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Vitamin C Everyday
Michigan State University
Cooperative Extension Service
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For
Vitamin C
 every day.

count on fruits
 and vegetables

how do you score?

By ANITA DEAN, Extension Specialist in Foods and Nutrition

CLAIM: Scientist claims cure for common cold with massive doses of Vitamin C.

FACT: Claim is based on personal experience. There is no conclusive evidence to support it at this time.

CLAIM: Processed fruits and vegetables have less food value than fresh.

FACT: Some loss occurs in processing, as in home cooking. It varies with the food product, nutrient and conditions of preparation and storage.

Processed foods enable the U. S. population to eat both ample quantities and varieties of foods. Of course, people will always like fresh fruits and vegetables. Food scientists are constantly searching for methods to assure the highest possible quality and nutritional content of processed products.

CLAIM: Scurvy (Vitamin C deficiency) no longer occurs in the U. S.

FACT: Scurvy occurs (though rarely) among some elderly as a result of poverty and general neglect, among alcoholics and bottle-fed infants who have no regular source of Vitamin C. Vitamin C induces rapid recovery.

CLAIM: Synthetic concentrates (pills or beverages) are of equal value with Vitamin C rich foods such as tomatoes, oranges, etc.

FACT: True. But fruits and vegetables contain other essential nutrients as well as Vitamin C.

Vitamin C (ascorbic acid) is absolutely necessary

for the formation of collagen, the protein substance that binds the cells together. The healthy formation of bone material and the dentine of teeth depends on Vitamin C, which also helps heal wounds and broken bones. Vitamin C keeps walls of blood vessels and body cells firm and strong. Vitamin C is essential to the body's use of other nutrients including protein (the amino acid, tyrosine), folic acid (a B-vitamin), iron and calcium.

As indispensable as it is, nature doesn't guarantee it. The body can't store it to any large extent. Cooking destroys part of it. It dissolves in water and leaches out of food. It is unstable. It reacts eagerly with oxygen when exposed to air. Heat speeds up its destruction. Exposure to light hastens its loss.

What can you do to assure a dependable daily supply of Vitamin C? Use a variety of forms of foods high in Vitamin C, especially fruits and vegetables. If fresh, handle and store so as to preserve flavor, food value and appearance: for example, store leafy greens in the refrigerator. At high humidity with minimum air movement and exposure to air, they retain Vitamin C longer.

Eat some raw vegetables and fruits each day. Cook vegetables only in enough water to assure top flavor and appearance. Do not over cook. Cook vegetables and fruits in their skins occasionally.

Remember that large or whole pieces and coarser shreds expose a smaller surface area to the air. Acids such as vinegar and lemon juice used in preparing pickled vegetables and coleslaw and the lactic acid in sauerkraut protect Vitamin C. Refrigerate leftovers promptly, keep them covered and use as soon as possible.

HOW MUCH VITAMIN C (Ascorbic Acid) DO YOU NEED EACH DAY?

AGE GROUP	MILLIGRAMS
Man (18 to 75)	60
Women (18 to 75)	55
Boys (14 to 18)	55
Girls (14 to 18)	50
Boys and Girls (12 to 14)	45
Children (1 to 12)	40
Infants	35
Pregnancy and Lactation	60

These "Recommended Dietary Allowances," established by the National Research Council of the National Academy of Science, are considered adequate for maintaining good nutrition and health for all the U. S. population. They offer a wide margin of safety to cover differences in individual requirements. Do not confuse them with the "Minimum Daily Requirements" established by the U. S. Food and Drug Administration for labeling foods and special dietary products. Minimum daily Vitamin C requirements for adults are 30 milligrams; children (1 to 12), 20 milligrams; infants, 10 milligrams.

WHAT VITAMIN C-RICH FOODS DO YOU ENJOY EATING?

Choose your favorites from "Your Daily Vitamin C Score." Many seasonal and local foods are good sources of Vitamin C. Endless combinations of fruits and vegetables will furnish a day's supply of Vitamin C. Of course, you would also eat from the meat group, cereal and bread group, and milk group of foods.

<p style="text-align: center;">(1)</p> <p>HALF CANTALOUPE 63</p> <p>TOTAL 63</p>	<p style="text-align: center;">(4)</p> <p>HALF GRAPEFRUIT 44</p> <p>FROZEN BROCCOLI 36</p> <p>TOTAL 80</p>	<p style="text-align: center;">(7)</p> <p>APPLE 7</p> <p>COLESLAW 21</p> <p>POTATO 20</p> <p>CHERRY PIE 12</p> <p>TOTAL 60</p>
<p style="text-align: center;">(2)</p> <p>STRAWBERRY SHORTCAKE 44</p> <p>CANNED ASPARAGUS 23</p> <p>TOTAL 67</p>	<p style="text-align: center;">(5)</p> <p>BLUEBERRIES 10</p> <p>PEACH 7</p> <p>CAULIFLOWER 33</p> <p>RADISHES (4) 10</p> <p>TOTAL 60</p>	<p style="text-align: center;">(8)</p> <p>GREEN BEANS 8</p> <p>FRENCH FRIES 12</p> <p>LETTUCE SALAD 10</p> <p>TOMATO (1/2) 21</p> <p>BANANA, WHOLE 12</p> <p>TOTAL 63</p>
<p style="text-align: center;">(3)</p> <p>TOMATO JUICE 20</p> <p>SPARERIBS AND SAUERKRAUT 17</p> <p>SWEET POTATOES 25</p> <p>APPLE SAUCE 2</p> <p>TOTAL 64</p>	<p style="text-align: center;">(6)</p> <p>ORANGE JUICE 62</p> <p>TOTAL 62</p>	

YOUR DAILY VITAMIN C SCORE (VEGETABLES)

	Milli-grams	SCORE			
Green pepper, sweet, raw—1 pod	94	—	Tomatoes, canned—1/2 cup	21	—
Green pepper, cooked—1 pod	70	—	Cabbage, finely shredded, raw—1/2 cup	21	—
Broccoli, whole stalks, cooked—1/2 cup	70	—	White potato, peeled before boiling—5 oz.	20	—
Brussel sprouts, cooked—1/2 cup	68	—	Tomato juice—1/2 cup	20	—
Collards, cooked—1/2 cup	43	—	Asparagus, canned—1/2 cup	19	—
Tomatoes, raw—1 (3x2 1/8 in.)	42	—	Turnips, cooked—1/2 cup	17	—
Broccoli, frozen, cooked—1/2 cup	36	—	Sauerkraut—1/2 cup	17	—
Turnip greens, mustard greens, kale, cooked—1/2 cup	34	—	Green peas, cooked—1/2 cup	17	—
Cauliflower, cooked—1/2 cup	33	—	Asparagus, cooked drained—4 spears	16	—
Spinach, cooked—1/2 cup	25	—	Lima beans—1/2 cup	15	—
Sweet potatoes (peeled after cooking)—1 (5 x 2 in.)	25	—	Winter squash, baked—1/2 cup	14	—
Cabbage, cooked—1/2 cup	24	—	Blackeye peas, cooked—1/2 cup	14	—
			French fried potatoes—10 pieces (2 x 1/2 x 1/2)	12	—
			Spinach, canned, drained—1/2 cup	12	—
			Onion, 6 green or 1 raw	12	—
			Beet greens, cooked, drained leaves and stems—1/2 cup	11	—
			Green peas, canned—1/2 cup	11	—
			Summer squash, cooked—1/2 cup	11	—
			Head lettuce—1/6 head	10	—
			Radishes, raw, small—4	10	—
			Snap beans, cooked, drained—1/2 cup	8	—
			Parsnips, cooked—1/2 cup	8	—
			Onion, cooked—1/2 cup	7	—
			Corn, sweet or canned—1 ear or 1/2 cup	7	—
			Cucumber, raw, pared, center—6 slices	6	—
			Beets, cooked, diced—1/2 cup	5	—
			Celery, raw—1/2 cup diced or 1 stalk	4	—
			Carrot, whole—1 or 25 thin strips	4	—
			Potato chips—10 medium chips	3	—

YOUR DAILY VITAMIN C SCORE (FRUITS)

	Milli-grams	SCORE			
Orange—1	66	—	Lemon—1	39	—
Cantaloupe—1/2 melon	63	—	Grapefruit, canned, white, sweetened—1/2 cup	39	—
Orange juice, fresh or frozen—1/2 cup	60-62	—	Strawberries, frozen—2 1/2 oz	38	—
Lemon juice—1/2 cup	56	—	Peaches, frozen—3 oz.	34*	—
Orange and grapefruit juice, frozen—1/2 cup	51	—	Watermelon, raw, 4 x 8—1 wedge	30	—
Orange juice, canned, unsweetened—1/2 cup	50	—	Tangerines, raw, medium—1	27	—
Grapefruit juice, fresh, white—1/2 cup	46	—	Avocado, Florida—1/2	22	—
Strawberries, chopped—1/2 cup	44	—	Orange-apricot drink—1/2 cup	20*	—
Grapefruit, fresh—1/2	44	—	Cranberry juice, cocktail*—1/2 cup	20**	—
Grapefruit juice, frozen diluted—1/2 cup	43	—	Raspberries, red, frozen or fresh—1/2 cup	15-16	—
Grapefruit, canned, white, unsweetened—1/2 cup	42	—	Blackberries, raw—1/2 cup	15	—
Lime juice, fresh—1/2 cup	40	—	Avocado, California—1/2	15	—
			Cherries, canned, red, sour—1/2 cup	12	—
			Pineapple, raw, diced—1/2 cup	12	—
			Bananas, raw—1	12	—
			Pineapple juice, canned—1/2 cup	11	—
			Apricots, raw (12 per lb.)—3	10	—
			Blueberries, raw—1/2 cup	10	—
			Lemonade, frozen, diluted—1/2 cup	9	—
			Rhubarb, cooked, sweetened—1/2 cup	9	—
			Pineapple, canned—2 small or 1 large slice	8	—
			Pears, raw—1	7	—
			Peach, yellow, fresh—1	7	—
			Apricots, canned or cooked—1/2 cup dried	4-5	—
			Peaches, canned—1/2 cup	4	—
			Apple—1	3	—
			Grape juice, frozen, dilute—1/2 cup	***	—

*Includes ascorbic acid added by manufacturer.
 **Based on products stating 30 milligrams per 6 fl. oz. serving.
 ***Present ONLY if added by manufacturer.