## **SOURCES OF PYRIDOXINE-B6**

Food	Amount	Milligrams
Banana	1 medium	0.7
Watermelon	1 slice (1 x 10	0.7
	inches)	
Salmon	3 ounces	0.6
Chicken, white meat	3 ounces	0.5
Pork, center loin chop	3.5 ounces	0.5
Potato, baked, with skin	1 medium	0.4
Soybeans	1/4 cup	0.4
Brewer's yeast	1 tablespoon	0.4
Sunflower seeds, dry	1/4 cup	0.3
Tuna, light, packed in	3 ounces	0.3
water		
Pacific Halibut	3 ounces	0.3
Brown rice, long grain	1 cup	0.3
wheat germ, raw	1/4 cup	0.3
Navy beans, cooked	1 cup	0.3
Green peas, cooked	1 cup	0.3
Spinach, cooked	1 cup	0.1

## **SOURCES OF VITAMIN B12**

Food	Amount	Micrograms
Liver, beef	3 ounces	95
Kidney, beef	3 ounces	19
Liver, chicken	3 ounces	16.5
Salmon, steak	3 ounces	3.0
Tuna, light, packed in water	3 ounces	2.5
Yogurt, nonfat, plain	8 ounces	1.5
Beef, lean	3 ounces	1.4
Pacific Halibut	3 ounces	1.2
Milk, whole	1 cup	0.9
Port, center loin chop	3.5 ounces	0.6
Swiss cheese	1 ounce	0.5
Egg, whole, raw	1 medium	0.4
Chicken, white meat	3 ounces	0.3
Cheese, American processed	1 ounce	0.2

## SOURCES OF VITAMIN C

# Foods with higher contents listed first Food

with higher contents hated hist		
Food	Amount	Milligrams
Orange juice, fresh squeezed	1 cup	124
Green peppers, raw, chopped	1/2 cup	96
Grapefruit juice, fresh squeezed	1 cup	94
Papaya	1/2 medium	94
Brussel sprouts	4 sprouts	73
Broccoli, raw, chopped	1/2 cup	70
Orange 1	medium	70
Cantaloupe	1/4 melon	70
Turnip greens, cooked	1/2 cup	50
Cauliflower	1/2 cup	45
Strawberries	1/2 cup	42
Grapefruit	1/2 medium	41
Tomato juice	1 cup	39
Cabbage, raw, chopped	1/2 cup	15
Blackberries	1/2 cup	15
Spinach, raw, chopped	1/2 cup	14
Blueberries	1/2 cup	9

#### Vitamin B12 - Cobalamin

Major dietary sources of vitamin B12 include meat, poultry, fish, milk, eggs, and cheese. Vitamin B12 is found almost exclusively in animal products. Unlike other water soluble vitamins, vitamin B12 is stored in the liver. Vitamin B12 is sensitive to ultraviolet light. Needed for Calcium absorption.

## Beneficial Properties:

- Helps in the formation & regeneration of red blood cells
- Helps prevent anemia
- Necessary for carbohydrate, fat & protein metabolism
- Maintains a healthy nervous system
- Promotes growth in children
- Increases energy
- Necessary for folate activity

### Deficiency Indicators:

- Poor appetite
- Growth failure in children
- Tiredness
- Brain damage
- Nervousness, neuritis
- Degeneration of spinal cord
- Depression
- Lack of balance
- Pernicious anemia (large cell type)
- Degeneration of peripheral nerves leading to paralysis
- Sore tongue and weakness

## Excessive Intake and Toxicity Symptoms:

No evidence of Vitamin B12 toxicity has been noted from oral intake

RDA

Adults 2 micrograms

**SOURCES OF VITAMIN B12** 

#### Vitamin B6 - Pyridoxine

Major dietary sources of pyridoxine include organ meats, meat, poultry, fish, whole grain and enriched breads and cereals, legumes (dried beans), potatoes and bananas. Excess intake of pyridoxine is excreted. Pyridoxine is sensitive to heat and ultraviolet light. Necessary for the synthesis & breakdown of amino acids, the building blocks of protein.

#### Beneficial Properties:

- Aids in fat and carbohydrate metabolism
- Aids in the formation of antibodies
- Maintains the central nervous system
- Aids in the removal of excess fluid of premenstrual women
- Promotes healthy skin
- Reduces muscle spasms, leg cramps, hand numbness, nausea & stiffness of hands
- Helps maintain a proper balance of sodium & phosphorous in the body.
- Aids in protein metabolism.
- Helps in the conversion of tryptophan (an amino acid) to niacin (vitamin B3)
- Helps with normal brain function
- Aids in the formation of red blood cells and synthesizing antibodies

#### Deficiency Indicators:

- Nervousness
- Insomnia
- Skin eruptions
- Loss of muscular control
- Anemia
- Mouth disorders
- Muscular weakness
- Dermatitis
- Arm & leg cramps
- Loss of hair
- Slow learning
- Water retention.

### Excessive Intake and Toxicity Symptoms:

Numbness and damage to the nervous system

RDA

Adults 1.6-2.0 mg

**SOURCES OF PYRIDOXINE-B6** 

#### Vitamin C - Ascorbic Acid

Vitamin C is important for tissue healing. Vitamin C is an anti-oxidant. Smoking and alcohol consumption will increase the excretion of vitamin C. Vitamin C taken at the same time as the iron medicine will greatly enhance the absorption of iron. Vitamin C will help with wound healing and healing of burns. It improves the strength of the walls of the blood vessels. Essential for healthy teeth, gums. Major dietary sources of vitamin C include citrus fruits, berries, tomatoes, potatoes, broccoli, green peppers and other green and yellow vegetables. Excess intake of vitamin C is excreted. Vitamin C is sensitive to heat and oxygen. Leaches into cooking water.

#### Beneficial Properties:

- Helps heal wounds, scar tissue, & fractures
- Prevents scurvy
- Builds resistance to infection
- Aids in the prevention & treatment of the common cold
- Strengthens to blood vessels
- Aids in the absorption of iron
- Required for the synthesis of collagen
- Major antioxidant nutrients
- Prevents the conversion of nitrates

### Deficiency Indicators:

- Soft & bleeding gums
- Swollen or painful joints
- Slow-healing wounds & fractures
- Nosebleeds
- Tooth decay
- Loss of appetite
- Muscular weakness
- Skin hemorrhages
- Capillary weakness
- Anemia
- Impaired digestion
- Scurvy
- Bruises (spots of blood under the skin's surface)

#### Excessive Intake and Toxicity Symptoms:

- Diarrhea
- Flatulence.
- Kidney stones are a possibility

RDA

Adults 60 mg

SOURCES OF VITAMIN C

#### (<u>u</u> WATER SOLUABLE VITAMINS

B-COMPLEX vitamins are important membrane stabilizers. They are natural anti-stress vitamins. They are important vitamins to help nerve function. B-complex vitamins contain PABA an important element needed for protecting the skin against the harmful effects of ultra-violet radiation. PABA functions as a UV screening agent. They may also to protect against the development of skin cancer or sun-induced skin damage such as wrinkling. Individuals with fair complexions may benefit by supplementing their diet with B complex vitamins. People with red hair, blue or green eyes tend to be sun sensitive (actinic sensitive). Women using oral contraceptives increase their utilization of the B vitamins and should supplement their diet with B-complex. B vitamins are not stored in the body as are beta carotene and vitamin E. B-complex must be taken with food already in the stomach. If taken on an empty stomach, pain and nausea are not uncommon. Indications that the B-complex is being absorbed - urine will be bright yellow and have a pungent odor caused by the riboflavonoids present.



Vitamin B - Biotin



Vitamin B - Choline



Vitamin B Folate - Folic Acid



Vitamin B - Pantothenic Acid



PABA (Para Amino Benzoic Acid)

- Vitamin B1 Thiamin
- Vitamin B2 Riboflavin
- Vitamin B3 Niacin
- Vitamin B6 Pyridoxine
- Vitamin B12 Cobalamin
- Vitamin C Ascorbic Acid