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Vitamin A Everyday  
Michigan State University  
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# Vitamin A every day

## How do you score?

By ANITA DEAN, *Extension Specialist in Foods & Nutrition*

You like liver paste? Cheese? How about a baked sweet potato? Peach cobbler—pumpkin pie with whipped cream—or fresh cantaloup?

You like 'em all? Good! Delicious, yes. But they're also packed with minerals, proteins, carbohydrates and vitamins. Especially Vitamin A.

You need Vitamin A for normal cell growth. You need it for normal vision in dim light. You need it for healthy, resistant skin and inner linings of the body.

Vitamin A occurs only in foods of animal origin such as meats, fish and eggs. However, many vegetables and fruits contain carotene, a substance which the body changes into Vitamin A. Largest amounts of carotene are found in dark green and deep yellow vegetables and deep yellow fruits.

Liver abounds in Vitamin A. Your own liver

stores it. If your diet is low in Vitamin A, the liver releases part of its store to meet your body needs. A deficiency may not develop for a long time, depending on how much Vitamin A is stored in the liver, and on the body's ability to use it. Your body can use the Vitamin A from your liver only if it is getting all the protein and fat and other essential vitamins it needs.

Can you get too much Vitamin A? Not from food alone. However, there are cases on record of *hypervitaminosis A* in both children and adults who took overdoses of Vitamin A concentrates (liquid and pills). The American Medical Association says "There is a definite possibility of harm from prolonged ingestion of Vitamin A in excess of 50,000 IU's daily." A healthy adult needs no more than 5,000 IU's of Vitamin A each day.

### How much Vitamin A do you need each day?

| AGE GROUP          | RECOMMENDED IU* ALLOWANCE |
|--------------------|---------------------------|
| Adult              | 5,000                     |
| Infant             | 1,500                     |
| Child (1 to 3)     | 2,000                     |
| Child (3 to 6)     | 2,500                     |
| Child (6 to 10)    | 3,500                     |
| Child (10 to 12)   | 4,500                     |
| Child (12 & older) | 5,000                     |
| Pregnancy          | 6,000                     |
| Lactation          | 8,000                     |

\*IU stands for "International Unit," the standard measure of Vitamin A. 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

### How three children met their daily Vitamin A allowance

| YEARS OF AGE                      | 5            | 10           | 15           |
|-----------------------------------|--------------|--------------|--------------|
| AMOUNT OF FOOD                    | IU           | IU           | IU           |
| Milk, whole (3 or 4 cups)         | 1,050        | 1,400        | 1,400        |
| Egg, medium (one)                 | 590          | 590          | 590          |
| Squash, winter (1½ Tbsp.)         | 718          | —            | —            |
| Spinach (2 Tbsp.)                 | —            | 1,825        | —            |
| Carrots (¼ cup)                   | —            | —            | 3,025        |
| Butter or margarine (1 or 2 pats) | 170          | 170          | 340          |
| <b>TOTAL</b>                      | <b>2,528</b> | <b>3,985</b> | <b>5,355</b> |

to cover differences in individual requirements. Do not confuse them with "Minimum Daily Requirements" established by the U. S. Food and Drug Administration for labeling foods and special dietary products. Minimum daily Vitamin A requirements for adults are 4,000 IU's; children, 3,000; and infants, 1,500.

## How three adults met their daily Vitamin A allowance

| AMOUNT OF FOOD                         | IU           | AMOUNT OF FOOD                         | IU           | AMOUNT OF FOOD                           | IU            |
|--|--------------|--|--------------|--|---------------|
| Milk, whole (2 cups)                   | 700          | Milk, skim (2 cups)                    | 20           | Milk, fortified skim (2 cups)            | 1,000         |
| Cheese, processed (2 oz.)              | 700          | Cottage cheese, uncreamed (½ cup)      | 10           | Cottage cheese, creamed (½ cup)          | 210           |
| Ice cream (¾ cup)                      | 390          | Ice milk (¾ cup)                       | 183          | Beef liver, fried (2 oz.)                | 30,280        |
| Eggs (2)                               | 1,180        | Egg (1)                                | 590          | Orange juice, frozen concentrate (½ cup) | 275           |
| Peas (½ cup)                           | 430          | Cantaloup (½)                          | 6,540        | Tomato, fresh (1)                        | 1,640         |
| Butter or margarine (2 Tbsp.)          | 940          | Lettuce (1/6 head)                     | 250          | Broccoli, cooked (½ cup)                 | 1,940         |
| <b>TOTAL</b><br>(About 1 day's supply) | <b>4,340</b> | Corn, canned (½ cup)                   | 345          | <b>TOTAL</b><br>(About 1 week's supply)  | <b>35,345</b> |
|  |              | Peaches, canned (2 halves)             | 550          |  |               |
|  |              | Butter or margarine (1 Tbsp.)          | 470          |  |               |
|  |              | <b>TOTAL</b><br>(About 2 day's supply) | <b>8,958</b> |  |               |

## Your Daily Vitamin A Score

| ANIMAL FOODS  | IU     | SCORE | PLANT FOODS                       | IU     | SCORE |
|---|--------|-------|-----------------------------------|--------|-------|
| Butter or margarine (1 Tbsp. or 1 pat)                        | 470    | _____ | Apricots, canned (½ cup)          | 2,255  | _____ |
| Cheese, cheddar or American (1 oz.)                           | 370    | _____ | Asparagus (4 spears)              | 540    | _____ |
| Cheese, cottage, creamed (½ cup)                              | 210    | _____ | Broccoli (½ cup)                  | 1,940  | _____ |
| Cream, coffee (1 Tbsp.)                                       | 130    | _____ | Beans, snap, green (½ cup)        | 340    | _____ |
| Cream, heavy whipping (1 Tbsp.)                               | 230    | _____ | Beans, Lima, cooked (½ cup)       | 240    | _____ |
| Cream, sour (1 Tbsp.)   | 100    | _____ | Carrots, cooked (½ cup)           | 7,610  | _____ |
| Imitation creamers, powdered (1 tsp.)                         | trace  | _____ | Carrots, whole (1) (or 25 strips) | 5,500  | _____ |
| Imitation frozen whipped topping (1 Tbsp.)                    | 30     | _____ | Spinach, greens (½ cup)           | 7,290  | _____ |
| Imitation powdered whipped topping, from whole milk (1 Tbsp.) | 20     | _____ | Swiss chard, cooked (½ cup)       | 5,130  | _____ |
| Imitation sour cream, from nonfat dry milk (1 Tbsp.)          | trace  | _____ | Lettuce, crisp head (1/6 head)    | 250    | _____ |
| Imitation whipped topping, pressurized (1 Tbsp.)              | 20     | _____ | Lettuce, leaf (2 leaves)          | 950    | _____ |
| Egg (1)   | 590    | _____ | Peaches (1)                       | 1,320  | _____ |
| Ice Cream, 10% fat (1 cup)                                    | 590    | _____ | Peas, cooked (½ cup)              | 430    | _____ |
| Ice milk, hardened (1 cup)                                    | 280    | _____ | Pepper, green (1)                 | 310    | _____ |
| Ice milk, soft serve (1 cup)                                  | 370    | _____ | Squash, winter (½ cup)            | 4,305  | _____ |
| Liver, cooked (2 oz.)   | 30,280 | _____ | Sweet potatoes, boiled (1)        | 11,610 | _____ |
| Liverwurst (2 slices)   | 1,310  | _____ | Sweet potatoes, canned (½ cup)    | 8,500  | _____ |
| Milk, whole (1 cup)   | 350    | _____ | Squash, summer, cooked (½ cup)    | 410    | _____ |
| Milk, nonfat or skim (1 cup)                                  | 10     | _____ | Tomatoes, canned (½ cup)          | 1,085  | _____ |
| Milk, nonfat skim, fortified (1 cup)                          | 500    | _____ | Tomatoes, fresh (1)               | 1,640  | _____ |
| Yogurt, from skim milk (1 cup)                                | 170    | _____ | <b>TOTAL (PLANT FOODS)</b>        | _____  | _____ |
| Yogurt, from whole milk (1 cup)                               | 340    | _____ | <b>TOTAL (ANIMAL FOODS)</b>       | _____  | _____ |
|   |        |       | <b>GRAND DAILY TOTAL</b>          | _____  | _____ |

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