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#9969

FOODS

RICH IN

Minerals

and

Vitamins

FOR NEBRASKANS

EXTENSION SERVICE • AGRICULTURAL COLLEGE
UNIVERSITY OF NEBRASKA - LINCOLN
E.C. - 9969



Vitamin C Calendar for Nebraska

MAY

Rhubarb*
Green onions
Asparagus
Radishes*
New peas

JUNE

In addition:
Leaf lettuce
Greens*
Strawberries*
Cabbage*
Cherries

JULY

In addition:
Broccoli
New potatoes
Raspberries
Currants
Parsley*

AUGUST

In addition:
Tomatoes*
Plums
Grapes
Apples

SEPTEMBER and OCTOBER

In addition:
Green peppers*
Cantaloupe*
Peaches

NOVEMBER through APRIL

Canned tomatoes
Store and use some
of these daily:
Potatoes
Cabbage
Apples
Turnips
Rutabagas

* The starred foods are especially rich although all raw fresh fruits or vegetables have some vitamin C. This is gradually lost during storage.

Distributed in furtherance of Acts of May 8 and June 30, 1914. Extension Service of the University of Nebraska College of Agriculture, the U. S. Department of Agriculture cooperating. W. H. Brokaw, Director, Lincoln, Nebraska.

The Best Known Functions of Important Vitamins

VITAMIN A

1. Promotes growth.
2. Helps maintain healthy condition of the mucous membranes, and thus aids the body in resisting infection.
3. Necessary for health of eyes, and protects against night blindness.
4. Helps to build and maintain teeth, bones and nerves in good condition.

VITAMIN B₁ (Thiamin)

1. Promotes growth.
2. Essential to utilization of carbohydrate.
3. Maintains and stabilizes good appetite.
4. Aids normal digestion.
5. Combats constipation.
6. Maintains good nerve health.
7. Helpful in heart disorders and in relief of neuralgic pain.

VITAMIN G (Riboflavin)

1. Promotes growth.
2. Preserves the characteristic of youth.
3. Lengthens the period of usefulness.
4. Defers old age.
5. Aids in keeping eyes healthy.
6. Necessary to the oxidation-reduction reactions of living cells.

VITAMIN C (Ascorbic Acid)

1. Essential to health of teeth, bones and blood vessels.
2. Prevents and cures scurvy.
3. Increases resistance to infection and hemorrhage.
4. Keeps gums firm.
5. Necessary for healing of wounds and to the oxidation-reduction reactions of the body.

FOODS RICH IN MINERALS AND

VITAMINS

MIN

VITAMIN A

VITAMIN B

CAI

I.U.			mg.		
Greens, ck.*	½ c.	20,000	Ham, lean, ck.*	2 oz.	.60
Liver	2½ oz.	7,500	Wheat germ	2 Tb.*	.60
Broccoli	½ c.	6,750	Heart	2½ oz.	.45
Sweet potato	⅔ med.	3,500	Pork, lean, ck.*	2½ oz.	.38
Squash, yellow	½ c.	3,000	Kidney	2½ oz.	.30
Carrots	½ c.	3,000	Liver	2½ oz.	.30
Apricots, dried, ck.	½ c.	2,400	Beans, lima, fr.*	½ c.	.22
Cantaloupe	½ med.	1,000	Lamb	3⅓ oz.	.20
Peaches, dried, ck.	½ c.	900	Chicken	3⅓ oz.	.15
Tomatoes	½ c.	900	Beef	3⅓ oz.	.15
Kidney	2½ oz.	800	Beans, dried, ck.	½ c.	.15
Beans, snap	½ c.	750	Greens, ck.	½ c.	.15
Peas, fr.* young	½ c.	700	Peas, ck.	½ c.	.14
Eggs	one	650	Oats, rolled, ck.	⅔ c.	.14
Egg yolk	one	650	Cracked wheat, ck.	⅔ c.	.14
Cream, coffee	¼ c.	600	Enriched flour	¼ c.	.14
Prunes, dried, ck.	½ c.	600	Irish potato	1 med.	.12
Milk, whole	1 c.	465	Milk, whole or skim	1 c.	.12

Milk, skim
Milk, evaporated
diluted with
equal quantity
of water
Milk, whole
Buttermilk
Cheese, cheddar
Salmon, canned,
with bones
†Greens, ck.*
Broccoli
Cottage cheese
† Kale, mustard
greens, but not sp
or lambsquarter.
Other foods

Cheese, cheddar	$\frac{3}{4}$ oz.	450
Cream, whipping	2 Tb.*	450
Butter	1 sq. or 1 Tb.	400

VITAMIN C

		mg.
Orange	1 small	54
Orange juice	$\frac{1}{2}$ c.	54
Grapefruit	$\frac{1}{2}$ med.	40
Strawberries	$\frac{3}{4}$ c.	35
Tomato	1 med.	35
Irish potato, new, ck.*	1 med.	30
Cantaloupe	$\frac{1}{2}$ med.	30
Green pepper, raw	$\frac{1}{4}$ med.	30
Greens, ck.	$\frac{1}{2}$ c.	25
Cabbage, raw	$\frac{2}{3}$ c.	23
Pineapple, raw	$\frac{2}{3}$ c.	20
Raspberries, black	$\frac{2}{3}$ c.	15
Lemon juice	2 Tb.*	15
Cauliflower, raw	1 oz.	15
Irish potato, old, ck.	1 med.	12
Tomato or juice, ck.	$\frac{1}{2}$ c.	12
Cabbage, ck.	$\frac{1}{2}$ c.	10
Radishes	3 med.	10
Rhubarb, ck.	$\frac{1}{2}$ c.	10
Liver, ck.	$2\frac{1}{2}$ oz.	10
Lettuce	2 oz.	9

Cauliflower	$\frac{1}{2}$ c.	.11
Sweet potato	$\frac{2}{3}$ med.	.10
Orange	1 small	.10

VITAMIN G

		mg.
Liver	$2\frac{1}{2}$ oz.	1.95
Kidney	$2\frac{1}{2}$ oz.	1.50
Milk, whole, skim or buttermilk	1 c.	.51
Greens, ck.*	$\frac{1}{2}$ c.	.35
Lamb	$3\frac{1}{3}$ oz.	.25
Soybeans, dry	1 oz.	.23
Broccoli	$\frac{1}{2}$ c.	.23
Beef, lean	$3\frac{1}{3}$ oz.	.23
Salmon, canned	$\frac{1}{2}$ c.	.20
Egg	One	.17
Pork	$3\frac{1}{3}$ oz.	.16
Yeast, moist	one cake	.15
Chicken	$3\frac{1}{3}$ oz.	.15
Wheat germ	2 Tb.*	.14
Cheese, cheddar	$\frac{3}{4}$ oz.	.12
Cauliflower	$\frac{1}{2}$ c.	.11
Egg yolk	one	.11
Beans, dried, ck.	$\frac{1}{2}$ c.	.10
Peas, canned	$\frac{1}{2}$ c.	.10
Sweet potato	$\frac{2}{3}$ med.	.08
Cabbage, ck.	$\frac{1}{2}$ c.	.06

amount of calcium
neglected as source
mineral.

Liver
Kidney
Heart
Oysters
Greens, ck.*
Beans, dried, ck.
Beef
Lamb
Apricots, dried, ck.
Pork
Chicken
Peas, dried, ck.
Egg
Egg yolk
Cracked wheat, ck.
Grain sorghum, ck.
Oatmeal, ck.
Irish potato
Prunes, dried, ck.
Broccoli
Raisins

* fr.—fresh. ck.—cooked. Tb.—Tablespoon.

VITAMINS FOR NEBRASKANS

ALS

YOUR FAMILY

VM

Needs Every Day the Amounts of Minerals and Vitamins Listed Below:¹

	grams
1 c.	.30
1 c.	.30
1 c.	.29
1 c.	.26
3/4 oz.	.20
1/2 c.	.19
1/2 c.	.16
1/2 c.	.11
1/3 c.	.06

	Average Adult	Children		Pregnant Woman	Nursing Mother
		1-12 yrs.	13-20 yrs.		
Calcium	0.8 g.	1.0-1.2 g.	1.0-1.4 g.	1.5 g.	2.0 g.
Iron	12 mg.	7-12 mg.	15 mg.	15 mg.	15 mg.
Vitamin A	5000 I.U.	2000-4500 I.U.	5000-6000 I.U.	6000 I.U.	8000 I. U.
Vitamin B ₁	1.7 mg.	0.6-1.2 mg.	1.2-2.0 mg.	1.8 mg.	2.3 mg.
Vitamin C	75 mg.	35-75 mg.	80-100 mg.	100 mg.	150 mg.
Vitamin G	2.5 mg.	0.9-1.8 mg.	1.8-3.0 mg.	2.5 mg.	3.0 mg.

List your family's daily needs here

nip, and dandelion
a, chard, beet tops,

Calcium _____ Vitamin A _____ Vitamin C _____

Iron _____ Vitamin B₁ _____ Vitamin G _____

in such a small

that they may be
of this valuable

* Slightly modified recommendations of the Committee on Food and Nutrition, National Research Council.

N

UNRELIABLE SOURCES

OF MINERALS AND VITAMINS

	mg.
2½ oz.	9.0
2½ oz.	4.9
2½ oz.	4.7
¼ c.	3.5
½ c.	3.2
½ c.	3.1
3¼ oz.	3.0
3¼ oz.	3.0
½ c.	2.3
3¼ oz.	2.2
3¼ oz.	1.9
½ c.	1.8
one	1.6
one	1.6
⅔ c.	1.4
⅔ c.	1.4
⅔ c.	1.3
1 med.	1.1
½ c.	1.1
½ c.	1.1
1 oz.	0.9

The foods listed below are good sources of energy and many of them are inexpensive, but if most of the food you eat comes from these groups your diet is inadequate.

To prevent "hidden hunger," choose several of the protective foods (those rich in minerals and vitamins)—found at the tops of the other lists.

Sugars	Hominy	White crackers
Corn syrup	Tapioca	Sweet rolls
Honey	Macaroni	Pretzels
Preserves	Spaghetti	Doughnuts
Jellies	Noodles	Most cakes
Most candy	White flour †	Most cookies
Popsickles	Prepared flours	Most pancakes
Soft drinks	Cornstarch	Most hot breads
Vegetable fats	Rice (white)	Most pickles
Cooking and salad oils	White corn meal	Vinegar
Lard	Refined cereals †	Gelatine
Bacon fat	Ready-to-serve	Gravy
Margarines †	refined cereals †	Meat broths
Pork fat back	Wheat bread †	Coffee
Salad dressings	made with water	Tea

† Unless "enriched"

Foods Rich in Vitamins and Minerals for Nebraskans

Prepared by Foods and Nutrition Division of the
Department of Home Economics,
College of Agriculture, University of Nebraska,
In cooperation with the State Nutrition Committee

This circular has been compiled because many Nebraskans are constantly asking: *how much* of these nutrients do I need, and *how much* should I give my family to keep it well fed?

To say that a food is a "good" or a "poor" source of a particular vitamin or mineral, or that you need "plenty of vitamins" is not always a satisfactory answer. Therefore, it was decided to put into simple table form the most outstanding of the common food sources of important vitamins and minerals and to show how much these foods contained.

The tables do not include figures of all of the known vitamins and minerals, but rather those most likely to be lacking in the everyday choice of food. This does not mean that the others are less important. Fortunately, the foods that will be needed to furnish the individual's requirements of the vitamins and minerals listed here will also supply adequate amounts of others.

The vitamin and mineral content of foods of both plant and animal origin is influenced by many factors such as variety, maturity, and cultural or feeding practices as well as methods of processing, storage, and preparation. For this reason, figures of vitamin and mineral content of any food may vary through a wide range. In this leaflet, however, for purpose of simplicity, only one figure, rather than two figures denoting a range, has been given for each of the values. Each figure represents the amount of vitamin or mineral that is most likely to be contributed by that food as it is commonly used in the home throughout the different seasons.

Obviously, the relative position of the foods in each list depends to some extent on the size of serving selected. For example, to one family, a "serving" of green pepper may mean one strip which contains about 6 mg. of vitamin C; and to another family, a serving may mean a half of a pepper which contains 60 mg. of Vitamin C.

The figures are based on the average of many determinations and are taken from Sherman and Lanford "An Introduction to Foods and Nutrition" 1943, and Sherman "Chemistry of Food and Nutrition" 1941, except in the case of tomatoes and potatoes where extensive work in the Nebraska laboratory has yielded figures especially for these Nebraska products.

The figures, unless otherwise indicated, are for the foods in the raw state, but the measure applies to the food as it is usually eaten. In the vitamin C table, a few foods are labelled "raw" to emphasize the value of using them this way. Few figures for cooked foods are available because losses that result from cooking vary widely. With care to avoid cooking in wasteful quantities of water, overcooking and unnecessary exposure to air, the vitamin and mineral loss can be kept low. Such practices have the added advantage of yielding a cooked product of superior quality and palatability.

Some of the functions of the different vitamins have been listed. It is not possible to describe in simple terms all of the functions or to explain their interrelationships. Each vitamin has some specific functions in the body that cannot be performed by any other substance. In addition it plays a more general but still indispensable part in the over-all good nutrition of the individual.