto Beans
Water	89 grams	89 grams	91.0 grams	90 grams	63 grams
Calories	40	35	23	35	143
Protein	1.10 grams	2.38 grams	2.97 grams	0.76 grams	9.01 grams
Fat	0.10 grams	0.41 grams	0.26 grams	0.18 grams	0.65 grams
Fiber	1.7 grams	3.3 grams	2.4 grams	3.0 grams	9.0 grams
Potassium	146 mg	293 mg	466 mg	235 mg	436 mg
Calcium	23 mg	40 mg	136 mg	30 mg	46 mg
Vitamin C	7.4 mg	64.9 mg	9.8 mg	3.6 mg	0.8 mg
Vitamin A	0 IU	1,548 IU	10,481 IU	17,033 IU	0 IU
Vitamin K	0.4 mcg	141 mcg	493.6 mcg	13.7 mcg	3.5 mcg

VEGETABLE QUIZ

Use the table on the page to the left to answer the following questions.

1. Which vegetable has the highest water content? _____ What percent of water is this? _____
2. Which vegetable has the most calories per 100 gram portion? _____
3. Which vegetable is highest in protein? _____
4. Which vegetable has the most fiber? _____
5. Which vegetable is highest in potassium? _____
6. Which vegetable has the most vitamin C? _____
7. Which vegetable has the most vitamin A? _____
8. Which vegetable has the most vitamin K? _____

Answers: 1. Spinach, 91%, 2. Beans, 3. Beans, 4. Beans, 5. Spinach, 6. Broccoli, 7. Carrots, 8. Spinach

TIPS FOR BUYING VEGETABLES

The fresher the vegetables the better they are for you.

Fresh home-grown or locally grown vegetables are best; however **frozen** vegetables are almost as good as fresh.

Surprisingly, **canned** vegetables though often soft and pale are still very high in nutrients. They are canned and cooked at the peak of freshness and in the dark, oxygen free environment of the can they do not lose their vitamin or nutrient content. The water soluble vitamins and other nutrients leach out into the water in the can.

Vegetables **stored dry** in a cool dark environment gradually lose nutrients over a period of several weeks and months. Potatoes held over the winter don't have the same nutritive value as fresh potatoes eaten in the fall.



TIPS FOR COOKING VEGETABLES

Many vegetables are nutritious when eaten raw. Cooking softens vegetable cell walls and releases some vitamins and nutrients that aren't as readily available when eaten raw.

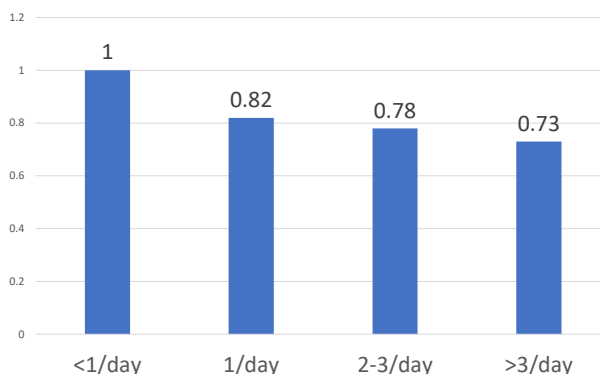
When cooking vegetables they should be steamed or cooked with a minimum amount of water which should then be poured over the vegetables if any is left over after cooking. Cook till just tender. Over cooking or too much water will reduce nutrient content.

VEGETABLES SAVE LIVES

A large international study including over 300,000 participants in 18 high, medium, and low income countries in North and South America, Europe, the Middle East, Asia, and Africa showed that no matter who you are, and no matter where you live, vegetables—even in modest quantities greatly reduce your risk of dying. Here is the data on overall mortality (risk of dying of any cause). Having 3 servings of vegetables a day resulted in a more than a 25% reduction in the risk of dying of both cardiovascular and cancer causes.

V. Miller, et.al., Fruit, vegetable, and legume intake, and cardiovascular disease and deaths in 18 Countries (PURE): a prospective cohort study. Lancet Vol 390, Nov. 4, 2017, 2037-2049. Significance $p < 0.0001$

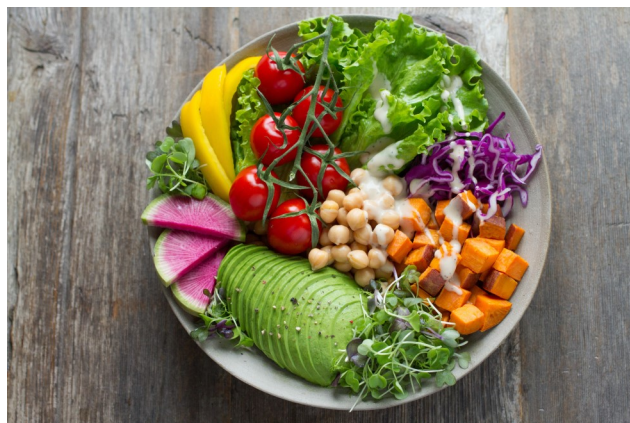
Overall Mortality by Vegetable Intake in Servings per day



NEW DIRECTIONS

NEW FRUITS I WILL TRY THIS WEEK

NEW VEGETABLES I WILL TRY THIS WEEK





Scripture Strength

Class

7

1. Anxiety: Ezekiel 12:18 _____

2. Temptation: Isaiah 55:2 _____

3. Asking: John 16:23-24 _____

4. Power: Ephesians 6:10 _____

5. Strength: Psalms 46:1-3 _____

6. Thanksgiving: Romans 6:17 _____

7. Praise: Psalms 74:14 _____
