A GUIDE TO GREATER VITALITY FROM THE FOODS YOU CHOOSE TO EAT

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Cleansing for Change

A publication by Michael O'Connell

A FEW FACTS TO CONSIDER WHEN CHOOSING THE FOOD YOU EAT

DIGESTION **...** is a series of physical and chemical changes by which ingested food is broken down in preparation for absorption from the intestinal tract into the bloodstream. The active materials in the digestive juices, which cause the chemical breakdown of food are called ENZYMES..

ABSORPTION: **...** is the process by which nutrients in the form of GLUCOSE (from carbohydrates) and FATTY ACIDS (from fats) are taken up by the intestines and passed into the bloodstream to facilitate cell metabolism.

METABOLISM: **...** involves all chemical changes that nutrients undergo from the time they are absorbed until they become a part of the body or are excreted from the body. Metabolism is the conversion of digested nutrients into the building material for living tissue or energy to meet the body's needs.

CARBOHYDRATES: **...** are the chief source of energy for all the body functions and muscular exertion and are necessary to assist in the digestion and assimilation of other foods. Fats require carbohydrates for their breakdown within the liver.
The principal carbohydrates present in foods are SUGARS, STARCHES & CELLULOSE.

FATS: **...** (or lipids) are the most concentrated sources of energy in the diet. When oxidized, fats furnish more than twice the number of calories per gram furnished by carbohydrates or proteins. In addition to providing energy, fats act as carriers for the fat soluble vitamins A, D, E & K. Fat deposits surround, protect and hold in place organs, such as kidneys, heart and liver. A layer of fat insulates the body from environmental temperature changes and preserves body heat.
The substances that give fats their different flavours, textures and melting points are called FATTY ACIDS. There are two different types of fatty acids; saturated and unsaturated; (saturated that is with hydrogen atoms). Saturated fatty acids come primarily from animal food sources and are incomparably more difficult to be utilized by the body.

CHOLESTEROL is a lipid or fat related substance necessary for good health. It is needed to form sex and adrenal hormones, vitamin D and bile, which is needed to digest fats. Cholesterol, however, is a substance that, if intake is too high contributes greatly to ailments like HARDENING OF THE ARTERIES, HEART DISEASE, GALLSTONES AND DIGESTIVE IMBALANCE.

CONSIDER therefore, that all animal fats, including milk, butter, fat meats, lard and most animal by-products contain cholesterol. Vegetable fats contain no cholesterol but a harmless counterpart called SITOSTEROLS. Vegetable fat contains unsaturated fatty acids (UFA) as against the saturated fatty acids (SFA) contained in most of the foods of animal origin. Two of the UFA are OLEIC ACID and LINOLEIC ACID.

The following chart shows the food to avoid, the saturated fats and those to use, the unsaturated fats. The figures show milligrams of the appropriate fatty acids in 100 grams of edible portion of each food shown.

100 grams equal 3 ½ ounces

FOODS	UNSATURATED Fatty acids	SATURATED Fatty acids
Filbert Nuts	91 mg	5mg
Walnuts, Black	90mg	6mg
Walnuts, English	89mg	6mg
Grape Seed	87mg	6mg
Almonds	87mg	8mg
Beechnut	87mg	8mg
Safflower Oil	87mg	8mg
Chickpea	87mg	8mg
Pistachio	85mg	10mg
Olive Oil	84mg	11mg
Corn Oil	84mg	11mg
Sunflower Oil	83mg	12mg
Cornmeal	82mg	11mg
Sorghum	81mg	12mg
Codfish Liver	81mg	15mg
Soy Bean Oil	80mg	15mg
Sesame Oil	80mg	14mg
Cantaloupe Seeds	79mg	15mg
Salmon	79mg	15mg
Cashew	79mg	17mg
Pumpkin Seeds	78mg	17mg
Watermelon Seeds	78mg	17mg
Wheat Germ	77mg	15mg
Herring	77mg	19mg
Peanut Oil	76mg	18mg
Halibut Liver	72mg	17mg
Vegetable Shortening	70mg	26mg
Eggs	61mg	32mg
Fowl, all	64mg	32mg
Beef	47mg	48mg
Lamb Meat	40mg	56mg
Cow Milk, Butter	39mg	55mg
Chocolate and Cocoa Butter	39mg	56mg
Goat Meat	37mg	57mg
Goat Milk	33mg	62mg
Coconut	8mg	86mg

SALT: ... like tobacco and sugar is habit-forming. Adequate salt can be obtained from most foods in their natural state. The body requires no more than 2000mg of sodium each day and most should have no more than 1500mg per day.

It has been found that excess salt causes HYPERDACIDITY, PREVENTS PROPER USE OF CALCIUM, ENCOURAGES FLUID RETENTION, STIMULATES THE BODY AND NERVE CELLS. It also contains A NUMBER OF ADDED CHEMICALS and some HARMFUL BACTERIA.
The following chart indicates the milligrams of sodium in 100 grams (3 ½ oz) of each listed food.

Kelp	3007g
Olive, Pickled	2400g
Dulse	2085g
Olive, Ripe	828g
Crab Meat	800g
Swiss Cheese	600g
Cheddar Cheese	510g
Whole Milk	417g
Hot, Red Peppers	373g
Skim Milk, Dry (8 oz)	337g
Buttermilk (8 oz)	320g
Jarlsberg Cheese	300g
Swiss Chard	147g
Cod Fish	135g
Halibut	125g
Cottage & Cream Cheese	125g
Celery	124g
Fowl, Average	100g
Horseradish	96g
Goats Milk	83g
Dandelion Greens	76g
Spinach	71g
Eggs, 2 Medium	61g
Beets, Sesame Seeds	60g

PROTEIN: ... is the most plentiful substance in the body next to water. It is one of the most important elements for the maintenance of good health and vitality and is of primary importance in the growth and development of all body tissues. It is the major source of building material for muscles, blood, skin, hair, nails and internal organs including the brain and heart.
Protein is needed for the formation of hormones, which control a variety of body functions, such as growth, sexual development and rate of metabolism.

Of the more than thirty amino acids, which compose the structure of protein, twenty two have been identified. Fourteen of these we are able to manufacture within the digestive tract, but only if the following essential amino acids are supplied through out food intake:

ARGININE, HISTICIDE, LEUCINE, LYSINE, METHONINE, PHENYLALANINE, TRYPTOPHANE, THREONINE, VALINE, CISTEINE.

A complete protein is one which has all the above in equal amounts. Below there are listed foods, which meet this requirement:

100 gram Skimmed milk	35 gram complete protein
" Torula Yeast	34 gram "
" Soybeans, Cooked	30 gram "
" Swiss Cheese	28 gram "
" Longhorn Cheese	21 gram "
" Cottage Cheese	19 gram "
" Eggs (2)	13 gram "
" Yoghurt, Plain	8 gram "
" Shrimp, Steamed	27 gram "
" Halibut, Broiled	26 gram "

Complete Protein Combinations:

100 gram legumes & Brown Rice	24 gram complete protein
" Sesame Seeds & Brown Rice	21 gram "
" Sesame Seeds & Chickpeas (garbanzo)	18 gram "
" Scotch Oatmeal & Millet	15 gram "
" Beans & Corn	14 gram "

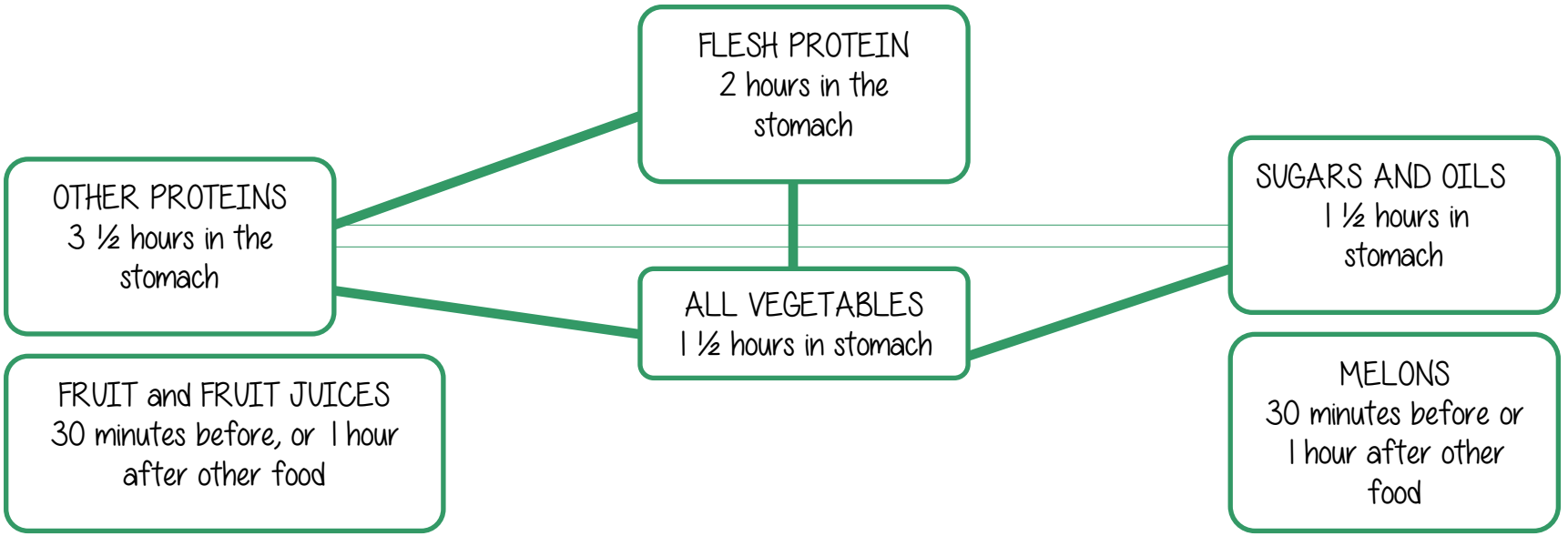
Eggs are an excellent source for a complete protein and contain LETITHIN which balances their high cholesterol level. In order to preserve the lecithin, the eggs must be correctly cooked; either boiled, poached or cooked in a "Tefal" pan without oil or frying!

TOFU (Soy Bean Curd) is another complete protein, containing LECITHIN and all 22 amino acids, and does not contain any saturated fats.

SUGAR: ... AVOID ALL FORMS OF REFINED SUGAR. Sugar has little or no nutritional value. The suggestion that it gives us energy is a misleading and dangerous half truth. The fact is that sugar ultimately depletes the body's resources by increasing the need for certain vitamins and trace minerals. Foods with sugar alternatives such as saccharin's etc. are EVEN MORE DETRIMENTAL to health, as are all chemicalized and over-refined foods.
BROWN SUGAR is only marginally better than white sugar, most of it only being coloured white sugar.
Overindulgence in starchy and sweet foods crowds out other essential foods from the diet and can therefore result in nutritional deficiency as well as in OBESITY and TOOTH DECAY.

ANIMAL FOOD PRODUCTS (Meats, fish, poultry, milk and dairy produce):
As dietary intake of saturated fats increases, there is almost linear increase of BREAST and COLON CANCER. It has also been linked with HEART DISEASE, OBESITY and all diseases resulting from TOO HIGH BLOOD CHOLESTEROL LEVEL. Another fact to be considered is, that meats remain within the digestive tract much longer than vegetable proteins, which prolongs the toxic effects upon the body.
Milk and dairy products have a strongly increasing effect on mucous formation as well as containing certain hormones in quantities, designed to meet the needs of calves and which are too high for human needs, especially for babies.

FOOD COMBINATIONS: Correct food combinations are important in the maintaining of any nutritional balance. Incorrect food combinations can upset the digestive process, cause acid-alkaline imbalance and prevent proper assimilation of vitamins and minerals.
This chart gives basic suggestions on how to combine foods.



Avoid combining unjoined spaces; spaces joined ▭ combine well; spaces joined ▬ combine excellently.

WHY YOU SHOULD EAT ORGANICALLY GROWN FOOD

Foods grown on different soils, under different conditions, harvested and processed by different methods contain different amounts of nutrients. On one hand, foods grown with the use of artificial fertilizers, herbicides and pesticides on soil depleted of humus and naturally occurring minerals. On the other hand, foods grown organically with high levels of humus, which is converted by soil bacteria and fungi, providing the correctly balanced food for the plants.

Vitamins and minerals in the correct balance for human needs can only be obtained from organically grown produce.

CHEMICAL FERTILIZERS: ...

... are easily dissolved in water and quickly saturate the soil, making it difficult or impossible for the less easily dissolved iron, copper, magnesium, zinc and other trace minerals to stay in the soil solution.
It also creates conditions, toxic or unsuitable for soil bacteria, micro flora and fauna, that makes nutrients available to plants. Research has shown an increased deficiency of B-complex vitamins within vegetables.

NITRATES: ...

... have been shown to destroy vitamin B5, vitamin C in plants and carotene (vitamin A) in plants and our bodies (e.g. carrots, treated with nitrates have been analysed and contained no carotene). Nitrates furthermore, are harmful to our intestinal flora, impairing absorption and utilization of ingested nutrients, causing deficiencies (Particularly of blood serum, vitamin B12 and folic acid).
Dietary nitrates (found in tobacco, fishmeal, flavourings etc), combine with substances in our body called "secondary amines" to form carcinogens. Cancer is also

POTASSIUM FERTILIZERS: ...

... as they cause a deficiency of magnesium, preventing magnesium from being absorbed by the plants. Absence of magnesium then causes the large amounts of potassium to become toxic to the body. Artificial fertilizer also makes zinc unavailable to the plants.

PESTICIDES: ...

... cannot be cleared from foods: washing food only removes about 1/3 of the chemical, the remainder penetrate to the pulp. Pesticides, just like fertilizers destroy various nutrients and enzymes essential for our metabolisms.

Pesticides in food warning

At long last the Ministry of Agriculture has published what I have been saying in these pages for years. It concerns the danger of chemical residues in fruit and vegetables.
They write:

"As almost all the fruit and vegetables we buy are produced and stored with the aid of pesticides – essential if we are to enjoy year round vegetables at reasonable prices, there has always been a percentage of these chemicals in the fibrous part of foods. This doesn't matter much if you wash vegetables thoroughly and peel them, but if you're one of the growing band of high-fibre, raw vegetable eaters then you might be swallowing more pesticides than are good for you".

Thank goodness that the Organic Growers Association is going from strength to strength!

Threat from chemicals used for crop storage

SPRAYING of crops with chemicals to prolong shelf-life has become so widespread in this country that there is a real danger of consumers taking in high levels of toxic chemicals.
The report on pesticide residues published by the Ministry of Agriculture. Fisheries and Foods highlights this increase in chemical spraying of crops after harvest to prolong storage.
Potatoes have been identified as a particular risk. The report describes a survey which took samples of potatoes from various retail outlets.
The potatoes were found to contain 0.1mg to 218mg/kg tecnazene residues. Tecnazene is used to suppress sprouting and has a maximum recommended limit (MRL) of 1mg/kg.

The Ministry concluded that on average 90 per cent of these residues are removed by washing and peeling so the remaining amount, they say, is acceptable. However, there may still be times when the residues are above the "safe" limits. The residues left in potatoes that are cooked without peeling such as baked potatoes will also be higher.
Wheat is also sprayed to prolong storage and there may be a similar risk to consumers of ingesting residues of organophosphorus insecticides used in storage.
The answer is to buy the flour that is produced organically without the use of chemicals on the wheat during growing or storage.

See also Pesticides in food warning (page 121)

The ACID – ALKALINE BALANCE of the body is about 80% - 20% and to maintain it, one should eat accordingly – 80% alkaline foods and 20% acid foods. These percents are in amount of food eaten not gram weight. This chart (as well as the notes on the boarders of the food lists for the vitamins and minerals) shows the acid and alkaline forming foods. Foods marked * eat alone.

ALKALINE FRUITS

APPLES and CIDER
APRICOTS, raw
AVOCADOS
BANANAS, yellow
BERRIES, all
CANTALOUPE
CAROB, POD ONLY
CHERRIES
CITRON
CURRANTS
DATES, raw
FIGS, raw
GRAPES
*GRAPEFRUIT
GUAVAS
KUMQUATS
*LEMONS, ripe
*LIMES
LOQUATS
MANGOS, all
NECTARINES
OLIVES, sun dried
*ORANGES
PAPAYAS
PASSION FRUIT
PEACHES
PEARS
PERSIMMONS
PINEAPPLE, fresh
PLUMS
POMEGRANATES
POMELOS
PRUNES
QUINCE

ALKALINE FRUITS cont.

RAISINS
SAPOTES
TAMARIND
TANGERINES
TOMATOES

ALKALINE DAIRY PRODUCTS

ACIDOPHILUS-
BUTTERMILK
YOGHURT
MILK, raw only
HUMAN, COW
Or GOAT
WHEY

ALKALINE FRESH FOODS

BLOOD AND BONE only;
BONEMEAL is alkaline.

ALKALINE CEREALS

NONE!

ALKALINE NUTS

ALMONDS
CHESTNUTS, roasted
COCONUT, fresh

ALKALINE VEGETABLES

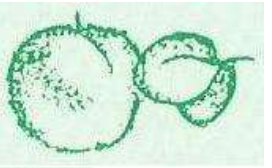
ALFALFA
ARTICHOKES
ASPARAGUS
BAMBOO SHOOTS
BEANS, Lima, Green, Wax, String
BEETS, all
BROCOLLI
CABBAGE, all
CARROTS
CAULIFLOWER
CELERY
CHARD
CHICKORY
CORN
CUCUMBER
DILL
DOCK
DULSE
EGGPLANT
ENDIVE
ESCAROLE
GARLIC
HORSERADISH
JERUSALEM
ARTICHOKE
KALE
LEEK
LETTUCE
MUSHROOMS
OKRA
ONIONS
OYSTERPLANT
PARSLEY

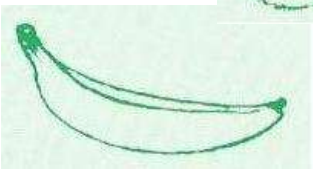
ALKALINE VEGETABLES cont.

PARSNIPS
PEPPERS, sweet
POTATOES
PUMPKIN
RADISH
ROMAINE
RUTABAGAS
SAUERKRAUT
SOY BEAN
SPINACH
SPROUTS
SQUASH
TURNIPS
WATER CHESTNUT
WATERCRESS

ALKALINE MISCELLANEOUS

AGAR AGAR
COFFEE SUBSTITUTE
HONEY
KELP, edible
TEA, China & Herb





ACID FRUIT

ALL PRESERVES
Canned & sugared
CRANBERRIES
DRIED, SULPHURED,
GLAZED FRUITS
OLIVES, pickled

ACID DAIRY PRODUCTS

BUTTER
CHEESE, all
COTTAGE CHEESE
CREAM
CUSTARD
MILK, boiled, cooked,
malted, dried or canned

ACID FLESH FOODS

ALL MEAT, FOUL and
FISH
GELATINE

ACID CEREALS

ALL FLOUR PRODUCTS
ALL GRAINS

ACID NUTS

ALL EXCEPT:
Almonds
Chestnuts, roasted
Coconut, fresh
COCUNT DRIED

ACID VEGETABLES

ASPARAGUS TIPS, White
BEANS, all dried
BRUSSEL SPROUTS
GARBANZOS (chickpeas)
LENTILS
RHUBARB

ACID MISCELLANEOUS

ALCOHOLIC DRINKS
COCOA
COFFEE
CONDIMENTS, all
DRESSINGS
DRUGS
EGGS
FLAVOURINGS
MAYONNAISE
TAPIOCA
TOBACCO
VINEGAR
LACK OF SLEEP
TEA, Indian

SOME GENERAL ADVICE:

EAT only when hungry

DO NOT OVEREAT
Try to avoid Large Sit-Down Meals, rather snack through the day with fruits, raw vegetables and proteins.

EAT only small amounts of protein at night
DO NOT EAT when in pain or emotionally upset
DO NOT EAT when tired or immediately after hard work
EAT in proportion to the type of work being done
EAT 80% ALKALINE foods
EAT juicy foods and drink prior to concentrated food
EAT raw foods BEFORE cooked foods
EXERCISE DAILY
AVOID all forms of REFINED SUGAR

The amounts of vitamins and minerals in this calendar, given as daily requirements, have been given through spirit communication and may vary somewhat from the Government recommended daily requirements.

It is based on the average requirements for an IN TUNE BODY beyond the age of TWELVE.

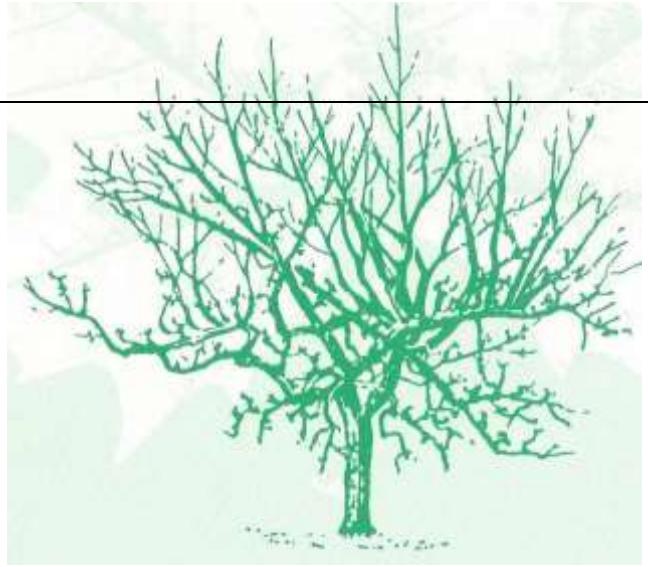
Each person, however, has different nutritive needs, which must be considered in his daily diet. One should keep in mind, that spiritual guidance is what the word implies - -

GUIDANCE AND SUGGESTION!

-- INDEX FOR CROSSREFERENCE--

ACID-ALKALI BALANCE	CALCIUM, CHLORINE, POTASSIUM, SODIUM
ARTERIES and VEINS	B – complex vitamins, C, E, F, P
BLADDER	A, B5, B6, C, E
BLOOD	A, B5, B6, Folic Acid, Paba, C, D, K, P, CALCIUM, COPPER, IRON, POTASSIUM, SODIUM
BODY TISSUES (all)	A, B2, PHOSPHORUS, POTASSIUM
BONES, and Bone Marrow	A, B12, Inositol, C, D, P, CALCIUM, COPPER, IRON, MAGNESIUM, MANGANESE, PHOSPHORUS, SODIUM, ZINC
BRAIN	B12, Inositol, COPPER
BREATHING	C, E, P, IRON, PHOSPHORUS
CARBOHYDRATE METABOLISM	B – complex vitamins, MAGNESIUM, MANGANESE, SULPHUR
CHOLESTEROL LEVEL	B – complex vitamins, IODINE, MANGANESE
DIGESTIVE SYSTEM	B2, B5, Choline, Folic Acid, Inositol, Paba, C, E, F, K, P, CHLORINE, PHOSPHORUS, POTASSIUM, SODIUM, ZINC
DNA and RNA	B6, COPPER
EARS	A, C, MANGANESE
ENERGY	B – complex vitamins, F, K, IODINE, MAGNESIUM, PHOSPHORUS
EYES and EYESIGHT	A, B2, B6, Inositol, D
FAT METABOLISM	B – complex vitamins, MANGANESE
GALL	Choline, E, F, Sulphur
GLANDS	B3, B5, E, IODINE, MANGANESE
GROWTH	Folic Acid, PHOSPHORUS, and CALCIUM, see also under BONES
HAIR	B2, B6, Folic Acid, Inositol, Paba, COPPER, IODINE, SULPHUR
HEART	B1, B12, Choline, D, E, F, CALCIUM, COPPER, IODINE, MAGNESIUM, POTASSIUM
HEADACHE	B – complex vitamins, C, E, F, P
HEALING wounds & burns, etc	C, P, ZINC
HORMONES	B3, B5, CHLORINE, MANGANESE, ZINC
INFECTION	C, P, ZINC
KIDNEYS	A, B1, B12, Choline, Inositol, F, COPPER, PHOSPHORUS, POTASSIUM, SODIUM, ZINC
LACTATION	C, P, MANGANESE
LECITHIN	Choline, Inositol
LIQUID and WATERBALANCE	B6, POTASSIUM, SODIUM
LIVER	B – complex vitamins, D, E, F, K, CHLORINE, COPPER, IRON, MANGANESE, SULPHUR, ZINC
LYMPH	E, SODIUM

INDEX Cont.	
MENSTRUAL DISTURBANCES	B12
MENTAL ALERTNESS and STABILITY	B1, B3, Paba, IODINE, MEGNESIUM, PHOSPHORUS, ZINC
MUSCULO-SKELETAL SYSTEM	B6, B12, D, E, CALCIUM, MAGNESIUM, MANGANESE, PHOSPHORUS, POTASSIUM, SODIUM, ZINC
NAILS	B6, B12, Folic Acid, Paba, IODINE, IRON, SULPHUR
NERVOUS SYSTEM	B2, B3, B5, B12, Choline, D, CALCIUM, IODINE, MAGNESIUM, MANGANESE, PHOSPHORUS, POTASSIUM, SODIUM, SULPHUR
PANCREAS	B12, E, F, MANGANESE, ZINC
PROTEIN METABOLISM	B – complex vitamins, C, COPPER, IRON, MANGANESE
RICKETS	D, PHOSPHORUS
SKIN	A, B2, B5, B6, Inositol, Paba, C, F, P, COPPER, IODINE, POTASSIUM, SULPHUR, ZINC
SPLEEN	IRON
SUNSCREEN	Paba
TEETH	A, C, D, P, CALCIUM, PHOSPHORUS, IODINE, POTASSIUM
TESTES	E, ZINC
UTERUS	E, ZINC



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LETS EAT RIGHT TO KEEP FIT (Adelle Davis)
LETS GET WELL (Adelle Davis)
SILENT SPRING (Rachel Carsons)

Vitamin A

Fat Soluble

Daily Requirement 20,000 iu

Vitamin A occurs in nature in two basic forms: preformed Vitamin A and provitamin A or Carotene. The ability of the body to utilize Carotene varies with the food and form of ingestion (mashing makes Carotene more available).
Preformed Vitamin A, as in fish liver oil and other animal products, is absorbed 3-5 hours after ingestion. Carotene absorption takes up to 6-7 hours. Diabetics cannot convert Carotene into Vitamin A.
A deficiency of Vitamin A leads to rapid loss of Vitamin C. 150 iu Vitamin E to every 25,000 iu Vitamin A allows better assimilation of both Vitamins and will decrease toxicity of large quantities of Vitamin A.

SOURCE

Liver, eggs, yellow fruits and vegetables, dark green fruits and vegetables. Spiralina and Sweet Potatoes.

SOME RICH FOODS ARE:
(per 100 gram)

COD LIVER OIL	85,000 iu	
HOT RED PEPPERS, DRY	77,000 iu	
LAMBS LIVER	50,455 iu	acid
CALF LIVER	22,480 iu	acid
DANDELION GREENS, RAW	14,000 iu	alkal.
DOCK (SORREL), RAW	12,900 iu	alkal.
DANDELION GREENS, COOKED	12,900 iu	alkal
CHICKEN LIVER	12,090 iu	acid
CARROTS, RAW	11,000 iu	alkal
NORI (SEAWEED)	11,000 iu	alkal.
CARROT JUICE	10,903 iu	alkal.
APRICOTS, DRIED	10,000 iu	acid.
CRESS SPRIGS, RAW	9,300 iu	alkal.
KALE, RAW	8,900 iu	alkal.
SPINACH, COOKED	8,100 iu	alkal.

DESTROYED/DEPLETED BY:

ALCOHOL

DRUGS

NICOTINE

DESTOYED BY: Strenuous physical work within four hours of consumption; intake of mineral oil, alcohol or large amounts of iron; Cortisone or other drugs; intake of polyunsaturated fatty acids with Carotene results in rapid destruction of Carotene unless antioxidants are also present; exposure to oxygen and processing of food.. Antibiotics and Laxatives.

DIGESTION – ABSORPTION – METABOLISM :

UPPER INTESTINAL TRACT

LIVER (90% STORAGE)

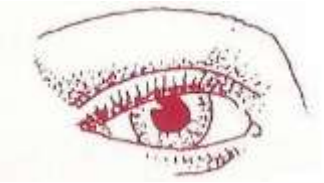
FATTY TISSUE

KIDNEYS

LUNGS

RETINA of the EYES

EYESIGHT

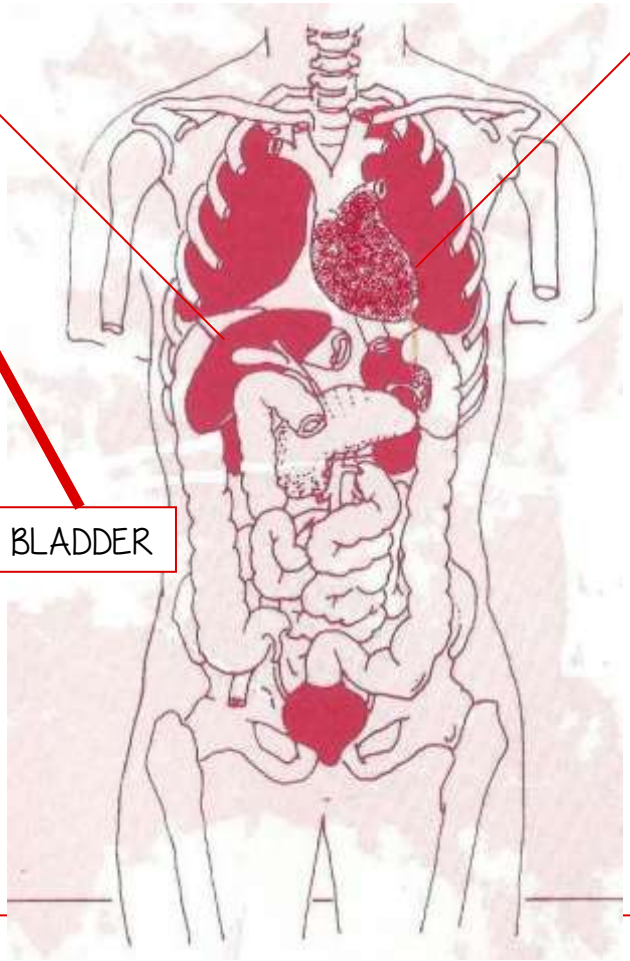


BONES and TEETH

Guards against Heart Disease and Strokes.

Formation of RICH BLOOD

KIDNEYS and BLADDER



ALL BODY TISSUES
Skin, mucous membranes, soft tissue and all the linings of the digestive tract

SKIN

DEFICIENCY SYMPTOMS

SOFTENING OF BONES AND TEETH

FREQUENT FATIGUE

SKIN, rough, dry prematurely aged; loss of SENSE OF SMELL; Loss of APPETITE

NIGHTBLINDNESS, XEROSIS, STIES, CORNEAL ULCERS

Vitamin B1
(THIAMINE)

Water Soluble

Daily Requirement 40 mg

The body does not store any excess of water-soluble vitamins, it is flushed out and has to be replaced daily (B – complex vitamins, C and P). There is no known toxicity for Thiamine.

SOURCE

Brewer's yeast, whole grains, Blackstrap molasses, Brown rice, organ meats, fish and poultry, egg yolk, legumes, nuts.

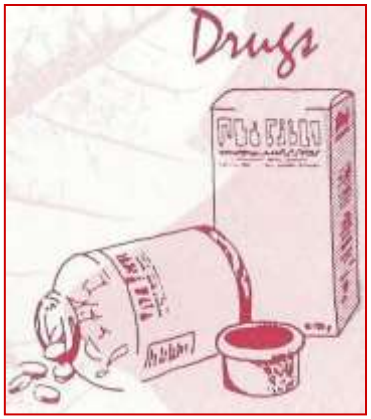
SOME RICH FOODS ARE:
(per 100 gram)

TORULA YEAST	24 -- mg
BREWER'S YEAST (debittered)	15.63 mg
BAKER'S YEAST (dry, active)	2.35 mg
MILK, DRIED, INSTANT	2.25 mg acid
SUNFLOWER SEEDS	2.-- mg acid
WHEAT GERM	2.-- mg acid
RICE BRAN	1.90 mg acid
SESAME SEEDS	1. -- mg acid
BRAZIL NUTS	1. -- mg acid
SOY BEAN, DRY	1. -- mg alkal.

DESTROYED/DEPLETED BY :

SUGAR

NICOTINE



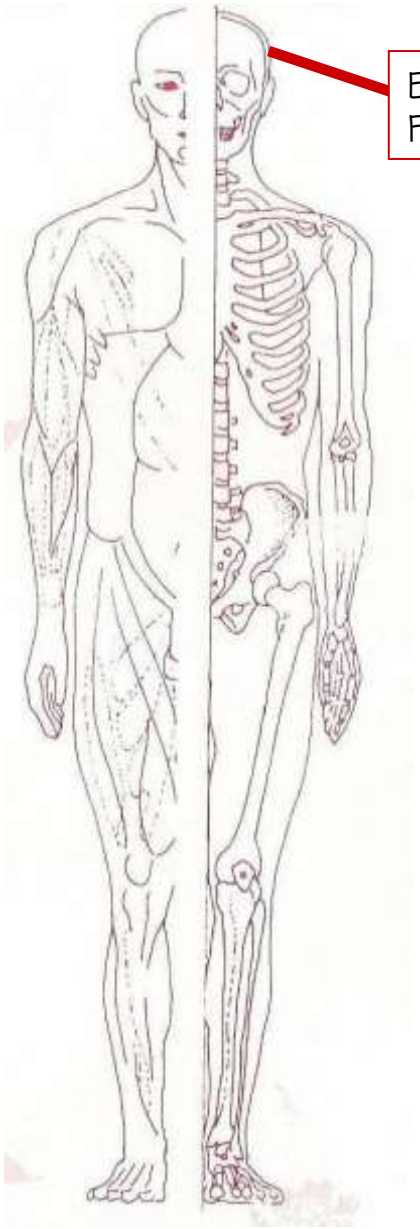
DRUGS

ALCOHOL

DESTROYED BY:
HEAT exposure, OXYGEN exposure, leached out by WATER IN COOKING; excessive SUGAR CONSUMPTION, SMOKING and ALCOHOL. Oral Contraceptives and Caffeine.

DIGESTION – ABSORPTION – METABOLISM :

UPPER AND LOWER SMALL INTESTINES
In cooperation with Manganese and Proteins



Enhances Brain Function

Production of stomach acid

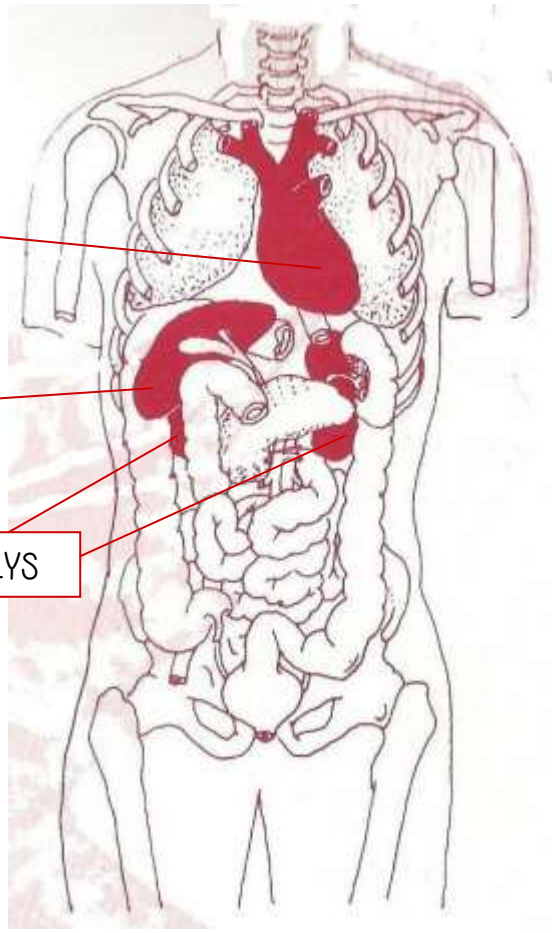
HEART

Enhances Circulation

LIVER

KIDNEYS

Breakdown of carbohydrates into GLUCOSE and oxidation of glucose, which supplies the body with ENERGY.



DEFICIENCY SYMPTOMS :

If deficiency is not arrested, CONFUSION, LOSS of MENTAL ALERTNESS and MEMORY can appear, followed by GASTRIC DISTRESS, ABDOMINAL PAINS and CONSTIPATION.
Further symptoms may be EASY FATIGUE, LOSS OF APPETITE, IRRITABILITY and EMOTIONAL INSTABILITY; HEART IRREGULARITIES, CARDIAC DAMAGE;
Finally PRICKLING SENSATIONS IN THE LOWER EXTREMITIES, IMPAIRED VIBRATORY SENSE and TENDERNESS OF THE CALF MUSCLES will occur.
A thiamine deficiency can also lead to INFLAMMATION of the OPTIC NERVE.. Beri Beri, Weightloss, Enlarged Liver and Edema.

Vitamin B2
(RIBOFLAVIN)

Water Soluble

Daily Requirement 25 mg

There is no know toxicity of riboflavin, however prolonged ingestion of large losses of any B – complex vitamin may result in high urinary losses of other B vitamins, therefore TAKE COMPLETE B-COMPLEX WITH ANY B VITAMIN!
Due to its water solubility, riboflavin is not stored in any large amount in the body and has to be replaced continually.

SOURCE

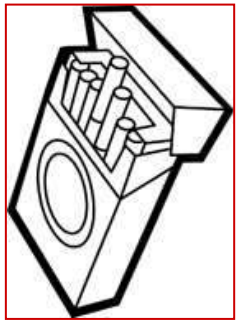
Brewer's yeast, whole grains, Blackstrap molasses, organ meats, egg yolk, legumes, nuts, cheese, spinach, yoghurt.

SOME RICH FOODS ARE:
(per 100 gram)

TORULA YEAST	24. -- mg
BAKER'S YEAST (dry, active)	5.46 mg
BREWER'S YEAST (debittered)	4.25 mg
LAMBS LIVER	3.28 mg acid
CALF LIVER	2.71 mg acid
CHICKEN LIVER	2.48 mg acid
SOYBEANS, FERMENTED (NATTO)	2.27 mg alkal.
MILK, NON-FAT, DRY	2.-- mg acid
PEPPERS, RED, DRY	1.50 mg

DESTROYED/DEPLETED BY :

DRUGS



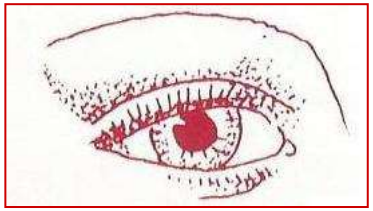
NICOTINE

ALCOHOL

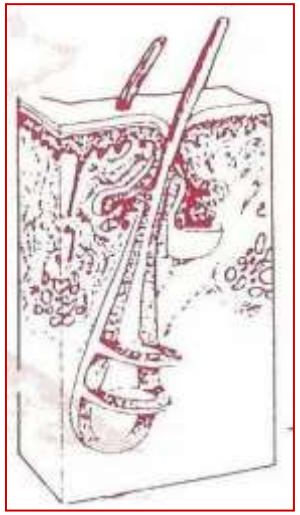
Riboflavin is stable to heat, oxidation and acid, however it disintegrates in the presence of alkali or light, especially ultraviolet. Also destroyed by Antibiotics.

DIGESTION – ABSORPTION – METABOLISM :

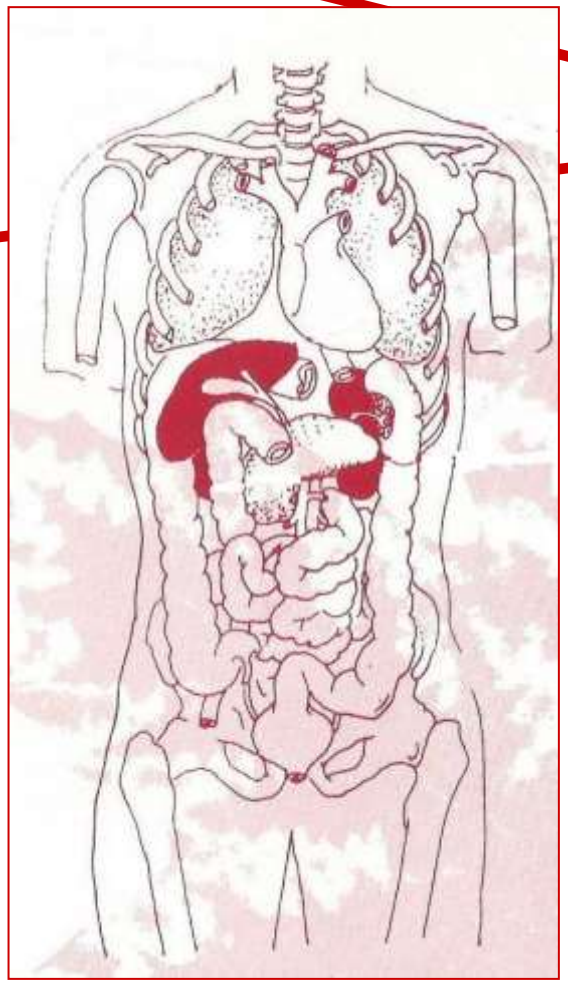
GOOD VISION, SKIN, HAIR, NAILS



ALL BODY TISSUES
Cell respiration



SKIN
And
HAIR



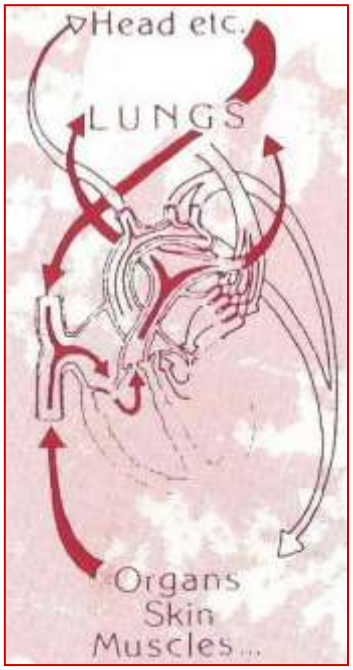
WALLS of the SMALL INTESTINE

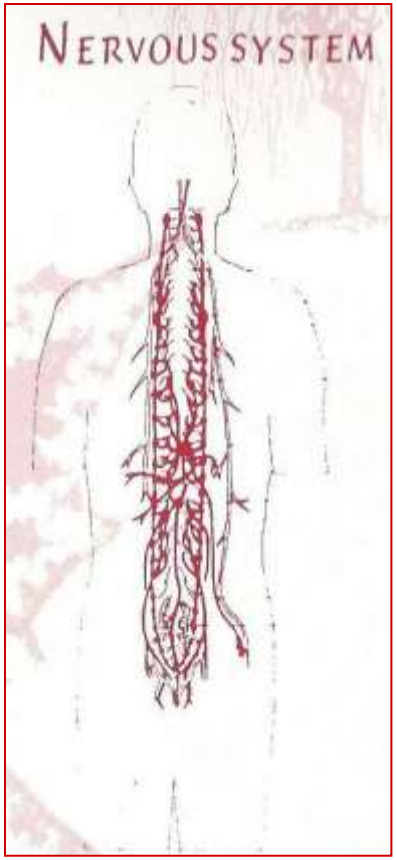
Red Blood Cell Formation

HEALTHY NERVES

LIVER
Breakdown and utilization of fat, carbohydrate and protein for ENERGY.

KIDNEYS





DEFICIENCY SYMPTOMS :

CRACKS and SORES in the CORNERS of the MOUTH; RED and SORE TONGUE: FEELING of GRIT inside the EYELIDS or BURNING of EYES , EYEFATIGUE, DILATION of PUPILS, CHANGES in CORNEA; LESIONS of the LIPS; SCALING AROUND NOSE, MOUTH, FOREHEAD, EARS; VAGINAL ITCHING, OILY SKIN, BALDNESS, RETARDED GROWTH; IMPAIRED LACTATION; PELLAGRA. HAIR LOSS, INSOMNIA.

INABILITY TO URINATE

SLOWED MENTAL RESPONSE

SLUGGISHNESS, DIZZINESS, LACK of STAMINA DIGESTIVE DISTURBANCES

OVERSENSITIVE TO LIGHT, TREMBLING

Vitamin B3
(NIACIN)

Water Soluble

Daily Requirement 60 mg

SOURCE

Lean Meats, poultry and fish, brewer's yeast, peanuts, milk and dairy products, rice bran. Broccoli, Carrots, Cheese, Eggs, Dates, Potatoes, Tomatoes

SOME RICH FOODS ARE:
(per 100 gram)

TORULA YEAST	45. -- mg
BREWER'S YEAST (debittered)	37.50 mg
BAKER'S YEAST (dry, active)	37.15 mg
BRAN FLAKES 40%, fortified	34.29 mg acid
RICE BRAN	30. -- mg acid
PEANUTS, roasted	17.10 mg acid
LAMBS LIVER	16.85 mg acid
WHEAT PASTRY FLOUR	16.70 mg acid
TUNA, CANNED IN WATER	13.20 mg acid
WHEAT FLAKES, fortified	11.66 mg acid
CALF LIVER	11.40 mg acid
TURKEY, LIGHT MEAT, cooked	11.07 mg acid
PEPPERS, RED, DRY	11 -- mg
WHEAT BRAN	10.88 mg acid
CHICKEN LIVER	10.79 mg acid

DESTROYED BY :

SUGAR

DRUGS

ALCOHOL

NICOTINE

DESTROYED BY : Leached out in WATER during cooking; excessive consumption of SUGAR and STARCHES.

DIGESTION – ABSORPTION – METABOLISM :

Helpful in mental illness and memory enhancement

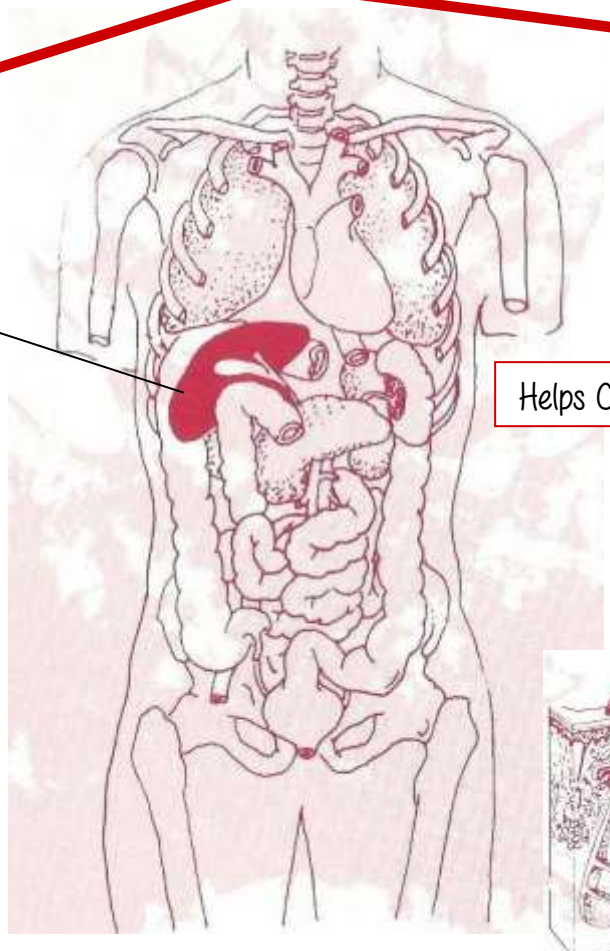
INTESTINES

LIVER

Breakdown of fats, carbohydrates and proteins into GLUCOSE for the body's ENERGY supply.

Reduction of cholesterol level in the blood

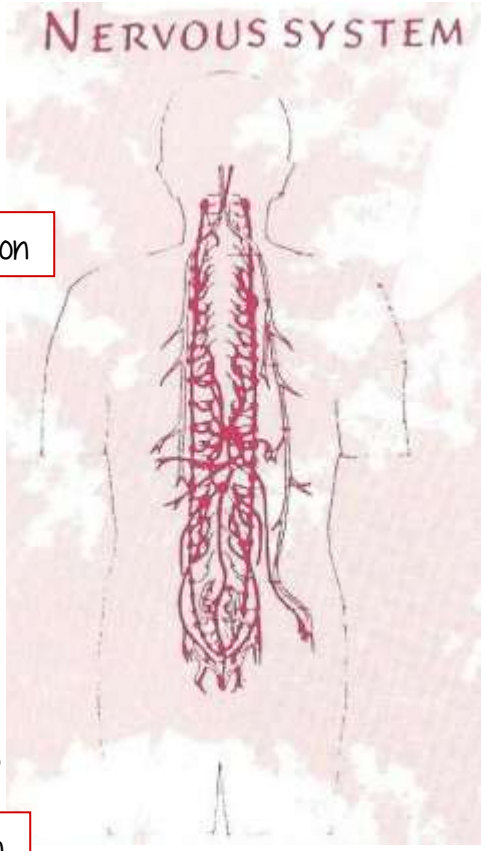
Synthesis of sexhormones



Helps Circulation

Healthy Skin

HEALTHY NERVOUS SYSTEM



DEFICIENCY/DEPLETION SYMPTOMS :

DIGESTIVE DISORDERS; SWOLLEN, SORE TINGUE, PELLAGRA; FAILURE TO GROW MAY BE SEEN IN CHILDREN. DEPRESSION, DEMENTIA, HALITOSIS, MUSCULAR WEAKNESS.

LOW BLOOD SUGAR, APPETITE LOSS, SKIN ERUPTIONS, INFLAMMATION.

NERVOUS IRRITABILITY; HEADACHES; INSOMNIA

Vitamin B5
(PANTOTHENIC ACID)

Water Soluble

Daily Requirement 30 mg

Adequate intake of pantothenic acid reduced the toxic effects of many antibiotics. It aids in the prevention of premature aging and wrinkles. It also protects against cellular damage caused by excessive radiation. Since it is a water soluble vitamin, no excess is stored in the body.
Known as the anti stress vitamin, it is involved in the production of neurotransmitters. It is a stamina enhancer and prevents certain forms of anaemia. Helpful in treating depression.

SOURCE

Organ meats, brewer's yeast, egg yolk, legumes, whole grains, wheat germ, salmon.

SOME RICH FOODS ARE :
(per 100 gram)

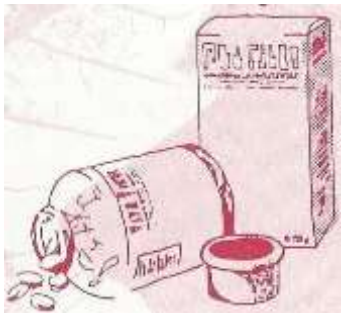
BREWER'S YEAST (debittered)	12.50 mg
TORULA YEAST	11.00 mg
BAKER'S YEAST (dry, active)	11.00 mg
CALF LIVER	7.99 mg acid
COW'S LIVER	7.70 mg acid
LAMBS LIVER	7.20 mg acid
CHICKEN LIVER	5.94 mg acid
BRANFLAKES 40% fortified	4.71 mg acid
KIDNEY (cow)	3.74 mg acid
MILK, DRIED, NON-FAT	3.56 mg acid
LIVERWURST	2.77 mg acid
BRAINS (all kinds)	2.59 mg acid
HEART (cow)	2.48 mg acid
RICE BRAN	2.25 mg acid
SOY FLOUR, defatted, stirred	2.21 mg alkal.

DESTROYED BY :

DRUGS

NICOTINE

ALCOHOL

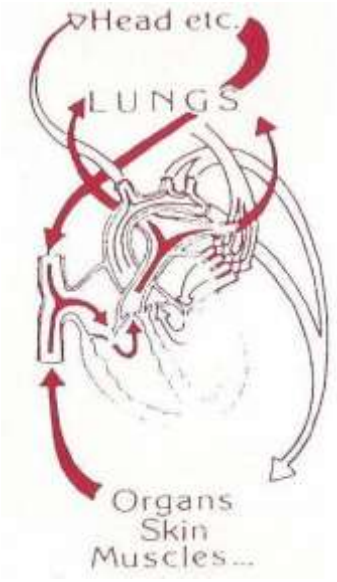


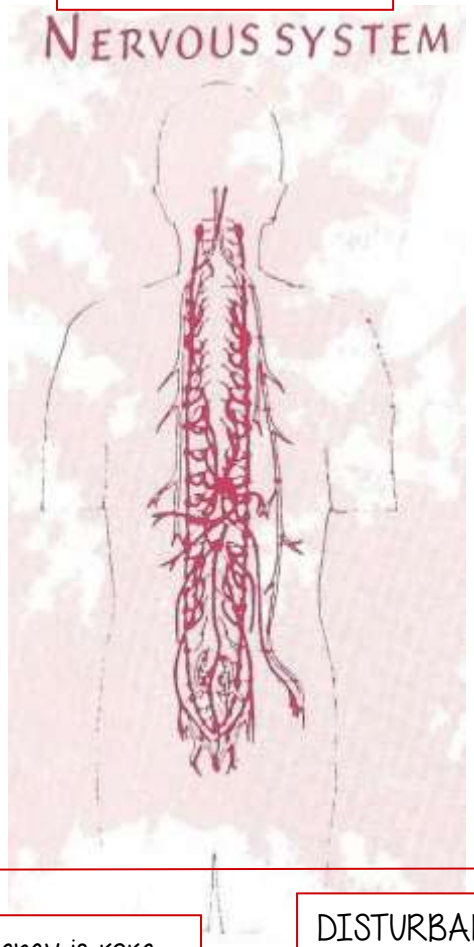
DESTROYED BY : About 50% is lost by MILLING of FLOUR. It is easily destroyed by acids such as VINEGAR or alkali such as BAKING SODA.

DIGESTION – ABSORPTION – METABOLISM :

INTESTINES

- Utilization of other vitamins especially B2
- Synthesis of cholesterol, fat soluble compounds called steroids and fatty acids.
- HEALTHY SKIN, NERVES and DIGESTIVE TRACT
- Production of cortisone and other adrenal hormones.
- Release of ENERGY from carbohydrates, fats and proteins
- BLOOD PLASMA liquid part of the lymph





SKIN AND HAIR

DEFICIENCY SYMPTOMS :

Pantothenic acid is so widely distributed in foods that a deficiency is rare. It may occur when the body lacks the intestinal flora needed to synthesise pantothenic acid..

DISTURBANCE OF THE MOTOR NERVES,
IMPAIRED HEALTH OF CELLS IN MANY TISSUES,
DIMINISHED FUNCTION OF THE ADRENAL GLAND.
INSUFFICIENT SECRETION OF HYDROCHLORIC ACID INTO THE STOMACH.

Vitamin B6
(PYRIDOXINE)

Water Soluble

Daily Requirement 45 mg

B6 consists of three related compounds: pyridoxine, pyridoxinal and pyridoxamine. It is involved in more bodily functions than almost any other single nutrient. It affects both physical and mental health. B6 is relatively non-toxic even in large amounts., administered alone can cause an imbalance or deficiency of other B vitamins. Due to its water solubility it has to be taken in continually.

SOURCE

Organ meats, whole grains, brewer's yeast, wheat germ, Blackstrap molasses, legumes. Carrots, Eggs, Spinach, Sunflower Seeds, Walnuts, Avocados, Brown Rice.

SOME RICH FOODS ARE :
(per 100 gram)

TORULA YEAST	24.00	mg
WHEAT GERM, toasted	1.14	mg acid
LIMA BEANS	1.00	mg alkal.
CHICKEN LIVER	0.74	mg acid
SALMON, fresh	0.70	mg acid
TROUT, RAINBOW	0.69	mg acid
CHICKEN, BREAST & WINGS	0.68	mg acid
CALF LIVER	0.66	mg acid
PEAS, BANANAS	0.50	mg alkal
BLACKSTRAP MOLASSES	0.25	mg acid

DESTROYED/DEPLETED BY :

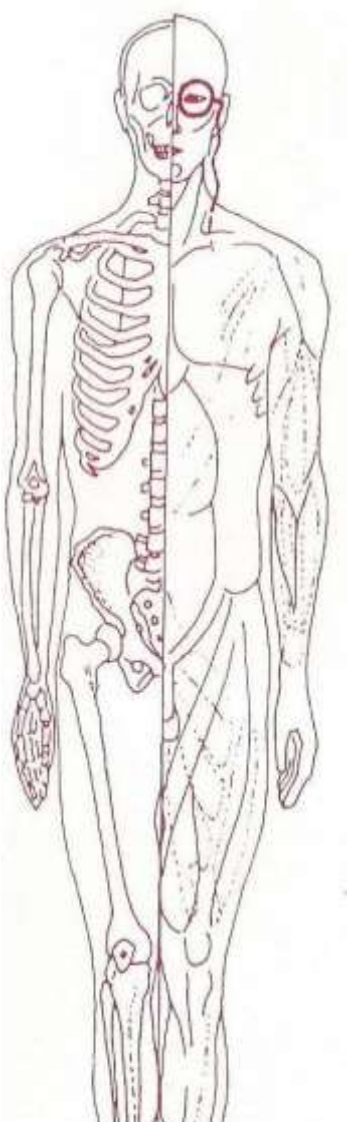
DRUGS

ALCOHOL

NICOTINE

DESTROYED BY : HEAT & LIGHT. Antidepressants, Diurettics, Oral Contraceptives, Cortisone.

DIGESTION – ABSORPTION – METABOLISM:



INTESTINES

Balance of sodium and potassium

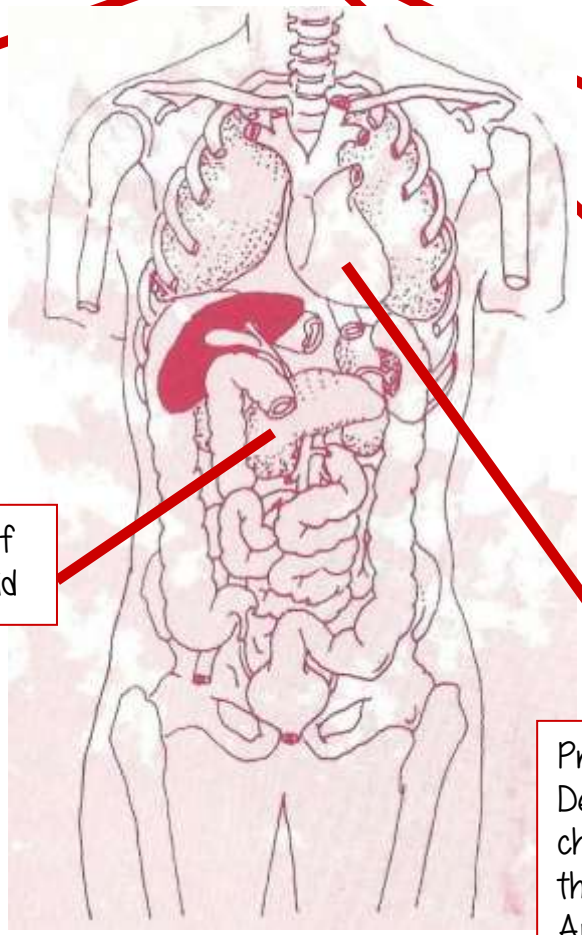
LIVER
Carbohydrate, fat and protein metabolism

Normal functioning of the nervous and musculo-skeletal system

Production of Stomach Acid

Production of red blood cells

Cancer Prevention.



Conversion of tryptophane (amino acid) into niacin (vitamin B3)

Synthesis and proper action of DNA & RNA (carriers of genetic code)

Prevents Deposition of cholesterol around the heart muscle. Arterior Sclerosis

Proper absorption of vitamin B12, aid of vitamin F

DEFICIENCY SYMPTOMS

Loss of HAIR; WATER RETENTION during pregnancy; CRACKS around the MOUTH and EYES; NUMBNESS and CRAMPS in ARMS and LEGS; SLOW LEARNING; VISUAL DISTURBANCES; HEART DISORDERS involving NERVES; ARTHRITIS; TEMPORARY PARALYSIS of a LIMB; INCREASE of URINATION.

Symptoms of B6 deficiency are similar to those of NIACIN (B3) and RIBOFLAVIN (B2) deficiencies. Sore Tongue, Vomiting, Acne, Irritability, Memory Loss, Hair Loss, Oily Facial Skin, Carpal Tunnel Syndrome, Impaired wound Healing..

Vitamin B12
(CYANOCOBALAMINE)

Water Soluble

Daily Requirement 20 mcg

B12 is unique in being the first cobalt containing substance found to be essential for longevity and it is the only vitamin containing essential mineral elements. It cannot be made synthetically, but has to be grown in bacteria or moulds. Important for the absorption in the gastro intestinal tract is the "INTRINSIC FACTOR", a mucoprotein enzyme. Vitamin B12 is closely related to the actions of four amino acids, pantothenic acid (B5) and vitamin C. No cases of B12 toxicity have been discovered, even in large quantities.
B12 is prepared for absorption by two gastric secretions. It needs to be combined with calcium during absorption to benefit the body properly. Absorption of B12 appears to decrease with age and with iron, calcium and B6 deficiencies. Absorption increases during pregnancy. B12 maintains fertility, prevents nerve damage, assists in memory and learning and has been shown to enhance sleep patterns.

SOURCE

Organ meats, fish and pork, eggs, cheese, milk and dairy products.

SOME RICH FOODS ARE:
(per 100 gram)

LAMBS LIVER	103.96 mcg acid
CALF LIVER	59.91 mcg acid
TORULA YEAST	42.00 mcg
CHICKEN LIVER	24.88 mcg acid
LIVERWURST	13.89 mcg acid
CALF "SWEETBREAD"	13.87 mcg acid
HERRING, fresh	8.94 mcg acid
MACKEREL, fresh	8.83 mcg acid
SEAWEED	8.00 mcg alkal.
TROUT, RAINBOW	5.01 mcg acid

DESTROYED BY :

NICOTINE

DRUGS

ALCOHOL

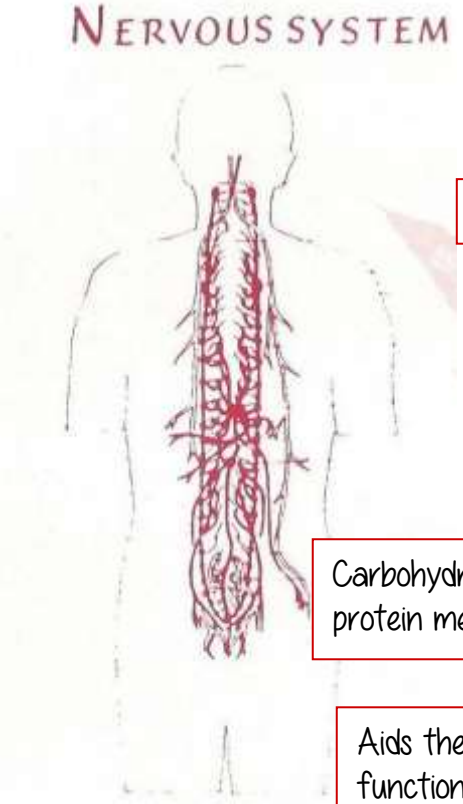
DIGESTION – ABSORPTION – METABOLISM :

GASTRO INTESTINAL TRACT
With the aid of the "intrinsic factor" and calcium.

Normal metabolism of nerve tissue.

BRAIN

Aids folic acid in the synthesis of Acetyl-choline.



LIVER

HEART

KIDNEYS

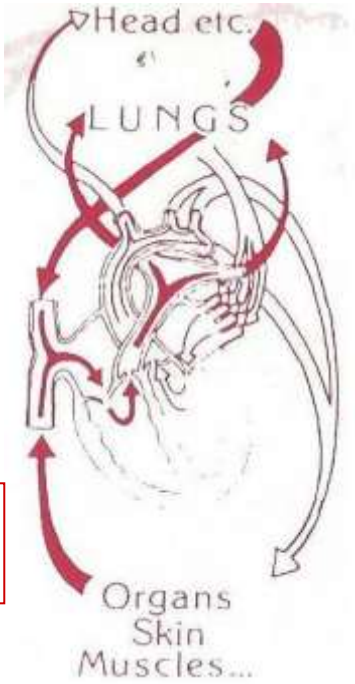
BONE MARROW

PANCREAS

Carbohydrate, fat and protein metabolism.

Aids the function of iron.

Formation of Red blood cells



DEFICIENCY/DEPLETION SYMPTOMS :

Deficiency symptoms may take five or six years to appear after the body's supply from natural sources has been restricted. A B12 deficiency is usually due to an absorption problem caused by lack of the intrinsic factor.
SORENESS and WEAKNESS in ARMS AND LEGS; DIMINISHED REFLEX RESPONSES and SENSORY PERCEPTION; Difficulty in WALKING and SPEAKING (stammering) and JERKING of LIMBS ; NERVOUSNESS, NEURITIS; UNPLEASANT BODY ODOURS ; MENSTRUAL DISTURBANCES.
Bone Loss, Chronic Fatigue, Constipation, Depression, Digestive Disorders, Migraines, Eye Disorders, Hallucinations, Irritability, Memory Loss, Moodiness, Palpitations, Anaemia, Tinnitus, Spinal Cord Degeneration.

B - complex

(BIOTIN)

Water Soluble

Daily Requirement 300 mcg

SOURCE

Egg Yolk, liver, unpolished rice, brewer's yeast, whole grains, sardines, legumes, Soy

SOME RICH FOODS ARE :
(per 100 gram)

BREWER'S YEAST (debittered)	800. -- mcg
BAKER's YEAST (dry, active)	400. -- mcg
TORULA YEAST	180. -- mcg
LAMBS LIVER	100. -- mcg
SOY FLOUR, full-fat, stirred	68.05 mcg
WALNUTS, English	37. -- mcg
PEANUTS, Roasted	34.02 mcg
CALF "SWEETBREAD" (pancreas)	13.87 mcg
BACON	7.-- mcg acid
BRAINS (all kinds)	6.82 mcg acid

DESTROYED BY :

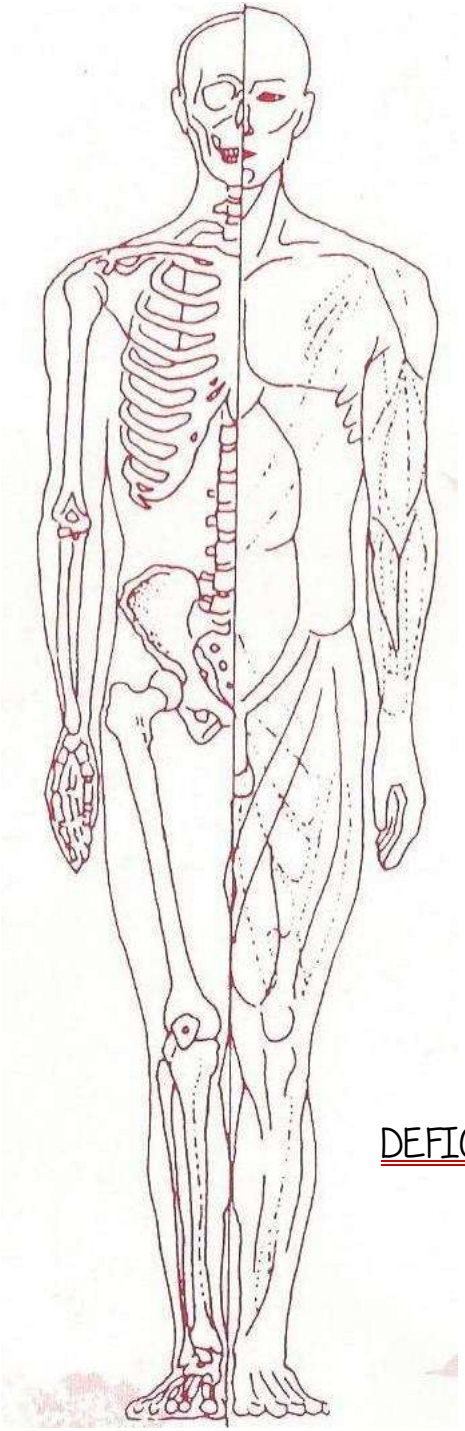
NICOTINE

ALCOHOL

DRUGS

DESTROYED BY : The intake of large amounts of raw egg white.

DIGESTION – ABSORPTION – METABOLISM :



INTESTINES

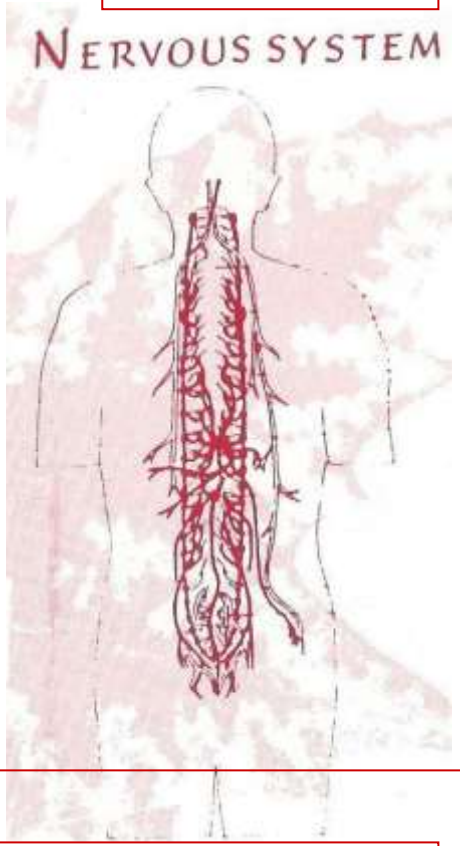
Synthesized by intestinal bacteria

Assists in the making of fatty acids.

Oxidation of fatty acids and carbohydr.

Aids in the utilization of protein, folic acid, vitamins B5 and B12

SKIN AND HAIR



DEFICIENCY/DEPLETION SYMPTOMS:

DEFICIENCY HAS ONLY BEEN REGISTERED, WHERE THE DIET CONTAINED LARGE AMOUNTS OF RAW EGG WHITE. A deficiency can cause muscular pain, poor appetite. Anaemia, Depression, Cradle Cap, Hair Loss, High Blood Sugar.

B - complex

(CHOLINE)

Water Soluble

Daily Requirement 450 mg

Choline functions with Inositol as a basic constituent of LECITHIN. Choline is synthesized by interaction of B12 and Folic Acid with the amino acid methionin.

SOURCE

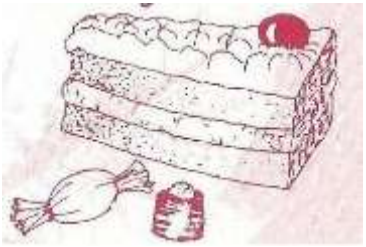
Egg yolk, organ meats, brewer's yeast, wheat germ, soy beans, fish, legumes.

SOME RICH FOODS ARE :
(per 100 gram)

SOYA	320 mg alkal.
TORULA YEAST	240 mg
OAT MEAL	150 mg acid
EGG YOLK	140 mg acid
SUNFLOWER SEEDS	16 mg

DESTROYED BY :

SUGAR



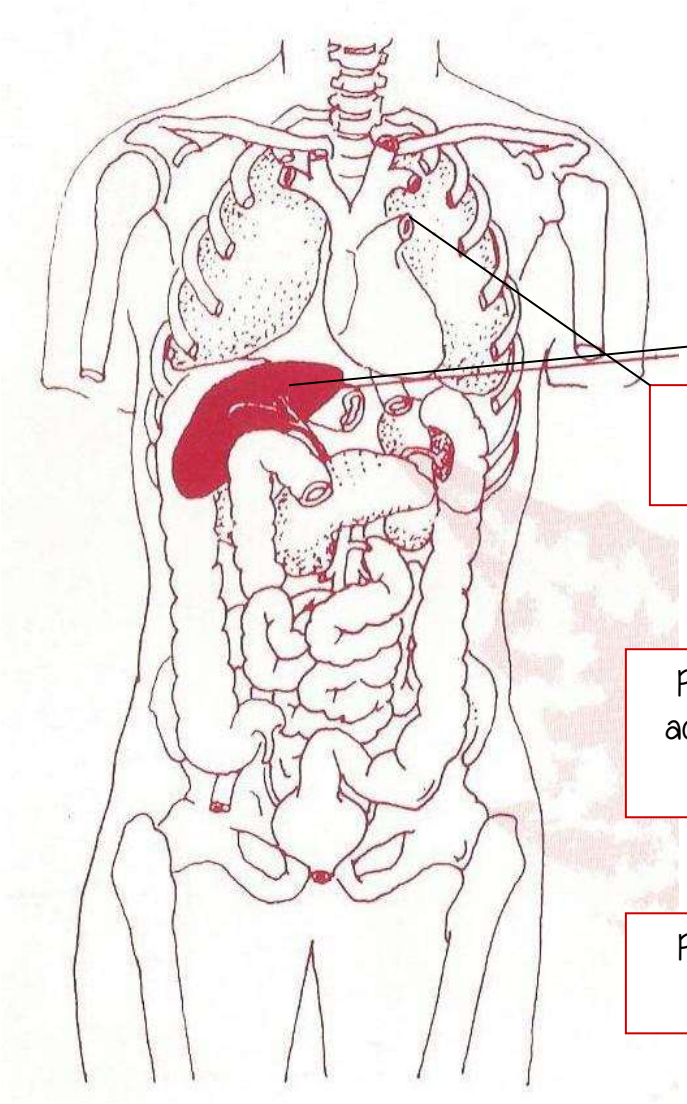
NICOTINE

ALCOHOL

DRUGS

DESTROYED BY : EXCESS OF SUGAR and ALCOHOL destroy B – complex vitamins. SULFONAMIDES and other ANTIBIOTICS destroy the intestinal bacteria, which is vital for the vitamin B – production. Milk free and REDUCING – DIETS can deplete the intestinal flora.

DIGESTION – ABSORPTION – METABOLISM :



INTESTINES
Synthesis of Choline by aid of Folic Acid, B12 and Methionine

LIVER
Conversion of fats and cholesterol into ENERGY, aided by Phosphoric acid

Prevention of arteriosclerosis

LECITHIN
Formation with acid of Inositol

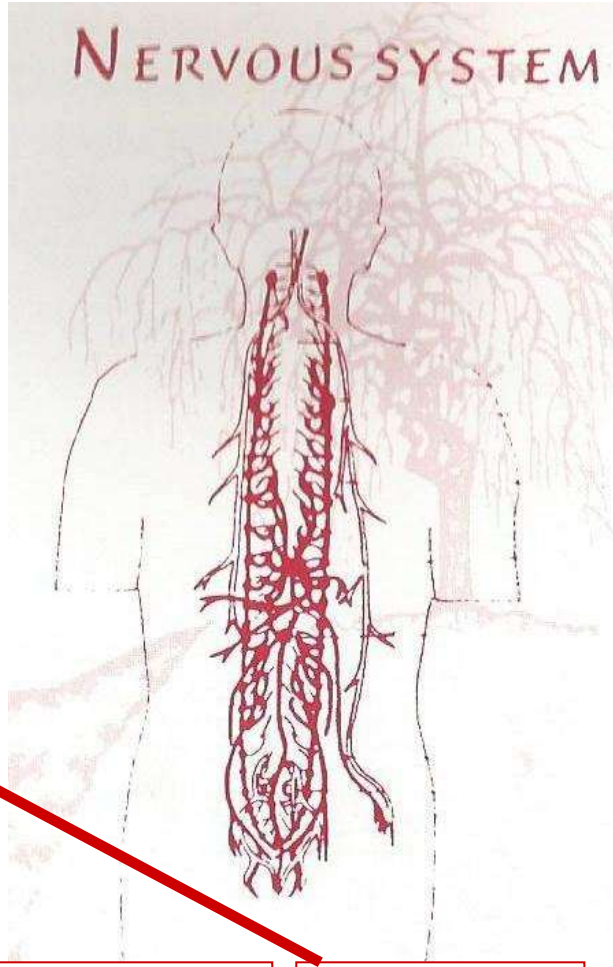
Prevention of fat accumulation in the liver.

Prevention of gall stones

Healthy Liver and kidneys

Aids in Hormone Production

Health of nerve fibres



DEFICIENCY/DEPLETION SYMPTOMS :

Impairment of Brain Function and Memory, High Blood Pressure, Cardiac Symptoms, Gastric Ulcers

Fat deposits in the LIVER, leading to STOMACH ULCERS, GALLSTONES & SAND.

HEART TROUBLE and BLOCKAGE of the TUBES TO THE KIDNEYS.

FAILURE in the TRANSMISSION of NERVE IMPULSES.

B - complex

Water Soluble

Daily Requirement 500 mg

(INOSITOL)

Inositol is closely associated with biotin and Choline and is found in high concentration in LECITHIN.
LECITHIN is found naturally in egg yolk, natural oils and seeds. It balances the cholesterol level.
Inositol is non-toxic. The human body contains more Inositol than any other vitamin except niacin.

SOURCE

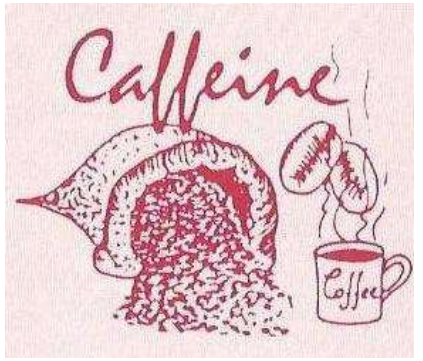
Whole grains, citrus fruits, brewer's yeast, molasses, meat, milk, nuts, vegetables, lecithin.

SOME RICH FOODS ARE :
(per 100 gram)

TORULA YEAST	360 mg
BLACKSTRAP MOLASSES	150 mg acid
SUNFLOWER SEEDS	147 mg
CANTALOUPE	120 mg alkal.
YOGURT, plain	42 mg alkal.

DESTROYED BY :

NICOTINE



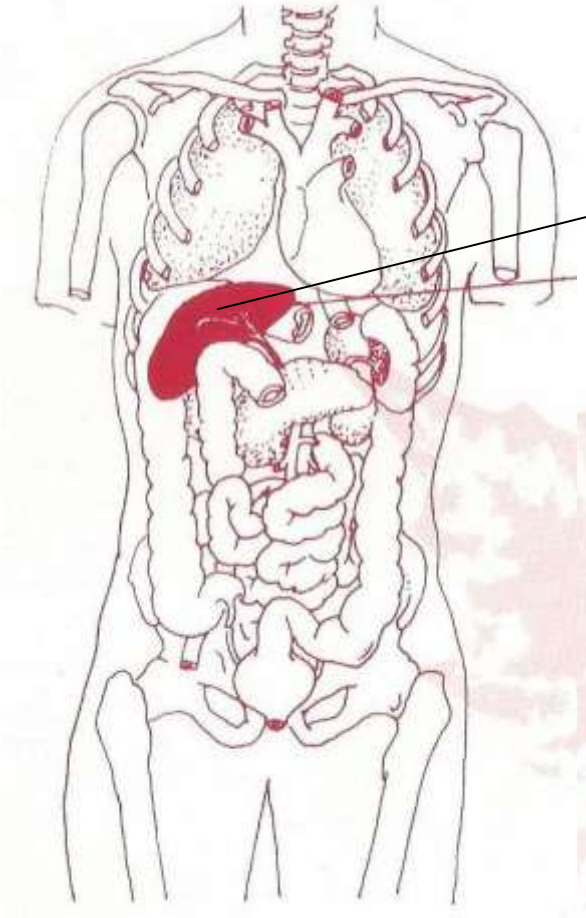
CAFFEINE

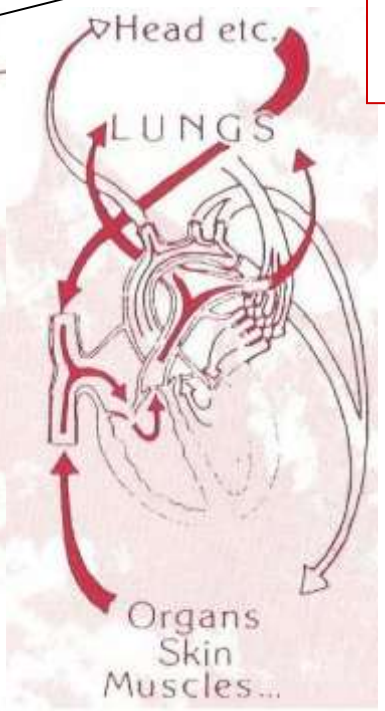
DRUGS

ALCOHOL

DESTROYED BY : CAFFEINE ; HYDROGENATION

DIGESTION – ABSORPTION – METABOLISM :





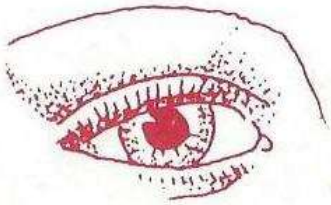
INTESTINES
By synthesis from GLUCOSE

LIVER
Promotion of production of Lecithin, which removes fats from the liver to the cells

Aids in prevention of Depression, Obsessive Compulsive Disorders and Anxiety

Growth and survival of cells in the bone marrow, eye membranes, intestines, vital for HAIR GROWTH

Brain cell nutrition



Protection of liver, kidneys and heart ; Prevention of fatty hardening of arteries

SKIN AND HAIR

Reduction of blood cholesterol, aid in fat metabolism

DEFICIENCY/DEPLETION SYMPTOMS :

Irritability, Mood Swings.

High blood cholesterol level. Arteriosclerosis.

Constipation

Hair loss

Eczema and abnormalities of the eyes

B - complex

Water Soluble

Daily Requirement 1-3 mg

(FOLIC ACID)

Non toxic, although excessive intake of folic acid can mask a B12 deficiency. Works best when combined with B12 and Vitamin C.

SOURCE

Dark green leafy vegetables, organ meats, milk, brewer's yeast, root vegetables, whole grains, oysters, salmon, Brown Rice, Asparagus, Barley, Dates, Lentils, Mushrooms, Oranges.

SOME RICH FOODS ARE:
(per 100 gram)

FENNUGREEK SEEDS	57.02 mg
BULGUR	4.52 mg acid
BAKER'S YEAST (dry, active)	4.10 mg
TORULA YEAST	3.00 mg
SOY FLOUR, full fat, stirrea	0.43 mg alkal.
CHICKEN LIVER	0.36 mg acid
LIMA BEANS	0.33 mg alkal.
COW'S AND LAMB'S LIVER	0.21 mg acid
WHEAT GERM	0.20 mg acid
CHICKPEAS (garbanzos)	0.19 mg acid
CANTALOUPE	0.13 mg alkal.
BLACK EYE PEAS, cooked	0.10 mg acid
PUMPKIN AND SQUASH SEEDS (dried, hulled)	0.10 mg acid
SPINACH, cooked	0.09 mg alkal.
ALMONDS, raw	0.09 mg alkal.

DESTROYED BY:

NICOTINE

ALCOHOL

DRUGS

DESTROYED/DEPLETED BY : HEAT, COOKING, ORAL CONTRACEPTIVES, LIGHT EXPOSURE, being left at room temperature for a long time ; SULPHA DRUGS, AMINOPERIN & STREPTOMYCIN

DIGESTION – ABSORPTION – METABOLISM :

Helps prevent Depression and Anxiety.

GASTRO INTESTINAL TRACT

By active transport and diffusion

In pregnancy, helps to regulate foetal nerve formation

LIVER

Breakdown and utilization of proteins with aid of vitamins B12 and C

Formation of red and white blood cells ("Carbon carrier")

Stimulation of production of hydrochloric acid for DIGESTION.

Helps prevent arteriosclerosis with B6 and B12

Prevention of intestinal parasites and food poisoning.

Formation of RNA and DNA essential for growth and reproduction, replication and division of all body cells.

SKIN AND HAIR

DEFICIENCY SYMPTOMS :

Disturbances of the gastrointestinal tract.

Apathy, Fatigue, Insomnia, Paranoia.

Poor growth Glossitis (red, sore tongue as with pellagra) greying hair.

ANAEMIA, that cannot be treated by supplementation of iron.

B - complex

Water Soluble

Daily Requirement 500 mg

(PARAAMINOBENZOIC ACID) (PABA)

PABA is a "vitamin within a vitamin" occurring in combination with folic acid. Acts as a sunscreen.

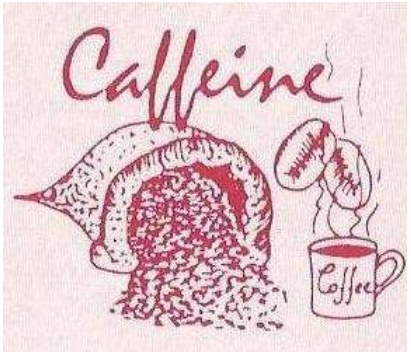
SOURCE

Organ meats, wheat germ, yoghurt, molasses, green leafy vegetables, mushrooms.

SOME RICH FOODS ARE :
(per 100 gram)

TORULA YEAST	90 mg
SUNFLOWER SEEDS	62 mg
BLACKSTRAP MOLASSES	20 mg acid
WHEAT GERM	2 mg acid

DESTROYED BY : SULPHUR DRUGS



CAFFEINE

ALCOHOL

NICOTINE

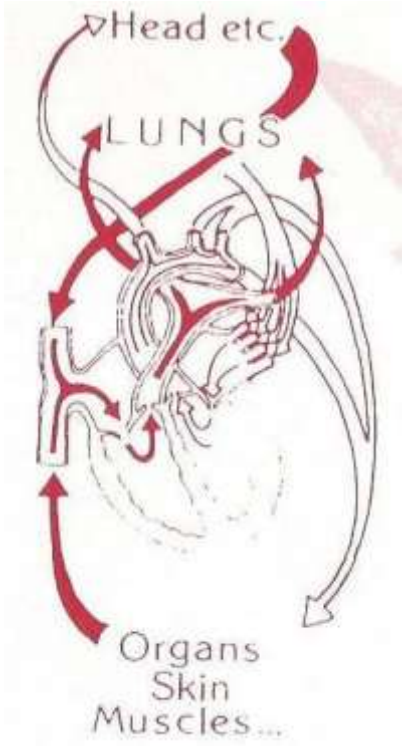
DRUGS

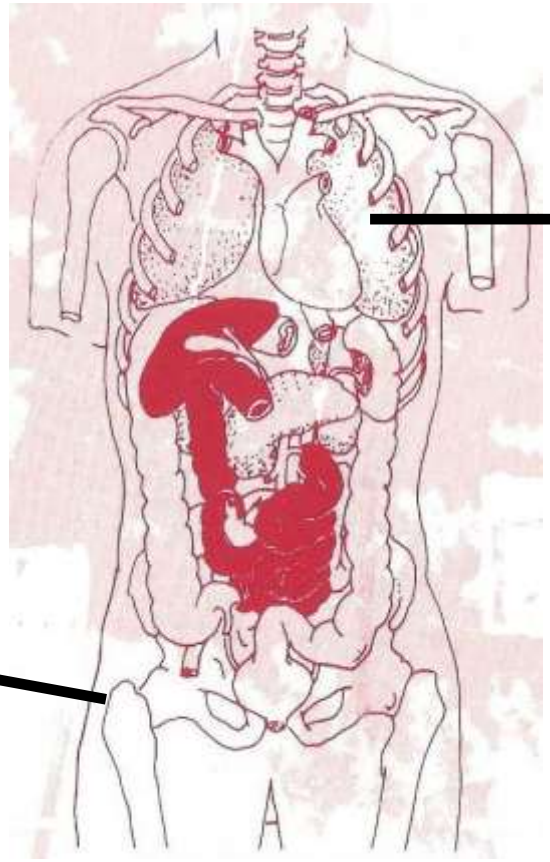
DIGESTION – ABSORPTION – METABOLISM :

INTESTINES
by synthesis

Protein metabolism
Formation of red blood cells

Stimulation of the intestinal bacteria enabling the production of folic acid.
Production of B5.





SUNSCREEN

HEALTH OF SKIN, INTESTINES; Pigmentation

Protects against cigarette smoke and air pollutants

SKIN AND HAIR. May restore grey hair to original colour

Reduced inflammation in Arthritis, Improves flexibility

DEFICIENCY SYMPTOMS :

FATIGUE, IRRITABILITY, DEPRESSION, NERVOUSNESS, HEADACHE, CONSTIPATION and other DIGESTIVE DISORDERS. Greying Hair, vitaligo.

PARAAMINOBENZOIC ACID (PABA) (B-complex)

Vitamin C
(ASCORBIC ACID)

Water Soluble

Daily Requirement 500 mg

Vitamin C, the Bioflavonoids (vit. P), calcium and magnesium should be taken together if in supplement form. The natural way all vitamin C foods should be eaten one hour before.
Vitamin C assimilates better with calcium. The level of absorbic acid © in the blood reached a maximum in two or three hours after ingestion of a moderate quantity, then decreases as it is eliminated in the wine and through perspiration. Most Vitamin C is out of the body within three or four hours. Because Vitamin C is a "stress vitamin" it is used up even more rapidly under stressful conditions. The human body is unable to meet the needs by synthesis and must rely upon dietary resources.
Toxicity symptoms usually do not occur with high intake of Vitamin C because the body simply discharges whatever it cannot utilize.
Vit C works synergistically with Vit E and betacarotine reinforcing each others antioxidant activity. Ester-C can be four times more effective.

SOME RICH FOODS ARE:
(per 100 gram)

ROSE HIPS	3,500. -- mg alkal.
ACEROLA CHERRY JUICE	1,600.-- mg alkal.
ACEROLA CHERRIES	1,066. -- mg alkal.
RED PEPPERS, dry	369.-- mg
GUAVA, raw	242.-- mg
PEPPERS, red, sliced, raw	204.-- mg
CURRANTS, black, raw	200.-- mg
PARSLEY, chopped, raw	151.47 mg alkal.
TURNIP GREENS, raw	139. -- mg alkal.
KALE, raw	125. -- mg alkal.
BRUSSEL SPROUTS	102. -- mg acid
GREEN PEPPERS, sliced, raw	130. -- mg alkal.
BROCCOLI, cooked	90.32 mg alkal.
STRAWBERRIES, raw	58.66 mg
LEMON	53. -- mg alkal.

SOURCE

Citrus fruits, rosehips, acerola cherries, alfalfa seeds (sprouted) cantaloupe, strawberries, broccoli, tomatoes, green peppers

DESTROYED/DEPLETED BY :

DRUGS

NICOTINE

ALCOHOL

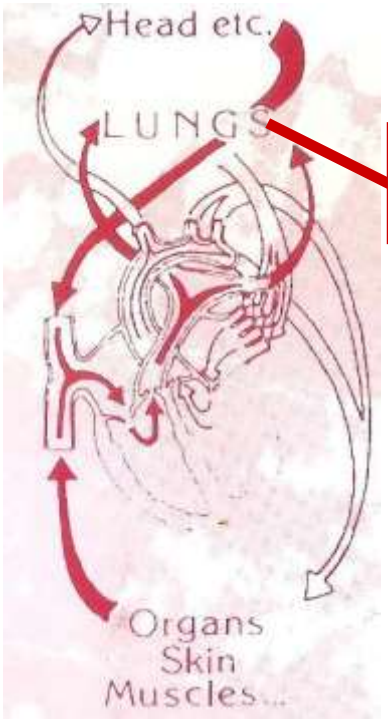
DESTROYED/DEPLETED BY : Vitamin C is the least stable vitamin and is very sensitive to OXYGEN. Its potency can be lost through exposure to LIGHT, HEAT, and AIR. The body's ability to absorb vitamin C is reduced by SMOKING, HIGH FEVER, STRESS, prolonged administration of ANTIBIOTICS or CORTISONE, inhalation of DDT or fumes of PETROLEUM, and the ingestion of ASPIRIN and other PAINKILLERS. ANTIDEPRESSANTS and ANTICOAGULANTS
BAKING SODA creates an alkaline medium that destroys vitamin C. Cooking in COPPER UTENSILS can destroy vitamin C as well.

Caution: during pregnancy avoid taking more then 5000mg daily

DIGESTION – ABSORPTION – METABOLISM :

GASTRO INTESTINAL TRACT

- Production of interferon. Immune System Support protects against infection.
- Formation of red blood cells
- Production of anti-stress hormones. Supports adrenal function
- Helps to prevent cancer, scavenges free radicals
- Maintenance of COLLAGEN, a protein necessary for formation of connective tissue in skin ligaments and bones.



- Reduces asthma symptoms
- Aids detoxification of heavy metals
- Reduces LDL (bad) cholesterol, increases HDL (good) cholesterol
- Lowers blood pressure
- Calcium metabolism Protection from oxidation for the vitamins B1, B2, B5, Folic Acid, A and E
- Conversion of inactive Folic Acid into active Folinic Acid

SKIN

DEFICIENCY/DEPLETION SYMPTOMS :

SHORTNESS of BREATH, IMPAIRED DIGESTION, POOR LACTATION, BLEEDING GUMS, WEAKENED ENAMEL OR DENTINE, tendency to BRUISING, SWOLLEN or PAINFUL JOINTS, NOSEBLEEDS, ANAEMIA, LOWERED RESISTENCE TO INFECTION, SLOW HEALING of WOUNDS, BURNS and FRACTURES; severe deficiency results in SCURVY, BREAKS in the CAPILLARY WALLS, where clots usually form at the points of break, therefore lack of Vitamin C can secondarily be the cause for STROKES and heart attacks by blood clotting.

VITAMIN C

Vitamin D

Water Soluble

Daily Requirement 800 mg

Vitamin D is best utilized when taken with Vitamin A, Calcium, Vitamin D2 known as calciferol, a synthetic. Vitamin D3 is the natural form as it occurs in fish liver oils. D3 can be made synthetically by ultraviolet irradiation of 7-dehydro-cholesterol, a derivate of cholesterol.
Vitamin D can be either acquired by ingestion or by exposure to sunlight. For fifteen minutes three times a week.
Pigmentation is a factor in the absorption of ultraviolet light. The more pigment there is, the less vitamin D is produced by the body through irradiation.

SOURCE

Salmon, sardines, herring, vitamin D fortified milk and milk products, egg yolk, organ meats, oat meal, sweet potatoes, vegetable oils.

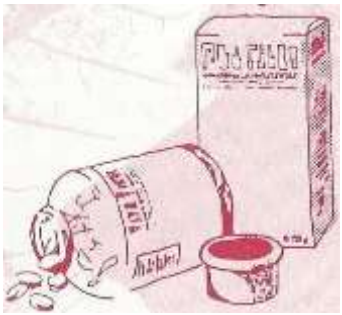
SOME RICH FOODS ARE :
(per 100 gram)

SOY MILK	345 mg alkal.
SUNFLOWER SEEDS	92 mg
BUTTER	60 mg acid
EGGS (2)	60 mg acid
SESAME SEEDS	15 mg acid

DESTROYED BY :

NICOTINE

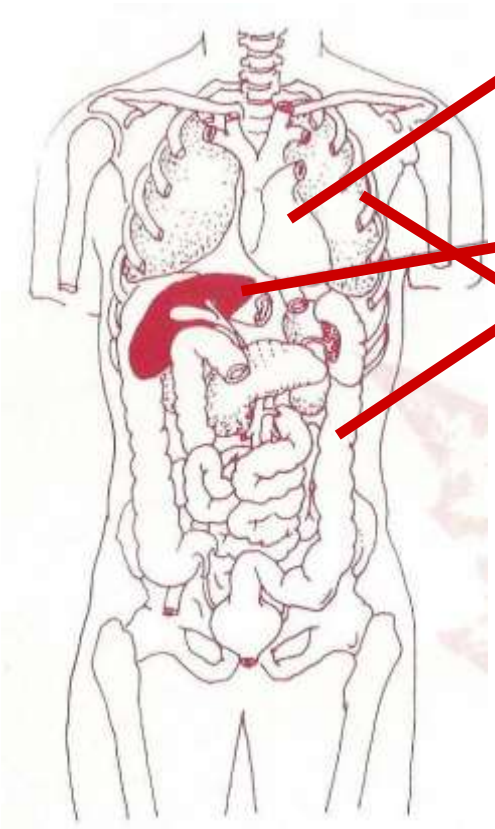
ALCOHOL



DRUGS

DESTROYED/DEPLETED BY : MINERAL OIL can destroy vitamin D already in the intestinal tract. Malabsorption through Liver and Gallbladder problems, cholesterol reducing drugs, antacids and cortisone.

DIGESTION - ABSORPTION - METABOLISM :



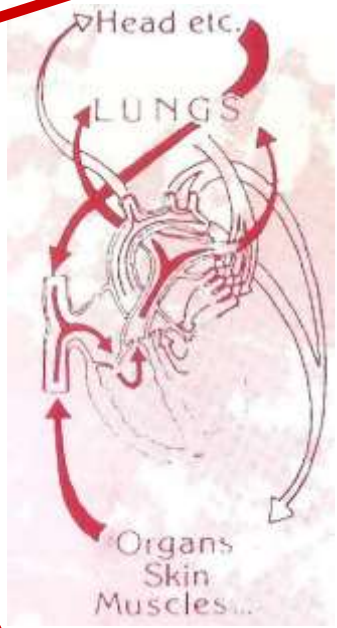
Regulation of Heartbeat

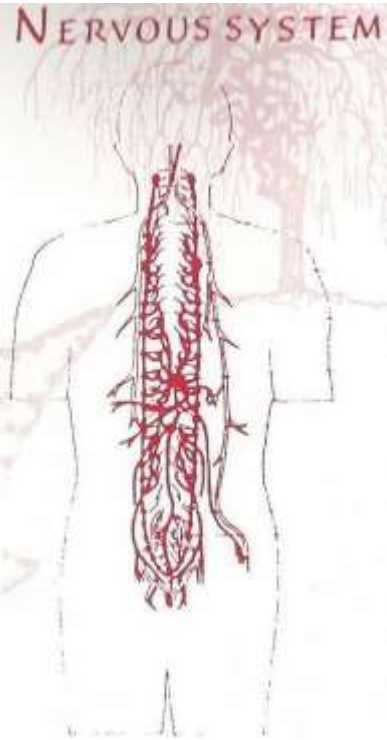
INTESTINAL TRACT
With aid of BILE

IN THE SKIN
From UV-in-radiation

LIVER
For Storage

Prevention and treatment of Breast and Colon Cancer





Aid in the absorption of calcium from the intestinal tract,
Breakdown and assimilation of PHOSPHORUS.....
BONE and TEETH formation.
Prevention of osteoarthritis and osteoporosis

Stable nervous system;
Normal heart action;
Normal blood clotting

DEFICIENCY/DEPLETION SYMPTOMS :

A deficiency of vitamin D leads to inadequate absorption of calcium from the intestinal tract and retention of phosphorus in the kidneys, leading to faulty mineralization of the bone structure. RICKETS is a direct result of vitamin D deficiency. Signs of rickets are SOFTENING OF THE SKULL, the fragile bones with BOWING OF THE LEGS, and SPINAL CURVATURE, ENLARGEMENTS OF THE WRISTS, KNEE NERVOUS IRRITABILITY; A D - deficiency may cause MYOPIA or NEARSIGHTEDNESS, FAULTY development of TOOTH STRUCTURE? FLABBINESS and POOR METABOLISM. Muscle Weakness, Loss of Appetite, Insomnia.

VITAMIN D

Vitamin E

(TOCOPHEROL)

Water Soluble

Daily Requirement 200 iu

Vitamin E is an antioxidant, opposing oxidation of substances in the body and assists in prevention of Cancer, particularly of the prostate, bowel and breast. Helps prevent cardiovascular disease. It prevents saturated fatty acids and Vitamin A from breaking down and combining with other substances which may become harmful to the body. It protects Vitamin B-complex as well as Vitamin C from oxidation. Fats and Oils containing Vitamin E are less susceptible to rancidity. Vitamin E has the ability to unite with oxygen and prevent it from being converted into toxic peroxides. It may also slow the progression of Alzheimer's disease.
Because aging in the cells is primarily due to oxidation, Vitamin E is useful in retarding that process. Vitamin E is non-toxic, even in large quantities and has been shown to protect against 80 diseases.
Synthetic Vitamin E is only 67% as effective as the natural d-alpha-tocopherol form.

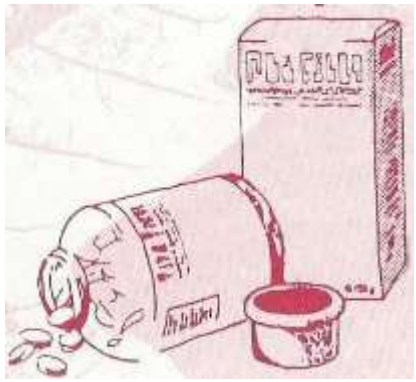
SOURCE

Cold pressed oils, eggs, wheat germ, organ meats, molasses, sweet potatoes, leafy vegetables, whole grains, brown rice, dulce, kelp,. Soy, water cress,

SOME RICH FOODS ARE:
(per 100 gram)

SUNFLOWER OIL	230.-- iu
CORN OIL	117.85 iu
COTTONSEED OIL	116.78 iu
SAFFLOWER OIL	112.50 iu
AVOCADOS	55.-- iu alkal.
HAZEL NUTS (FILBERTS), raw	31.11 iu acid
TOMATOES	30.-- iu alkal.
SUNFLOWER SEEDS	30.-- iu
ALMONDS, raw	22.50 iu alkal.
WHEAT GERM, raw	22.50 iu acid
CUCUMBER, sliced	12. -- iu alkal.
PEANUTS, roasted	9.75 iu acid

DESTROYED BY :



DRUGS

NICOTINE

DESTOYED/DEPLETED BY : There are several substances that interfere with or cause a depletion of vitamin E in the body. For example, when iron and Vitamin E are administered together, the absorption of both substances is impaired (especially iron in inorganic form).
CHLORINE in the drinking water, FERRIC CHLORIDE, RANCID OIL OR FAT and INORGANIC IRON COMPOUNDS destroy Vitamin E in the body. MINERAL OIL used as laxatives depletes Vitamin E. STEEL ROLLER MILLING.

DIGESTION - ABSORPTION - METABOLISM :

INTESTINES
With BILE salts

LIVER
STORAGE

ADRENAL & PITUITARY GLANDS

LYMPH

Promotes better functioning of Vitamin F .

TESTES & UTERUS

Increases fertility and potency and enhances sperm production.

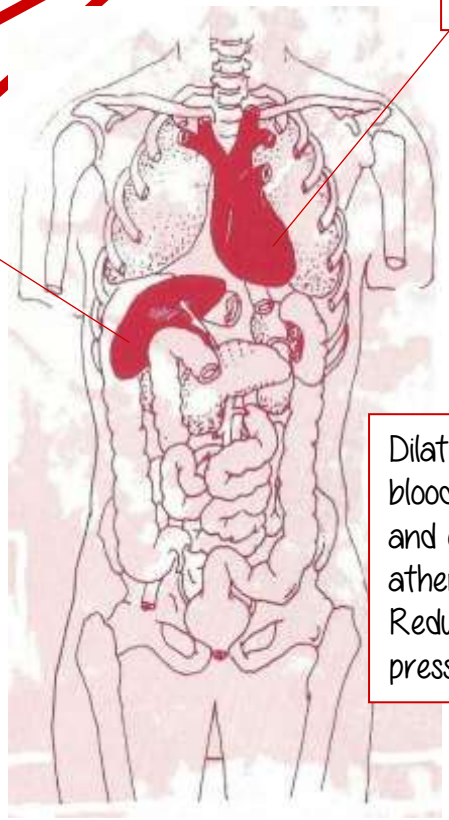
Stimulates Urination

MUSCLES

Cellular respiration of all muscles, especially cardiac and skeletal.

HEART

Dilation of the blood vessels and celation of atherosclerotic. Reduces blood pressure



Retards Aging

DEFICIENCY/DEPLETION SYMPTOMS :

Improper absorption may be partly responsible for muscular problems such as MUSCULAR DISTROPHY and poor performance in athletes and digestive problems, such as PEPTIC ULCERS and CANCER of the COLON. Poor absorption can impair the survival of the red blood cells. REDUCTION OF MEMBRANE STABILITY, tendency towards MUSCULAR WASTING or abnormal fat deposits in the muscles and an INCREASED DEMAND for OXYGEN.

In the case of deficiency, several amino acids cannot be utilized and pituitary and adrenal glands reduce their level of functioning. IRON ABSORPTION and HAEMOGLOBIN FORMATION are also IMPAIRED. GASTRO INTESTINAL DISEASE, where prolonged deficiency cause faulty absorption of fat and fat soluble vitamins, possibly resulting in CYSTIC FIBROSIS, BLOCKAGE OF THE BILE DUCTS and CHRONIC INFLAMMATION of the PANCREAS. Damage to red blood cells and destruction of nerves. Signs of deficiency can include infertility in both men and women, menstrual problems, spontaneous abortion, uterine degeneration, and neuromuscular impairment.

VITAMIN E

Vitamin F

(UNSATURATED FATTY ACIDS)

Water Soluble

Daily Requirement 90 g

The body cannot manufacture the essential unsaturated fatty acids : linoleic, linolenic and arachidonic, and they must be obtained from foods.
Unsaturated fatty acids usually come in the form of liquid vegetable oils, where saturated fatty acids are usually found in solid animal fats. The unsaturated fatty acids function in the body by cooperating with vitamin D in making calcium available to the tissues, assisting in the assimilation of phosphorus, and stimulating the conversion of carotene into Vitamin A. Fatty acids are related to the normal functioning of the reproductive system.
Hydrogenated oils are created by saturating the oil with hydrogen atoms at very high temperatures and bleaching the mixtures to make it white. The thus processed oil is much more difficult to metabolize for the body. For more information look under FATS at the beginning of this calendar.

DESTROYED BY : X-ray treatment and radiation destroys the essential fatty acids within the body, although destruction can be prevented if large doses of vitamin E are taken.
Vitamin F is easily destroyed when exposed to AIR and may become RANCID.

SOURCE

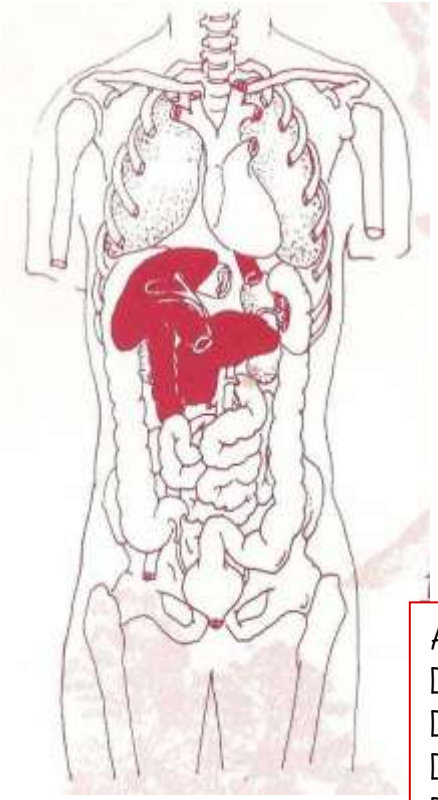
Vegetable Oil, butter, sunflower seeds

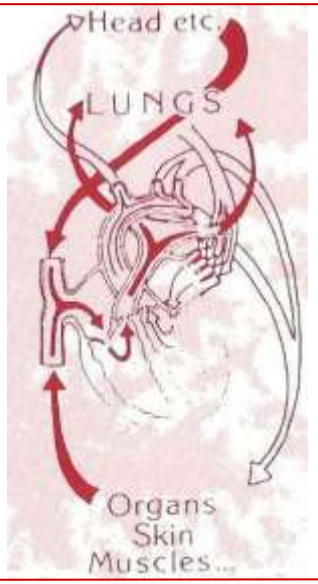
SOME RICH FOODS ARE:
(per 100 gram)

SAFFLOWER OIL	87 g
SUNFLOWER SEEDS	83 g
SESAME SEEDS	80 g
WHEAT GERM	77 g acid
OLIVE OIL	76 g
AVOCADO	69 g alkal.

DIGESTION - ABSORPTION - METABOLISM :

THE STOMACH, SMALL INTESTINE and PANCREAS normally produce liberal amounts of fat splitting enzymes, necessary for the conversion of fats into fatty acids and glycerol's (broken down fatty acids). These are absorbed through walls of the intestinal tract and are then transported through the portal vein to the LIVER, where they are usually metabolized as a source of energy. These changes must take place before the nutrients enter the bloodstream without causing food allergies.
The digested fat is taken from the GASTROINTESTINAL TRACT as fatty acids and glycerol. These then enter fat collecting ducts, which finally carry the fat to the lymphatic system, which is primarily concerned with collecting body fluids, and returning them to the general circulatory system.
Absorption of fat is DECREASED if there is an increased movement in the gastro intestinal tract and when there is an absence of bile, to break down the fat.
The fatty acids are stored in the ADIPOSE TISSUES.





DEFICIENCY SYMPTOMS :

A deficiency of vitamin F may be responsible for BRITTLE and LUSTERLESS HAIR, NAIL PROBLEMS, DANDRUFF and ALLERGIC CONDITIONS.
DIARRHEA, VARICOSE VEINS, UNDERWEIGHT and GALLSTONES may be symptoms of F-deficiency. SKIN DISORDERS such as ECZEMA, AKNE and DRY SKIN have been linked with F-deficiency. Also ailments like DISEASES of the HEART, CIRCULATORY SYST. and KIDNEYS associated with faulty fat metabolism.

VITAMIN F

Vitamin k

Water Soluble

Daily Requirement 2 g

There are three main K vitamins : K1, K2 can be manufactured in the intestinal tract, K3 is produced synthetically for the treatment of patients, who are unable to utilize naturally occurring vitamin K because they lack BILE, necessary for the absorption of all fat soluble vitamins. Vitamin K is an important VITALITY and LONGEVITY FACTOR. It can be safely used as a preservative to control fermentation in foods. It has no bleaching effect, no unpleasant odour, and when added to naturally coloured fruit, helps maintain a stable and effective condition.

If yoghurt, kefir or acidophilus milk is included in the diet, the body may be able to manufacture sufficient amounts of vitamin K. In addition, unsaturated fatty acids and a low carbohydrate diet increase the amounts of vitamin K produced by the intestinal flora.

Folic acid (B-complex) is manufactured in the small intestine with the intake of 12-14 oz of PLAIN YOGHURT, made from the Bulgarian acidophilus culture. In order to preserve that acid, yoghurt MUST NEVER BE COMBINED with HONEY, SUGAR or FRUIT (except BANANA). A GOOD COMBINATION with yoghurt would be any of the following: TORULA YEAST, BANANA, RAW WHEAT and VANILLA or PROTEIN.

SOURCE

Green leafy vegetables, egg yolk, safflower oil, Blackstrap molasses, cauliflower, soy beans, asparagus, broccoli, soy, wheat, yoghurt

SOME RICH FOODS ARE :
Per 100 gram)

ROSE HIPS	100 mg
PEAS, raw	52 mg
SOY MILK	39 mg
WHEAT GERM	1 mg acid

DESTROYED BY :

DESTROYED/DEPLETED BY :

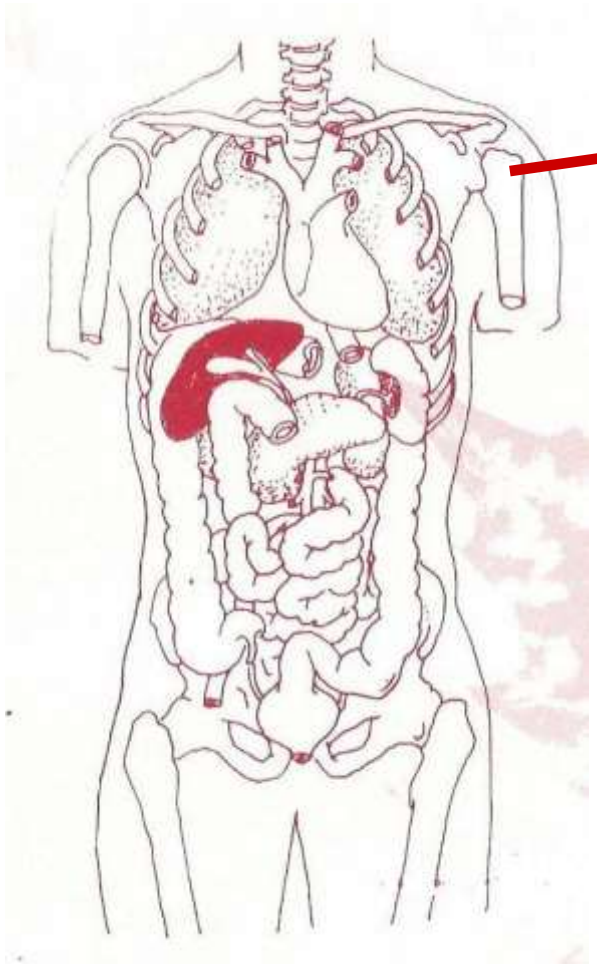
DRUGS

NICOTINE

Unaffected by either heat or air ; CAN BE COOKED WITHOUT LOSS. FROZEN FOODS, RANCID FATS, RADIATION, X-RAYS, ASPIRIN and industrial AIR POLLUTION all destroy vitamin K. USE of ANTIBIOTICS destroy the intestinal flora. Ingestion of mineral oil cause rapid excretion of vitamin K.

DIGESTION - ABSORPTION - METABOLISM :

UPPER INTESTINAL TRACT
With the aid of bile salts and intestinal flora

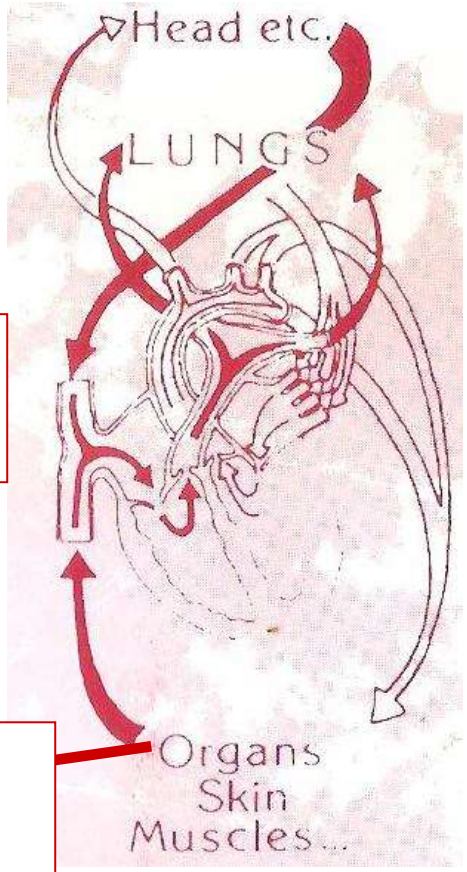


Bone formation synthesis of osteocalcium

LIVER

Glycogen conversion from glucose for healthy liver

Formation of PROTHROMBINE for blood clotting.



Helps prevent Cancers targeting inner linings of organs

DEFICIENCY SYMPTOMS :

Usually result from inadequate absorption or the body's inability to utilize vitamin K in the liver. K-deficiency is common in diseases like CELIAC DISEASE (intestinal malabsorption), SPRUE (malabsorption in adulthood), and COLITIS. A deficiency can cause HAEMORRHAGES in any part of the body, including the BRAIN, SPINAL CORD, and INTESTINAL TRACT ; it can also cause MISCARRIAGES, NOSEBLEEDS and can be a factor in CELLULAR DISEASE and DIARRHEA.

VITAMIN K

Vitamin P
(BIOFLAVONOIDS)

Water Soluble

Daily Requirement 350 g

Vitamin P is composed of a group of brightly coloured substances, that often appear in fruits and vegetables and vitamin C. The components are CITRIN, HESPERIDIN, QUERCITIN, RUTIN, FLAVONES and FLAVONALS.
Bioflavonoids are completely non-toxic. There is ten times the concentration of Bioflavonoids in the edible part of the fruit, than there is in the strained juice.

SOURCE	
GRAPES, black	900 mg alkal.
LEMON	850 mg alkal.
GRAPE FRUIT	550 mg alkal.
ROSE HIPS	490 mg alkal.
PLUMS (3 avg)	350 mg alkal
PRUNES	350 mg alkal

DESTROYED/DEPLETED BY :

Leached out by COOKING in WATER

DRUGS | NICOTINE | ALCOHOL

DIGESTION - ABSORPTION - METABOLISM :

Closely related to vitamin C

GASTRO INTESTINAL TRACT

- Stimulates Bile Production
- Increase strength of capillaries and regulate their permeability
- Antibacterial
- Assists vitamin C in maintenance of COLLAGEN (intercellular cement) Helps in the treatment of injuries.
- Reduce symptoms of oral herpes

DEFICIENCY SYMPTOMS :

Symptoms of vitamin P deficiency are closely related to those of vitamin C deficiency. Especially noted is the increased tendency to HAEMORRHAGING or bleed and BRUISE EASILY.
A deficiency of vitamins C and P may contribute to RHEUMATISM and RHEUMATIC FEVER.

VITAMIN P

Calcium

Daily Requirement 350 g

Calcium is the most abundant mineral in the body. To function properly Calcium has to be accompanied by MAGNESIUM, PHOSPHORUS and the vitamins A, C and D.
When excessive amounts of fat combine with Calcium, an insoluble compound is formed which cannot be absorbed. OXALIC ACID (found in chocolate, spinach and rhubarb) when combined with Calcium makes another insoluble compound and may form into stones in the gallbladder or kidneys. Large amounts of PHYTIC ACID (present in cereals and grains) may inhibit the absorption of Calcium in the body. Interfering with the absorption is also LACK OF EXERCISE, EXCESSIVE STRESS and TOO RAPID a FLOW of FOOD through the intestinal tract.

SOURCE
Milk and milk products, green leafy vegetables, shellfish, molasses ; Dolomite, Tahini, Asparagus, Brewers Yeast, Broccoli, Dulce, Kelp, Cabbage, Figs

SOME RICH FOODS ARE :
(per 100 gram)

MILK, dried, whole, instant	1402.94 mg acid
HIJIKI, (Seaweed)	1400.-- mg alkal.
WAKAME, (SEAFOOD)	1300.-- mg alkal.
MILK, dried, non-fat	1256.66 mg acid
MILK, dried, non-fat, instant	1230.88 mg acid
PARMESAN CHEESE, hard	1142.85 mg acid
KELP (SEAWEED)	1093.-- mg alkal.
MILK, dried, whole	912.50 mg acid
DULSE	567.-- mg alkal.
SOY BEANS, fermented, (NATTO)	467.-- mg alkal.
AGAR AGAR	400.-- mg alkal.
SOY BEANS, fermented, (MISO)	308.-- mg alkal.
BLACKSTRAP MOLASSES	258.-- mg acid
SOY FLOUR, defatted, stirred	256.-- mg
ALMONDS, raw	234.-- mg alkal
CHICKPEAS (GARBANZOS)	150.-- mg acid

DESTROYED BY :

NICOTINE

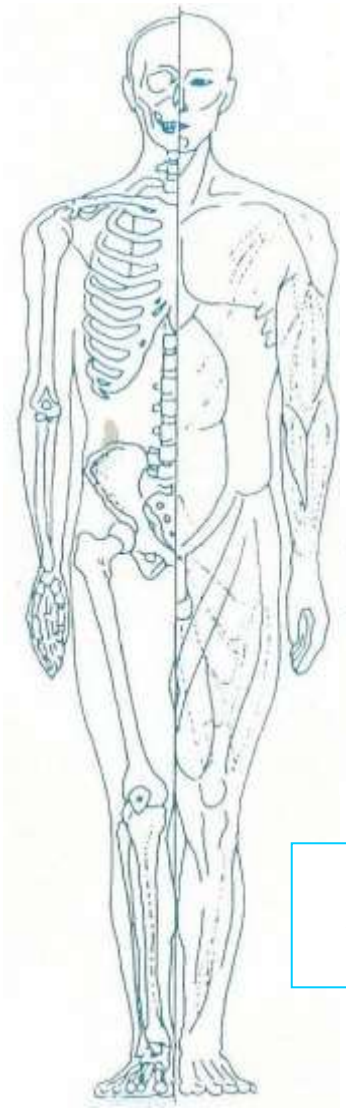
DRUGS

ALCOHOL

DESTROYED BY : SMOKING, ALCOHOL, EXCESSIVE amounts of FAT, STRESS, LACK of EXERCISE, LACK of SLEEP

DIGESTION - ABSORPTION - METABOLISM :

Calcium absorption is very inefficient and usually just 20 % - 30 % of ingested calcium is absorbed. Unless calcium is in a water soluble form in the intestine, it will not be properly absorbed.



Helps breakdown fats

Protects against preeclampsia

DUODENUM to UPPER INTESTINAL TRACT

Helps prevent Cancer

Regulates Heartbeat in NERVE TRANSMISSION

MUSCLES for growth and contraction

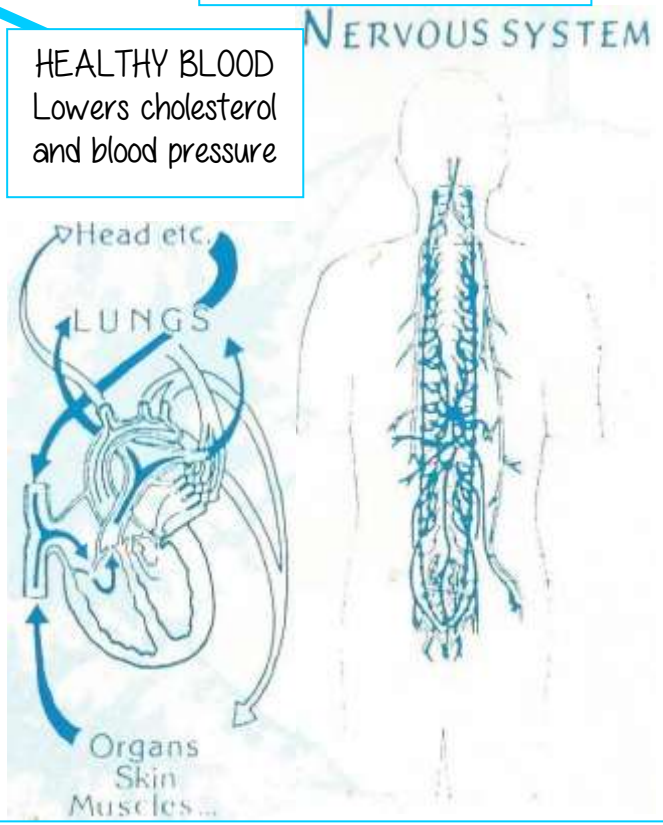
HEALTHY BLOOD Lowers cholesterol and blood pressure

BONES TEETH & GUMS. Prevents bone loss.

UTILIZATION of IRON

Participates in protein structure of RNA and DNA

REGULATES ACID - ALKALINE BALANCE



DEFICIENCY/DEPLETION SYMPTOMS :

High Blood Pressure and Cholesterol.

MUSCLE CRAMPS, NUMBNESS and TINGLING in arms and legs, IRRITABILITY of MUSCLES

RICKETS and BONE MALFORMATION; POROUS and FRAGILE BONES; JOINT PAINS; TOOTH DECAY; IMPAIRED GROWTH

HEART PALPITATIONS, SLOW PULSE RATES

Cognitive Impairments, Depression, Delusions

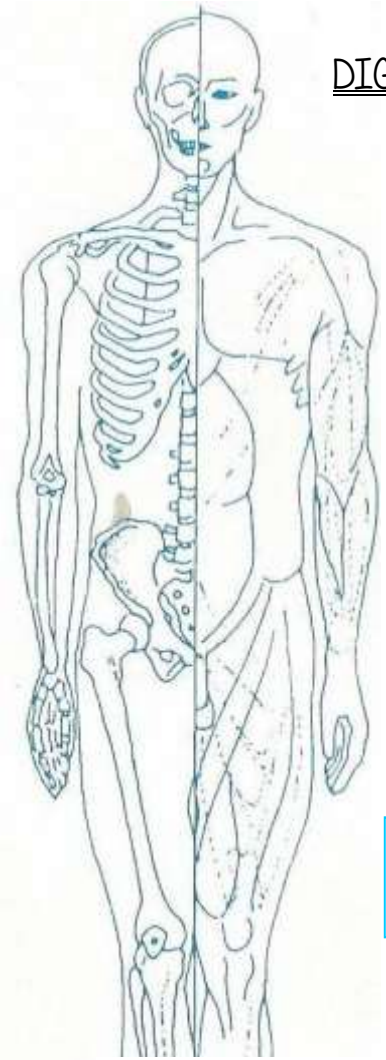
NERVOUS AFFLICTION EXCESSIVE IRRITABILITY of NERVES

Eczema

Chlorine

Daily Requirement 1 ½ mg (1,50)

Chlorine occurs in the body mainly in compound form with SODIUM and POTASSIUM



DIGESTION - ABSORPTION - METABOLISM :

INTESTINE

CEREBRO SPINAL FLUID
for storage

- HEALTHY JOINTS and TENDONS
- Production of hydrochloric acid for DIGESTION
- LIVER STIMULATION
- Regulation of the ACID-ALKALI balance in the blood
- HORMONE DISTRIBUTION

SOURCE

Table salt, seafood, meats, ripe olives, rye flour.

SOME RICH FOODS ARE:
(per 100 gram)

TOMATOES	1800 mg alkal.
KELP	1220 mg alkal.
AVOCADO	654 mg alkal.
BLACKSTRAP MOLASSES	317 mg acid
EGGS (2)	106 mg acid

DEFICIENCY SYMPTOMS :

- HAIR and TOOTHLOSS
- IMPAIRED DIGESTION
- POOR MUSCULAR CONTRACTION

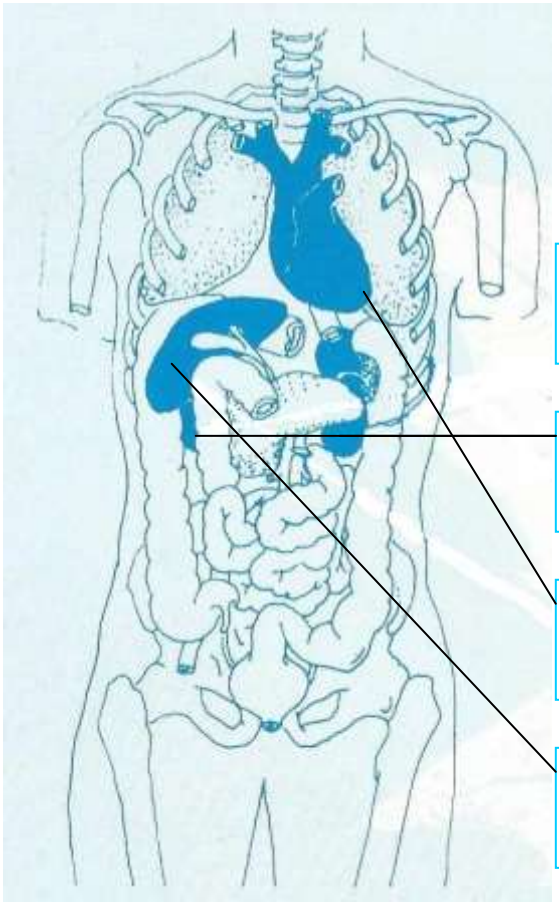
Copper

Daily Requirement 5 mg

Do not exceed this amount, toxic above 10mg

Copper is a TRACE MINERAL, found in the body tissues and is best balanced with Iron, Zinc and Calcium.

DIGESTION - ABSORPTION - METABOLISM :



STOMACH AND UPPER INTESTINE
Only 30% of ingested copper is used

BRAIN
storage

KIDNEYS
storage

HEART
storage

LIVER
storage

Formation of HEMOGLOBIN and red blood cells

PROTEIN METABOLISM
Particularly skin and connective tissue

PRODUCTION OF RNA

Formation and maintenance of BONES

SKIN

SOURCE

Organ meats, seafood, nuts, legumes, molasses, almonds, avocados, lentils, oats, oranges, raisins, soy, green leafy vegetables

SOME RICH FOODS ARE:
(per 100 gram)

SHRIMP	170.31 mg acid
BAKER'S YEAST, dry, active	7.-- mg acid
CALF LIVER	7.92 mg acid
LAMBS LIVER	5.50 mg acid
COWS LIVER	2.79 mg acid
PRUNES	2.50 mg acid
LOBSTER	2.20 mg acid
BLACKSTRAP MOLASSES	2.-- mg acid
SUNFLOWER SEEDS, dried, hulled	1.77 mg
MUSHROOMS, raw	1.54 mg alkal.
BRAZIL NUTS	1.52 mg acid
TORULA YEAST	1.25 mg

DEFICIENCY/DEPLETION SYMPTOMS :

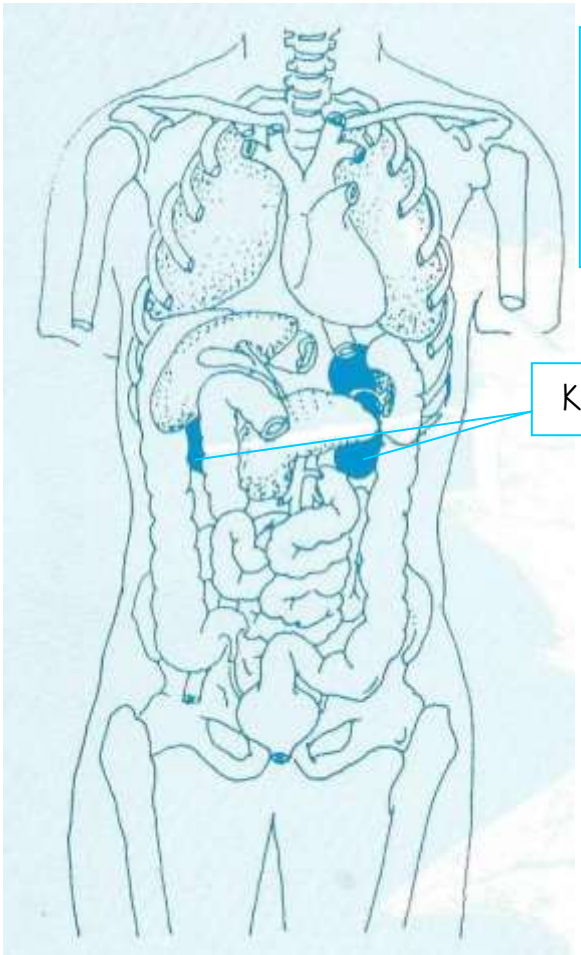
ANAEMIA | GENERAL WEAKNESS | IMPAIRED RESPIRATION | BALDNESS | SKIN SORES | INCREASED BLOOD FAT

Iodine

Daily Requirement 3 mg

Iodine is a trace mineral most of which is converted into IODIE in the body.

DIGESTION - ABSORPTION - METABOLISM :



Essential for cell normalization, protects against Cancer

GASTRO INTESTINAL TRACT

KIDNEYS

THYROID GLAND
Ca.30% absorbed.
Proper development and functioning of thyroid

MENTALITY, SPEECH

CHOLESTEROL SYNTHESIS

PRODUCTION of ENERGY

CONDITION of HAIR, NAILS, SKIN and TEETH

SOURCE

Seafood, mushroom, Irish moss, Iodised Salt, Asparagus, Dulce, Garlic, Lima Beans

SOME RICH FOODS ARE:
(per 100 gram)

KELP	150 mg alkal.
EGGS (2)	13 mg acid
DULSE	8 mg alkal.

DEFICIENCY/DEPLETION SYMPTOMS :

SLOWED MENTAL REACTIONS
TREMOR, NERVOUSNESS,
RESTLESSNESS, IRRITABILITY

NEONATAL HYPOTHYROIDISM

GOITER

Breast and Soft Tissue Cancers

FATIGUE

HARDENING of ARTERIES, OBESITY, SLUGGISH METABOLISM

RAPID PULSE and HEART PALPITATIONS

Weight Gain

DRY HAIR

IODINE

Sulphur

Daily Requirement 1 ½ mg (1.50)

Sulphur is a non-metallic element that occurs widely in nature, being present in every cell of animals and plants. Sulphur makes up 0.25% of the human bodyweight. Sulphur is prevalent in KERATIN, a tough protein substance necessary for health and maintenance of the SKIN, NAILS and HAIR. It is found in INSULIN, the hormone that regulates carbohydrate metabolism.

SOURCE

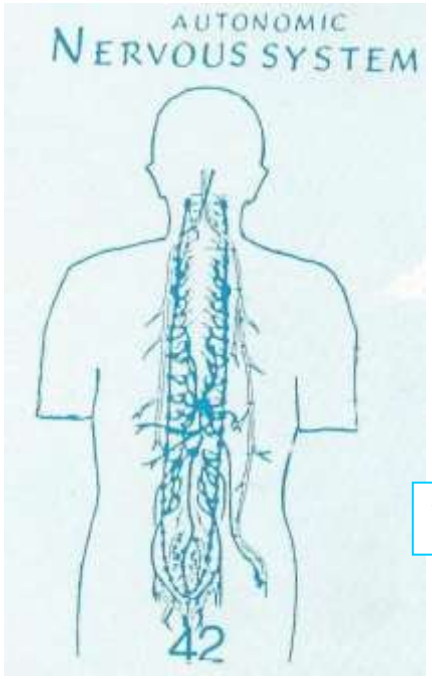
Fish, eggs, meats, cabbage, brussel sprouts, Garlic, Amonds, Soy, Turnips Dried Beans, Wheat Germ, Methylsulphonyl, Methane

SOME RICH FOODS ARE:
(per 100 gram)

BRUSSEL SPROUTS	3530 mg acid
RASBERRY	1150 mg
KELP	930 mg alkal.
HAZELNUTS (FILBERTS)	446 mg acid
EGGS (2)	154 mg acid

DIGESTION - ABSORPTION - METABOLISM :

- INTESTINES
  - Protects protoplasm of cells
  - Slows Ageing
  - Part of Chemical Structure of Amino Acids
  - Disinfects the blood. Helps resist bacteria. Protects against toxic substances and radiation
- Strong healthy NERVES together with B1, B5 and Biotin
- LIVER for secretion of BILE
- INSULIN for regulation of carbohydrate metabolism
- EVERY CELL OF THE BODY Cellular respiration
  - HAIR. SKIN and NAILS Colagen Formation



DEFICIENCY SYMPTOMS

THERE ARE NO KNOWN DEFICIENCY SYMPTOMS OR EFFECTS

Iron

Daily Requirement 15 mg

Iron is a mineral concentrated in every living cell. All iron exists in the body combined with PROTEIN.. Sufficient Stomach Acid, COPPER, MANGANESE, Vit A and B-Complex must be present for IRON to be absorbed properly. Do not supplement at the same time with Vitamin E.

SOURCE

Meats, eggs, fish and poultry, Blackstrap molasses, cherry juice, green leafy vegetables, dried fruits.

SOME RICH FOODS ARE :

(per 100 gram)

KELP	100.-- mg alkal.
BRAN FLAKES 40% fortified	35.42 mg acid
TORULA YEAST	19.64 mg
BREWER'S YEAST, debittered	17.50 mg
SOY BEANS, fermented (NATTO)	16.80 mg alkal.
RICE BRAN	16.09 mg acid
WHEAT BRAN	14.89 mg acid
POTATO FLOUR	14.76 mg alkal.
WAKAME	13.-- mg alkal.
PUMPKIN & SQUASH SEEDS, dried, hulled	11.21 mg
SOY FLOUR, defatted, stirred	11.08 mg
LAMBS LIVER	10.88 mg acid
WHEAT GERM	10.-- mg acid
CALF LIVER	8.78 mg acid
SOY FLOUR, full-fat, stirred	8.33 mg
BLACKSTRAP MOLASSES	8.-- mg acid
BLACK BEANS	7.90 mg
CHICKEN LIVER	7.88 mg acid
ALMOND MEAL	7.28 mg alkal.
SOY BEAN GRANULES	7.10 mg alkal.
SUNFLOWER SEEDS, dried, hulled	7.10 mg alkal.

RICH FOODS (Contd) :

CHICKPEAS (GARBANZOS), dry	6.90 mg acid
PARSLEY, chopped. Raw	6.16 mg alkal.
APRICOT, dried	5.50 mg acid
OYSTER	5.50 mg acid
VENISON (deer)	5.-- mg acid
BUCKWHEAT FLOUR	5.-- mg

DESTROYED/DEPLETED BY :

LACK of HYDROCHLORIC ACID, administration of ALKALIS, HIGH intake of CELLULOSE, COFFEE and TEA, increased intestinal mobility. Heavy menstruation, Lack of B6 and B12, strenuous exercise and heavy perspiration. Excessive amounts of Zinc and Vitamin E Candida and Herpes infection

NICOTINE

DRUGS

ALCOHOL

CAFFEINE

DIGESTION - ABSORPTION - METABOLISM :

UPPER SMALL INTESTINES

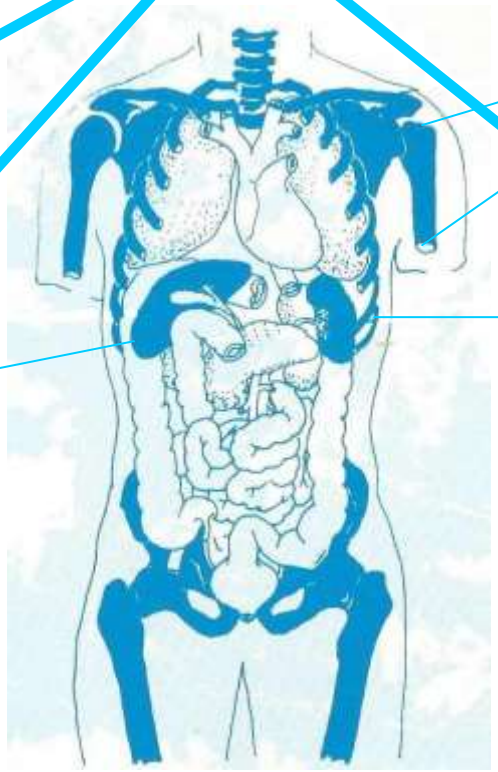
BLOOD
storage

Making of HAEMOGLOBIN & MYOGLOBIN colouring matter of red blood cells. Oxygen Transport.

RESPIRATORY ACTION

LIVER
storage

PROTEIN METABOLISM



BONE MARROW
storage

Energy Production

SPLEEN
storage

Healthy Immune System

DEFICIENCY/DEPLETION SYMPTOMS :

FRAGILE BONES

INFLAMMATION OF MOUTH TISSUES

ANAEMIA

DIGESTIVE DISTRUBANCES

DIFFICULT BREATHING

ABNORMAL FATIGUE

SLOWED MENTAL REACTIONS & NERVOUSNESS

DIFFICULT SWALLOWING

OBESITY

HAIR LOSS, LUSTERLESS and BRITTLE NAILS LONGDITUDENAL NAIL RIDGES

IRON

Magnesium

Daily Requirement 400 mg

Magnesium is an essential mineral that accounts for about 0.05% of the total body weight.
Magnesium is involved in many essential metabolic processes. Most magnesium is found inside the cell, where it activates enzymes necessary for the metabolism of carbohydrates and amino acids. If calcium intake is high, Magnesium intake has to be high as well. There is an increased need for magnesium when BLOOD CHOLESTEROL is HIGH as well as CONSUMPTION of PROTEIN.
Because Magnesium acts as ALKALI, it SHOULD NOT be TAKEN AFTER MEALS. Large amounts of magnesium can be TOXIC, especially IF CALCIUM INTAKE is low and PHOSPHORUS INTAKE is HIGH. Some HORMONES when used as DRUGS can upset the metabolism and cause LOCAL DEFICIENCIES.

SOURCE

Seafood, whole grains, dark green vegetables, molasses, nuts, Epsom salts, beans, bran, oats

SOME RICH FOODS ARE :

(per 100 gram)

KELP	760.-- mg alkal.
WHEAT GERM, raw	511.-- mg acid
WHEAT BRAN, raw	489.47 mg acid
AGAR AGAR	400.-- mg alkal.
HONEY	386.-- mg
PEANUT FLOUR, defatted	360.-- mg acid
SOY FLOUR, defatted, stirred	310.14 mg
SOY FLOUR, low-fat, stirred	289.-- mg
ALMONDS, raw	271.83 mg alkal.
CASHEW NUTS, roasted	267.14 mg acid
BRAZIL NUTS, raw	250.71 mg acid
SNAILS	250.-- mg acid
SOY FLOUR, full-fat, stirred	247.22 mg
HAZELNUTS (FILBERTS), raw	231.85 mg acid
WALNUTS, black, chopped	190.40 mg acid
SESAME SEEDS, dried, hulled	180.-- mg
PEANUTS, roasted	175.00 mg acid

Contd.

RED CHILLI PEPPERS, hot, canned	170.61 mg
MILLET, whole grain, dry	161.84 mg acid
PECAN NUTS, raw	131.48 mg acid
WALNUTS, English, raw	131.-- mg acid
RYE FLOUR, dark	114.84 mg
WHEAT FLOUR, whole, stirred	113.33 mg
SOY BEAN CURD (TOFU)	111.-- mg alkal.
MILK, dried, non-fat	110.-- mg acid
WHEAT MEAL CEREAL	102.40 mg acid
MILK, dried, whole	84.37 mg acid
SPINACH, raw	80.-- mg alkal.

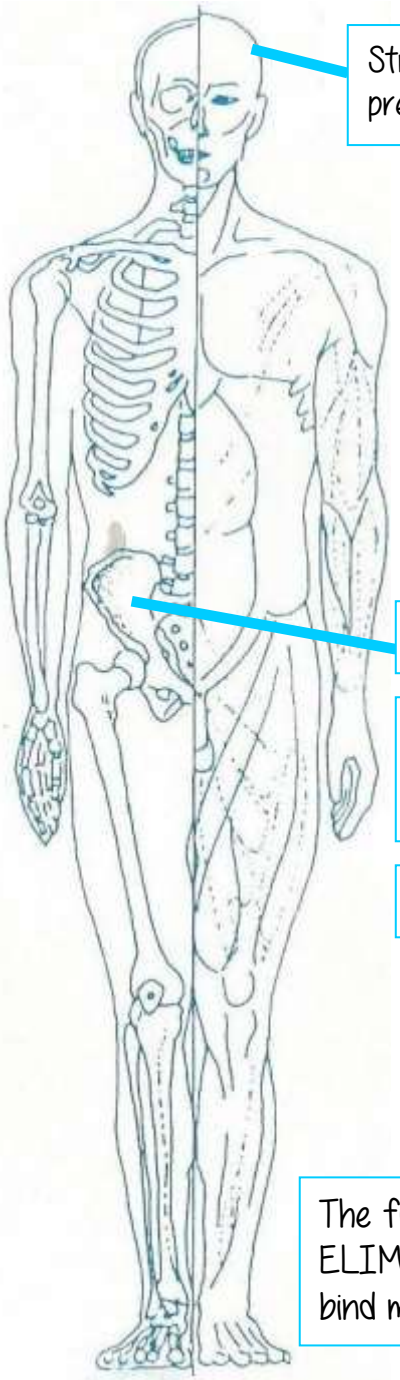
DESTROYED/DEPLETED BY :

ALCOHOL | NICOTINE

ALCOHOL DIURETICS; FLUORIDE, HIGH LEVELS OF ZINC & VITAMIN D, Foods high in oxalic acid and High intake of Fat soluble vitamins. Deficiency may occur with a high carbohydrate and high fat diet.

DIGESTION - ABSORPTION - METABOLISM :

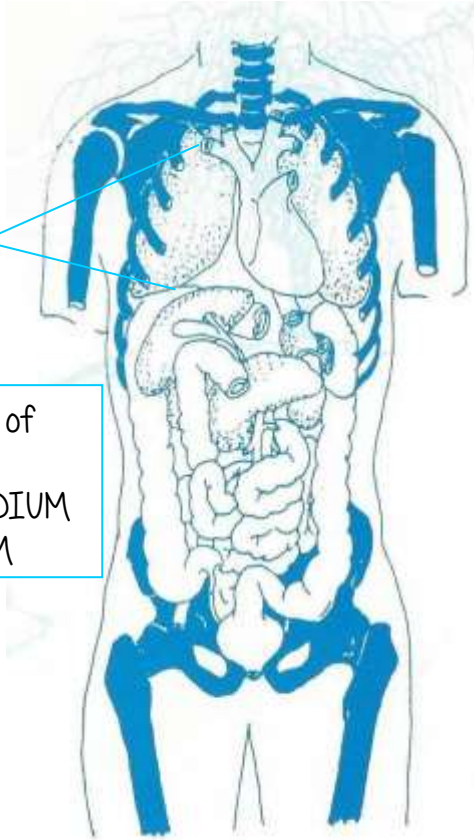
SMALL INTESTINE



Stress reduction helps prevent depression

SOFT TISSUE and BODY FLUIDS 30% stored

BONES 70% stored



NEURO MUSCULAR CONTRACTION

Helps utilize vitamins B-complex, C and E

Helps absorption of CALCIUM, PHOSPHORUS, SODIUM & POTASSIUM

Helps prevent Calcification

Supplementation before pregnancy reduce birth defects

Reduces Cholesterol

Conversion of blood sugar into ENERGY

Metabolism of CARBOHYDRATES and AMINO ACIDS

Helps maintain correct PH balance

DEFICIENCY/DEPLETION SYMPTOMS :

MUSCLE TWITCH, TREMOR

CORONARY HEART DISEASE

APPREHENSIVENESS, CONFUSION and DISORIENTATION Irritability, Nervousness, Headaches

The first step in treating Magnesium deficiency, especially in young children is to ELIMINATE MILK from the diet. CALCIFEROL (synth. Vit. D) like FLUORINE tends to bind magnesium and carry it out of the body. Milk contains high amounts of calciferol)

ARTHRITIS, OSTEOPOROSIS

KIDNEY STONES

VESOCONSTRICTION, HIGH BLOOD PRESSURE

PRE MENSTRUAL SYNDROME

PREMATURE LABOUR

MAGNESIUM

Manganese

Daily Requirement 15 mg

Manganese is a trace mineral and plays an active part in activating numerous enzymes. It is essential for people with Iron deficiency anaemia's.
Manganese is very poorly absorbed while in the intestinal tract. Large intakes of CALCIUM and PHOSPHORUS in the diet will depress Manganese absorption. The adult body contains only 10 to 20 mg of manganese. A deficiency can affect the glucose tolerance, resulting in the ability to remove excess sugar from the blood by oxidation and/or storage. Manganese works well with B-complex, promoting a feeling of well being. It aids the production of Mothers milk.

SOURCE

Whole grains, green leafy vegetables, legumes, nuts, pineapples, egg yolk, seeds and seaweed.

SOME RICH FOODS ARE:

(per 100 gram)

WHEAT BRAN, raw	5.89 mg acid
OAT MEAL	5.-- mg acid
OAT FLAKES, fortified	4.89 mg acid
HAZELNUTS (FILBERTS), raw	4.20 mg acid
TORULA YEAST	3.-- mg
BRAZIL NUTS, raw	2.78 mg acid
EGGS (2)	2.50 mg acid
BUCKWHEAT FLOUR, dark	2.09 mg
AVOCADO, raw	2.-- mg alkal.
ALMONDS, raw	1.90 mg alkal.
PEANUTS, roasted	1.50 mg acid
PECAN NUTS, raw	1.42 mg acid
PINEAPPLE, raw	1.01 mg alkal.
BEETS, raw	0.94 mg alkal.

DESTROYED BY :

NICOTINE

ALCOHOL

DIGESTION - ABSORPTION - METABOLISM :

INTESTINAL TRACT

Formation of Cartilage and Synovial Fluids of the joints.

LIVER
storage

Immune System Support

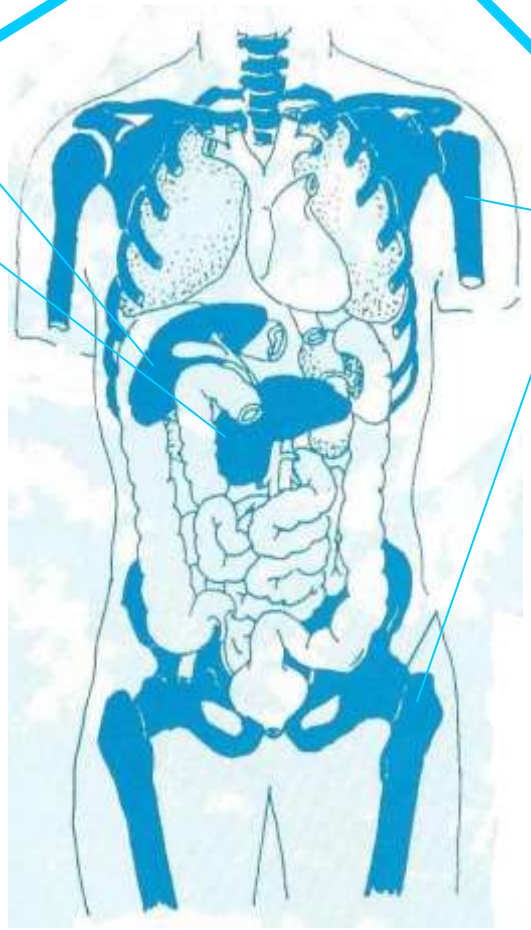
PITUARY GLAND
storage

Protein, carbohydrate and fat metabolism

Manganese is a catalyst in synthesis of fatty acids and cholesterol

PANCREAS
storage

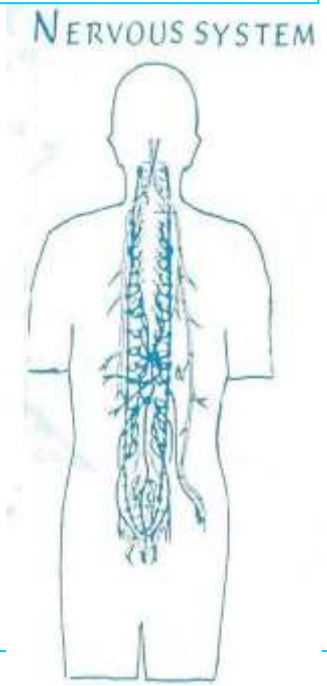
Production of milk and urea (part of urine)



BONES
Storage and synthesis

Normal SKELETAL development

Maintenance of sex hormone production and nourishment of nerves and brain.



DEFICIENCY/DEPLETION SYMPTOMS :

BLINDNESS and DEAFNESS in infants
DIZZINESS, EAR NOISES, LOSS OF HEARING may occur in adults.

PARALYSIS and CONVULSIONS, CONFUSION, MEMORY LOSS

ATHEROSCLEROSIS, HYPERTENTION, HIGH CHOLESTEROL.

PANCREATIC DAMAGE

PROFUSE PERSPIRATION

BREAST AILMENTS

RAPID PULSE

TOOTH GRINDING

MANGANESE

Phosphorus

Daily Requirement 600 mg

Phosphorus is the second most abundant mineral in the body. It is found in every cell and often functions along with calcium.
The healthy body maintains a specific calcium - phosphorus balance in the bones of 2.5 parts calcium to 1 part phosphorus.
About 70% of ingested phosphorus is absorbed. NIACIN (B3) and RIBOFLAVIN cannot be digested unless phosphorus is present. Vitamin D increases the effectiveness of Phosphorus.

SOURCE

Fish, meats, poultry, eggs, legumes, milk and milk products, nuts, whole grain cereals, Asparagus, Brewer's Yeast, Sesame and Sunflower Seeds.

SOME RICH FOODS ARE :
(per 100 gram)

SOY BEANS, fermented (MISO)	1402.-- mg alkal.
PUMPKIN & SQUASH SEEDS, dried, hulled	144.28 mg
WHEAT GERM, toasted	1125.-- mg acid
WHEAT GERM, raw	1118.-- mg acid
RICE BRAN	1105.71 mg acid
MILK, dried, non-fat	968.33 mg acid
ALMOND MEAL	925.-- mg alkal.
SUNFLOWER SEEDS, dried, hulled	837.24 mg
SOY BEANS, fermented (NATTO)	826.-- mg alkal.
BRAZIL NUTS, raw	692.85 mg acid
SOY FLOUR, defatted, stirred	655.07 mg
SOY FLOUR, low-fat, stirred	634.-- mg
GRUYERE CHEESE	614.28 mg acid
SOY FLOUR, full-fat, stirred	558.33 mg
GOUDA CHEESE	553.57 mg acid
RYE FLOUR, dark	535.93 mg
ALMONDS, raw	504.22 mg alkal.
ALMONDS, roasted, salted	503.82 mg acid

DESTROYED BY :

ALCOHOL

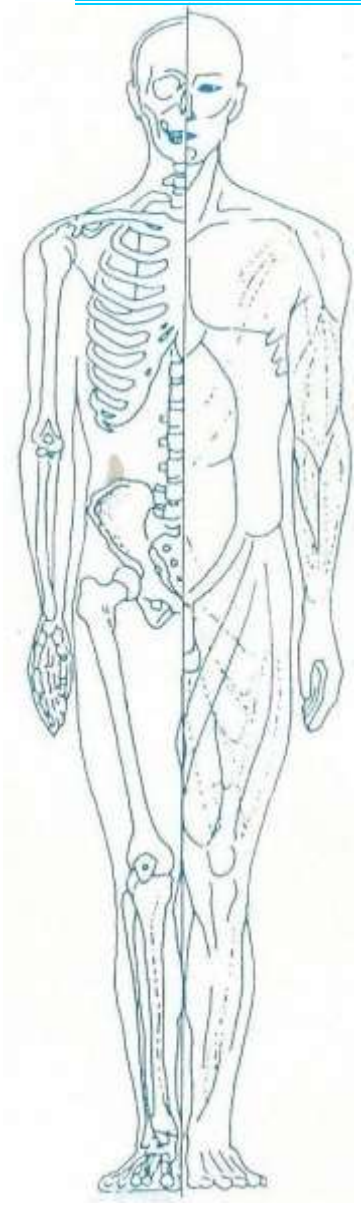
NICOTINE

SUGAR

DRUGS

DESTROYED BY : WHITE SUGAR, HIGH FAT DIETS or digestive conditions that prevent the absorption of fat disturb the calcium - phosphorus balance.

DIGESTION - ABSORPTION - METABOLISM :



INTESTINES

Blood Clotting

Carbohydrate, fat-utilization and production of ENERGY

Proper KIDNEY functioning

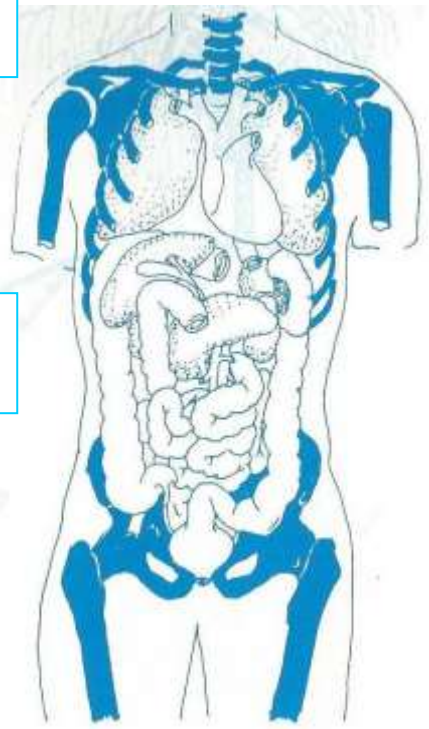
BONES AND TEETH
88% stored

Stimulation of heart muscle contraction. Maintains normal rhythm

Growth, maintenance and repair of cells

Transferable of NERVE IMPULSES

Proper development of BONES and TEETH



DEFICIENCY/DEPLETION SYMPTOMS

IRREGULAR BREATHING, LACK OF APPETITE, WEIGHT LOSS

MENTAL and PHYSICAL FATIGUE & NERVOUS DISORDERS, ANXIETY

STUNTED GROWTH, POOR QUALITY OF BONES and TEETH and other bone disorders

RICKETS and TOOTH DECAY

WEIGHT CHANGES

ARTHRITIS, PYORRHEA

PHOSPHORUS

Potassium

Daily Requirement 700 mg

Potassium is an essential mineral, found mainly in the intracellular fluid, only a small amount is found in the extracellular fluid. Potassium constitutes 5% of the total mineral content of the body. It unites with phosphorus to send oxygen to the brain. Potassium decreases with age, accounting for circulatory damage, lethargy and weakness in older people. Taken with Magnesium and B6 it can help prevent Kidney Stones.

SOURCE

Lean meats, whole grains, vegetables, dried fruits, legumes, sunflower seeds, fish, apricots, avocados, lima beans,. Molasses, brewer's yeast, brown rice, potatoes, garlic, nuts, dates, figs, torula yeast, yams

SOME RICH FOODS ARE :
(per 100 gram)

MILK, whole, instant	2054.41 mg acid
SOY FLOUR, low-fat, stirred	1859.-- mg
SOY FLOUR, defatted, stirred	1820.28 mg
MILK, dried, non-fat	1794.16 mg acid
SOY FLOUR, full-fat, stirred	1659.72 mg
MILK, dried, whole	1329.68 mg acid
NAVY BEANS	1300.-- mg
BLACK BEANS, dry	1038.-- mg
CHICKPEAS (GARBANZOS)	797.-- mg acid
BANANA	400.-- mg alkal.

DESTROYED BY :

CAFFEINE

SUGAR

ALCOHOL

NICOTINE

DRUGS

DESTROYED/DEPLETED BY :

EXCESSIVE use of SALT, LAXATIVES, PROLONGED DIARRHEA, EXCESSIVE SWEATING, VOMITING and the use of DIURETICS; ALCOHOL, COFFEE increase the urinary excretion of potassium.
Excessive intake of SUGAR; HORMONE PRODUCTS such as CORTISONE or ALDOSTERON and LIQUORICE

DIGESTION - ABSORPTION - METABOLISM :

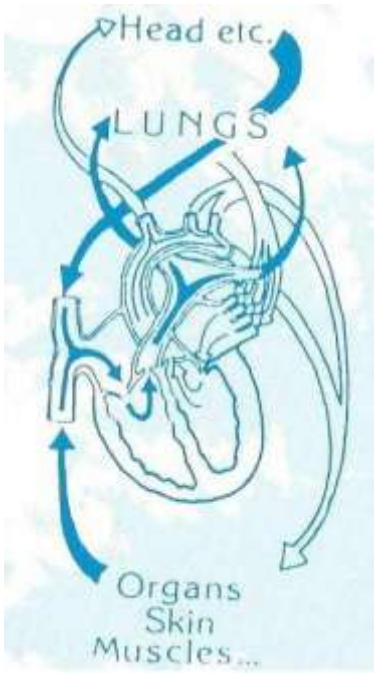
SMALL INTESTINE

INTRACELLULAR FLUID
greatest concentration

Conversion of Glucose into GLYCOGEN

Regulates transfer of nutrients through cell membranes

Synthesis of muscle protein from amino acids



Preservation of proper alkalinity of body fluids

Important for transmission of electrochemical impulses

SKIN AND HAIR

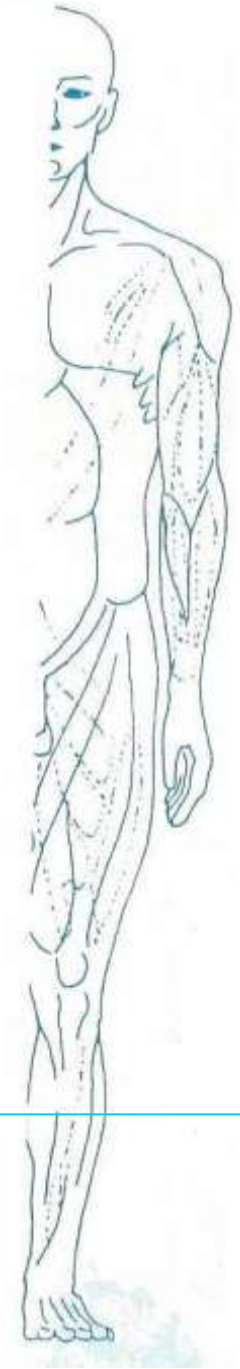
KIDNEY stimulation

Regulates the water balance

Maintains stable blood pressure

Cell metabolism

Healthy SKIN



DEFICIENCY/DEPLETION SYMPTOMS

Excessive urinary losses induced by TOO HIGH SALT INTAKE have caused potassium deficiencies to be commonplace. Vomiting, severe malnutrition and stress, both physical and mental, may also lead to potassium deficiency.

NERVOUS DISORDERS, INSOMNIA, CONSTIPATION, SLOW and IRREGULAR HEARTBEAT, and MUSCLE DAMAGE. Infants suffering from diarrhoea may have potassium deficiency because of decreased absorption. DIABETIC patients are often deficient in potassium.
Early symptoms of potassium deficiency include GENERAL WEAKNESS, IMPAIRMENT of NEURO MUSCULAR FUNCTION, POOR REFLEXES and SOFT and SAGGING MUSCLES.
In adolescents ACNE can result, in older persons DRY SKIN may occur. Cognitive Impairment, Depression, Edema, Insaciable Thirst, Insomnia, Glucose Intolerance, high Cholesterol, High Blood Pressure, Salt Retention and Protein in Urine.

POTASSIUM

Sodium

Daily Requirement 1 ½ g (1.50)

Sodium is an essential mineral found predominantly in the extracellular fluids and the intestinal fluids surrounding the cells, and the vascular fluids within the blood vessels, arteries, veins and capillaries. About 50% of the body's sodium is found in these fluids and the remaining amount is found WITHIN THE BONES.

SOURCE

Nearly all Foods contain Sodium.
Seafood, table salt, celery, baking powder, milk products, kelp.

SOME RICH FOODS ARE :
(per 100 gram)

SOY BEANS, fermented (MISO).	13,381.-- mg alkal.
UMEBOSHI	9,400.-- mg
SOY SAUCE	7,327.-- mg
GREEK OLIVES, salt cured	3,290.-- mg acid
WAKAME	2,500.-- mg alkal.
BACON, Canadian	1,889.42 mg acid
BOLOGNA SAUSAGE	1,298.89 mg acid
OAT FLAKES, fortified	1,135.13 mg acid
BUTTER	986.70 mg acid
HAM, cured	752.20 mg acid
OLIVES, ripe	750.-- mg alkal.
PIZZA CHEESE	701.-- mg acid

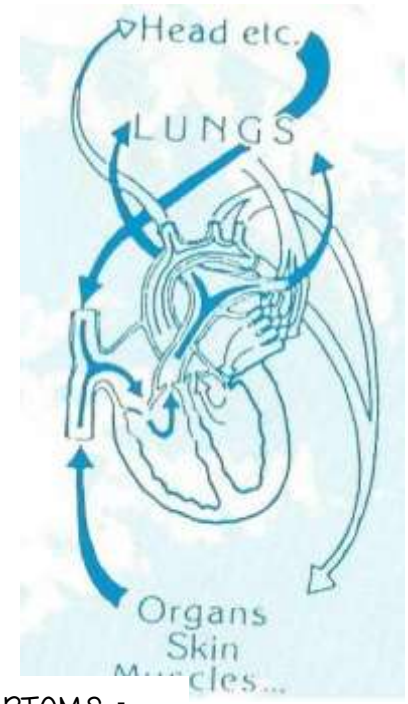
DESTROYED/DEPLETED BY :

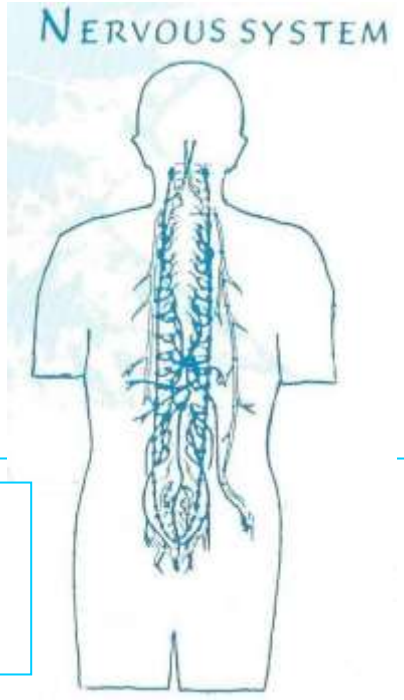
Diuretics for high blood pressure especially for those in low sodium diets.
Excessive Salt in food interferes with the absorption and utilization, especially in the case of protein foods. It can result in edema, high blood pressure, potassium deficiency, liver and kidney disease.

DIGESTION - ABSORPTION - METABOLISM :

STOMACH AND SMALL INTESTINE

- BONES
- VASCULAR FLUIDS
  - Keeping other blood minerals fluid and improving blood and lymph health
- EXTRACELLULAR FLUIDS
  - KIDNEYS
    - Maintenance of the water and acid-alkali balance
      - Nerve Stimulation
        - Contraction and expansion of the muscles
- INTESTINAL FLUIDS
  - Production of hydrochloric acid
    - Purging of carbon dioxide and proper digestion.





DEFICIENCY/DEPLETION SYMPTOMS :

Deficiencies are very rare, because nearly all foods contain some sodium. A deficiency can cause intestinal gas, WEIGHT LOSS, VOMITING and MUSCLE SHRINKAGE. The conversion of carbohydrates into fat for digestion is impaired if sodium is absent. Abdominal cramps, Anorexia, Confusion, Hallucinations, Headaches, Heart Palpitations, Memory Loss and Recurrent infections.

SODIUM

Zinc

Daily Requirement 10 mg

Zinc is an essential trace mineral occurring in the body in larger amounts than any other trace mineral except IRON. The human body contains approximately 1.8 grams of zinc compared to nearly 5 grams of iron. Zinc helps prevent Acne, promotes a healthy immune system and prevents formation of free radicals. It is a constituent of Insulin and many vital Enzymes. Reduces symptoms and duration of common colds.

SOURCE

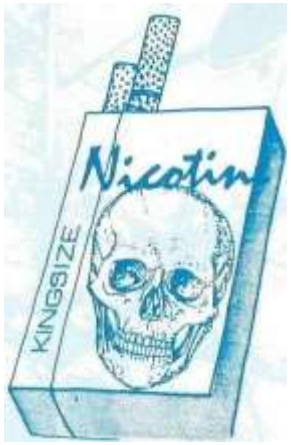
Sunflower seeds, seafood, organ meats, mushrooms, brewer's yeast, soy beans.

SOME RICH FOODS ARE :
(per 100 gram)

OYSTERS, fresh	74.61 mg acid
WHEAT GERM, toasted	15.40 mg acid
WHEAT GERM, raw	14.30 mg acid
TORULA YEAST	11.-- mg
WHEAT BRAN	9.80 mg acid
BLACKSTRAP MOLASSES	6.-- mg acid
STEAMED CRAB	4.30 mg acid
EGG YOLK	3.-- mg acid
OATMEAL	3.-- mg acid

DESTROYED BY :

ALCOHOL



NICOTINE

DESTROYED/DEPLETED BY :

A high intake of calcium and PHYTIC ACID may prevent absorption of zinc. Zinc is lost through perspiration, diarrhoea, Kidney disease, diabetes, and sclerosis of the liver.
High intake of CADMIUM, a toxic mineral, will accentuate the deficiency symptoms and cadmium will be stored in the body in the absence of zinc.
CAUTION: Zinc and Iron supplements should not be taken together as they interfere with each others activity.

DIGESTION - ABSORPTION - METABOLISM :

UPPER SMALL INTESTINE

Allows acuity of taste and smell

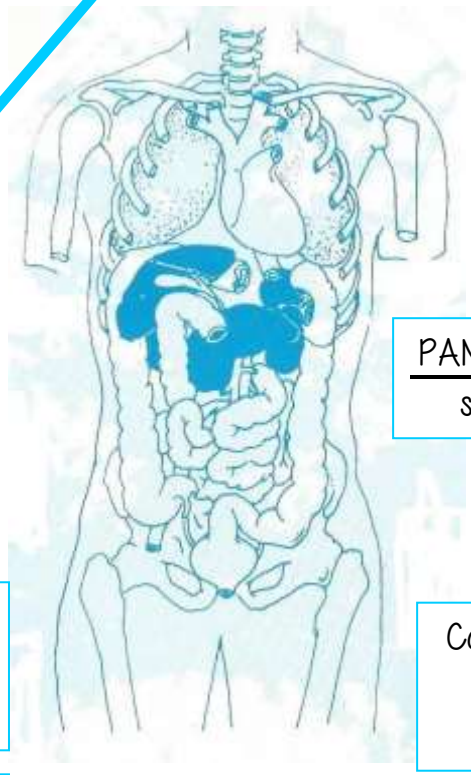
VOLUNTARY MUSCLES
stored

BONES
stored

KIDNEYS
stored

General growth and proper development of reproductive organs and sperm production

Maintains health of prostate gland



LIVER
Stored
Protects it from chemical damage

PANCREAS
stored

Regulates activity of cerbaceous glands

SKIN
AND
HAIR

Important in healing wounds and burns

Constituent of at least 25 enzymes involved in digestion and metabolism

Component of INSULIN for breakdown of ALCOHOL

Protein synthesis and collagen formation

Normal absorption and action of vitamins especially B-complex

Maintains proper concentration of Vitamin E in the blood. Increases absorption of Vitamin A.

DEFICIENCY/DEPLETION SYMPTOMS :

STRETCHMARKS IN THE SKIN and white SPOTS and peeling in the FINGERNAILS

INCREASED FATIGUE SUSCEPTIBILITY to INFECTION, INJURY AND DECREASED ALERTNESS

DELAYED SEXUAL MATURITY

Loss of taste and sense of smell

PROLONGED HEALING of WOUNDS

ACNE

RETARDED GROWTH

Cleansing for Change

A publication by Michael O'Connell