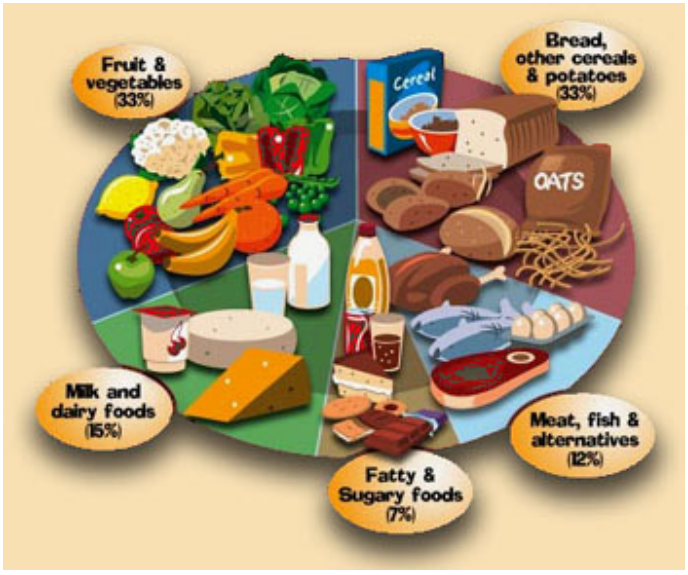
PASCAS CARE

MINERALS

&

VITAMINS



"Peace And Spirit Creating Alternate Solutions"

PASCAS FOUNDATION (Aust) Ltd **Em: info@pascasworldcare.com**
ABN 23 133 271 593 **Em: info@pascashealth.com**
Pascas Foundation is a not for profit organisation
Queensland, Australia **www.pascasworldcare.com www.pascashealth.com**

PASCAS INTRODUCTION:

Documents assembled by Pascas are provided for your individual assessment and exploration. The contents are sourced from a variety of avenues and publications. Every endeavour is made to determine that the contents are of the highest level of truth and veracity. At all times we ask that you go within yourself, to ascertain for yourself, how the contents resonate with you.

Pascas provides these notes and observations to assist us all in the development and growth of our own pathways and consciousness. Pascas does not hold these contents as dogma. Pascas is about looking within oneself. Much of what we are observing is new to us readers and thus, we consider that you will take on board that which resonates with you, investigate further those items of interest, and discard that which does not feel appropriate to you.

Kinesiological muscle testing, as developed by Dr David R Hawkins and quantified by his Map of Consciousness (MOC) table, has been used to ascertain the possible level of truth of documents. Such tested calibration levels appear within the document. We ask that you consider testing same for yourself. The technique and process is outlined within Pascas documents, such as Pascas Health – Energy Level of Food. From each person's perspective, results may vary somewhat. The calibration is offered as a guide only and just another tool to assist in considering the possibilities. As a contrast, consider using this technique to test the level of truth of your local daily newspaper.

Contents are not to be interpreted as an independent guide to self-healing. The information sourced herein is not from a doctor or doctors, and any information provided in this document should not be in lieu of consultation with your physician, doctor, or other health care professional. Pascas, nor anyone associated with this document, does not assume any responsibility whatsoever for the results of any application or use of any process, technique, compound or potion as described within this document.

The sources of contents are noted throughout the document. In doing so, we acknowledge the importance of these sources and encourage our readers to consider further these sources. Should we have infringed upon a copyright pertaining to content, graphics and or pictures, we apologise. In such cases, we will endeavour to make the appropriate notations within the documents that we have assembled as a service via our not for profit arm, to our interested community.

We offer all contents in love and with the fullness of grace, which is intended to flow to readers who join us upon this fascinating journey throughout this incredible changing era we are all experiencing.

Living Feelings First, *John.*

"Never can one man do more for another man than by making it known of the availability of the Feeling Healing process and Divine Love." JD

I Want Vitamins














Vitamins are organic food substances found only in living things, i.e. plants and animals. They are essential for our bodies to function properly, for growth, energy and for our general well-being. With very few exceptions the human body cannot manufacture or synthesize vitamins. They must be supplied in our diet or in man-made dietary supplements. Some people believe that vitamins can replace food, but that is incorrect. In fact, vitamins cannot be assimilated without also ingesting food. That is why it is best to take them with a meal. Synthetic vitamin supplements can be of varying quality, so it is a good idea to get your supplements from a reliable source.

http://www.healthalternatives2000.com/vitchart.htm

Note that I have listed only those foods which contain the listed vitamins in significant quantities. The are listed in descending order by nutrient quantity. For more detailed information, please visit the United States Department of Agriculture (USDA) Food & Nutrition Center.

Nutrient – Daily Amount Needed	Information	Fruit Sources	Vegetable Sources	Nut Sources
Vitamin A 10,000 IU/day (plant-derived) for adult males. 8,000 for adult females – 12,000 if lactating. 4,000 for children ages 1-3 5,000 for children ages 4-6 7,000 for children ages 7-10	Vitamin A helps cell reproduction. It also stimulates immunity and is needed for formation of some hormones. Vitamin A helps vision and promotes bone growth, tooth development, and helps maintain healthy skin, hair, and mucous membranes. It has been shown to be an effective preventive against measles. Deficiency can cause night blindness, dry skin, poor bone growth, and weak tooth enamel. Alpha-carotene, beta-carotene and retinol are all versions of Vitamin A.	Most fruits contain vitamin A, but the following fruits have a significant amount: Tomatoes Cantaloupes Watermelon Peaches Kiwi Oranges Blackberries	Sweet potato Kale Carrots Spinach Avocado Broccoli Peas Asparagus Squash – summer Green Pepper	Pistachios Chestnuts Pumpkin Seeds Pecans Pine Nuts/Pignolias Sunflower Seeds Almonds Filberts/Hazelnuts

 1.2 mg for adult males and 1.1 mg for women – 1.5 mg if lactating. Children need .6 to .9 mg of B1/thiamine per day.	Vitamin B1/thiamine is important in the production of energy. It helps the body cells convert carbohydrates into energy. It is also essential for the functioning of the heart, muscles, and nervous system. Not getting enough thiamine can leave one fatigued and weak. Note: Most fruits and vegetables are not a significant source of thiamine.	Watermelon	Peas Avocado	No nuts contain a significant amount of vitamin B1.
 1.3 mg for adult males and 1.1 mg for women – 1.5 mg if pregnant/lactating. Children need .6 to .9 mg of B2/riboflavin per day.	Vitamin B2 or riboflavin is important for body growth, reproduction and red cell production. It also helps in releasing energy from carbohydrates. Note: Most fruits and vegetables are not a significant source of riboflavin.	Kiwi	Avocado	No nuts contain a significant amount of vitamin B2.
 16 mg for adult males and 14 mg for women – 17 – 18 mg if pregnant/lactating. Children need 9 – 16 mg of niacin per day.	Niacin assists in the functioning of the digestive system, skin, and nerves. It is also important for the conversion of food to energy.	Peaches Tomatoes Kiwi Bananas Cantaloupe Watermelon	Avocado Peas Potatoes Mushrooms Squash – winter Corn Artichoke Asparagus Squash – summer Lima Beans Sweet potato Kale Broccoli	Nuts: Peanuts Pine Nuts/Pignolias Chestnuts Almonds

			Carrots Green Pepper	
Vitamin B5 (pantothenic acid) 5 mg for adults and 6 – 7 mg for women who are pregnant or lactating. Children need 2 – 4 mg of niacin per day.	Pantothenic acid is essential for the metabolism of food as well as in the formation of hormones and (good) cholesterol.	Oranges Bananas	Avocado Sweet potato Potatoes Corn Lima Beans Squash – winter Artichoke Mushrooms Broccoli Cauliflower Carrots	No nuts contain a significant amount of vitamin B5.
Vitamin B6 (pryidoxine) 1.3 to 1.7 mg for adults – 2 mg for women who are pregnant or lactating. Children need between .6 to 1.3 mg.	B6 plays a role in the creation of antibodies in the immune system. It helps maintain normal nerve function and acts in the formation of red blood cells. It is also required for the chemical reactions of proteins. The higher the protein intake, the more need there is for vitamin B6. Too little B6 in the diet can cause dizziness, nausea, confusion, irritability and convulsions.	Bananas Watermelon	Avocado Peas Potatoes Carrots	No nuts contain a significant amount of vitamin B6.
Vitamin B9 (folate/folic acid) At least 400 mcgs for most adults – pregnant women 600 mcgs and breastfeeding women should get at least 500 mcgs. Children need between 150 to 300 mcg per day.	Folate and folic acid are both forms of B9. Folate occurs naturally in fresh foods, whereas folic acid is the synthetic form found in supplements. Your body needs folate to produce red blood cells, as well as components of the nervous system. It helps in the formation and creation of DNA	Kiwi Blackberries Tomatoes Orange Strawberry Bananas Cantaloupe	Lima Beans Asparagus Avocado Peas Artichoke Spinach Squash – winter Broccoli Squash – summer Corn Sweet potato Kale	Nuts/Seeds: Peanuts Sunflower Seeds Chestnuts Walnuts Pine Nuts/Pignolias Filberts/Hazelnuts Pistachios Almonds Cashews Brazil Nuts Pecans Macadamias

	and maintaining normal brain function, and is a critical part of spinal fluid. It has also been proven to reduce the risk for an NTD-affected (neural tube defect) pregnancy by 50 to 70 percent. Folic acid is vital for proper cell growth and development of the embryo. That is why it is important for a woman to have enough folate/folic acid in her body both before and during pregnancy.		Potatoes Carrots Onions Green Pepper	Pumpkin Seeds
 2.4 mcg for adults and 2.6 – 2.8 mcg for women who are pregnant or lactating. Children need .9 – 2.4 mcg per day.	Like the other B vitamins, vitamin B12 is important for metabolism. It helps in the formation of red blood cells and in the maintenance of the central nervous system. Vitamin B12 is the one vitamin that is available only from fish, poultry, meat or dairy sources in food.	None	None	No nuts contain a significant amount of vitamin B12.
 60 mg for adults – 70 mg for women who are pregnant and 95 for those lactating. Children need between 45 and 50 mg	Vitamin C is one of the most important of all vitamins. It plays a significant role as an antioxidant, thereby protecting body tissue from the damage of oxidation. Antioxidants act to protect your cells against the effects of free radicals, which are potentially damaging by-products of the body's metabolism.	Kiwi Strawberry Orange Blackberries Cantaloupe Watermelon Tomatoes Lime Peach Bananas Apples Lemon Grapes	Artichoke Asparagus Avocado Broccoli Carrots Cauliflower Corn Cucumber Green Pepper Kale Lima Beans Mushrooms Onions Peas	No nuts contain a significant amount of vitamin C.

	Free radicals can cause cell damage that may contribute to the development of cardiovascular disease and cancer. Vitamin C has also been found by scientists to be an effective antiviral agent.		Potatoes Spinach Squash – summer Squash – winter Sweet potato	
 5 mg for most adults. Between 50 – 70 yrs 10 mg, and after 70 15 mg. Children need about 5 mg/day.	Vitamin D is known as the "sunshine vitamin" since it is manufactured by the body after being exposed to sunshine. Ten to fifteen minutes of good sunshine three times weekly is adequate to produce the body's requirement of vitamin D. This means that we don't need to obtain vitamin D from our diet unless we get very little sunlight – usually not a problem for children. Vitamin D is vital to the human body as it promotes absorption of calcium and magnesium, which are essential for the normal development of healthy teeth and bones. It also helps maintain adequate levels of calcium and phosphorus in the blood.	None	Mushrooms	No nuts contain a significant amount of vitamin D.
 30 IU for most adults. Children need between 6-11	Like vitamin C, vitamin E plays a significant role as an antioxidant, thereby protecting body tissue	Blackberries Bananas Apples Kiwi	None	Nuts: Almonds Sunflower Seeds Pine Nuts/Pignolias

mg/day. (1 IU is equal to approximately .75 mg) Note: some researchers and medical experts believe that with all of the positive studies using higher doses of vitamin E, this daily recommended intake is not high enough.	from the damage of oxidation. It is important in the formation of red blood cells and the use of vitamin K. Many women also use it to help minimize the appearance of wrinkles, and mothers use it to help heal minor wounds without scarring, as it is valued for its ability to soothe and heal broken or stressed skin tissue.			Peanuts Brazil Nuts
Vitamin K 70-80 micrograms/day for adult males, 60-65 micrograms per day for adult females. Children need about half the amount, depending on age.	Vitamin K is fat soluble and plays a critical role in blood clotting. It regulates blood calcium levels and activates at least 3 proteins involved in bone health.	None	Vitamin K is found in significant quantities in dark green leafy vegetables such as spinach, broccoli, and kale.	Pine Nuts/Pignolias Cashews Chestnuts Filberts/Hazelnuts

Essential Minerals

Minerals

As most people know, minerals and trace minerals are in essential factor in the proper function and structure of all living cells. Similar to vitamins, minerals function as Coenzymes, promoting the body performance, energy, growth and healing.

As in other areas of bodily function proper chemical balance is essential. **An imbalance of minerals in the body often leads to various types and illnesses**. Maintaining mineral balance is essential to good health. Both macro and micro (trace) minerals are stored in bone and muscle tissue. Though mineral toxicity is possible, massive amounts are needed to induce toxicity.

Minerals found throughout the body or originally came from mother Earth, in the form of rock. As erosion breaks down the mineral salts of rocks into smaller and smaller particles, the small particles eventually end up as soil from which all living organisms such as plants grow. Microbes in the soil utilize the mineral salts, and eventually pass them along to the plant structure through the root system. As plants grow, nutrients including minerals are taken up through the roots and are deposited in the cellular structure of the plant. When the plant is digested by humans or animals, the minerals are easily absorbed into our systems. Absorption of minerals taken in from live plant food is significantly more efficient than taking mineral supplements. Plant synthesis is very efficient, while mineral synthesis using supplements is much less efficient.

Minerals are broken into two classes, macrominerals, and micro (trace) minerals. Macro minerals include calcium, magnesium, sodium, potassium, and phosphorus. Typically, macro minerals are needed in the tissues in larger amounts then trace minerals. Micro (trace) minerals include, boron, chromium, copper, germanium, iodine, iron, vanadium, and zinc.

Although it is possible to receive adequate amounts of minerals through diet alone, supplementation is generally thought off as being essential to good health. Many researchers as well as the federal government indicate there is a very low mineral content in the farm soils of the United States and other parts of the world. It is because of the typically low trace minerals content in the soils from which our vegetables are grown that often times, nutritionists suggest trace mineral supplementation. Farmers are concerned with rate of growth of their products and pay little or no attention to minerals, other than those that promote growth of their products. **Since farming depletes the soil of minerals and farmers do not generally replace the used up minerals, the end product, which is the vegetables and fruits we eat have a very low trace mineral content. Supplementation is the logical** option.

It is essential to take supplemental minerals in balanced amounts, because cells of the body compete for minerals that are needed. Too much of one mineral can cause cells to ask for and look for other minerals, which if not present, can create an imbalance in the mineral and trace mineral makeup of the cellular structure.

Minerals are elements that originate in the soil and cannot be created by living things, such as plants and animals. Yet plants, animals and humans need minerals in order to be healthy. Plants absorb minerals from the soil, and animals get their minerals from the plants or other animals they eat. Most of the minerals in the human diet come directly from plants, such as fruits and vegetables, or indirectly from animal sources. Minerals may also be present in your drinking water, but this depends on where you live, and what kind of water you drink (bottled, tap). Minerals from plant sources may also vary from place to place, because the mineral content of the soil varies according to the location in which the plant was grown.

http://www.healthalternatives2000.com/minchart.htm

Note that I have listed only those foods which contain the listed vitamins in significant quantities. For more detailed information, please visit the United States Department of Agriculture (USDA) Food & Nutrition Center.

Nutrient – Estimated Amounts Needed	Benefits/Deficiency Symptoms	Fruit Sources	Vegetable Sources	Nut/Seed Sources
 Adults need 1000 mg/day. Children need 800 to 1300 mg/day. Recommended supplement: **Coral Calcium**	Calcium eases insomnia and helps regulate the passage of nutrients through cell walls. Without calcium, your muscles wouldn't contract correctly, your blood wouldn't clot and your nerves wouldn't carry messages. If you don't get enough calcium from the food you eat, your body automatically takes the calcium needed from your bones. If your body continues to tear down more bone than it replaces over a period of years in order to get sufficient calcium, your bones will become weak and break easily. Deficiency may result in muscle spasms and cramps in the short term and osteoporosis.	Most fruits contain some calcium: Orange Blackberries Kiwi Tomatoes Lime Strawberry Lemon Grapes Apples Cantaloupe Bananas Peach	Artichoke Peas Squash – summer Broccoli Kale Lima Beans Squash – winter Spinach Carrots Avocado Asparagus	Almonds Brazil Nuts Pistachios Peanuts Walnuts Chestnuts Macadamias Pecans Sunflower Seeds Filberts/Hazelnuts Pumpkin Seeds Cashews Pine Nuts/Pignolias

Copper The estimated safe and adequate intake for copper is 1.5 – 3.0 mg/day. Many survey studies show that Americans consume about 1.0 mg or less of copper per day	Copper is involved in the absorption, storage and metabolism of iron and the formation of red blood cells. It also helps supply oxygen to the body. The symptoms of a copper deficiency are similar to iron-deficiency anemia.	Most fruits contain a small amount of copper, but kiwi fruit has a significant amount. Apples Bananas Blackberries Cantaloupe Grapes Kiwi Fruit Lemon Lime Orange Peach Strawberry Tomatoes	Most vegetables have some copper, but Lima Beans have a significant amount. Artichoke Avocado Broccoli Carrots Cauliflower Corn Cucumber Green Pepper Kale Lima Beans Mushrooms Onions Peas Potatoes Spinach Squash – summer Squash – winter Sweet Potato	Most nuts contain a trace amount of copper.
Iodine Adults should get 150 mcgs per day. The children's recommendation for iodine is 70 to 150 mcg (that is micrograms).	Iodine helps regulate the rate of energy production and body weight and promotes proper growth. It also promotes healthy hair, nails, skin and teeth. In countries where iodine is deficient in the soil, rates of hypothyroidism, goiter and retarded growth from iodine deficiency are very high. In developed countries, however, because iodine is added to table	Fruits grown in iodine-rich soils contain iodine.	Vegetables grown in iodine-rich soils contain iodine.	Nuts grown in iodine-rich soils contain iodine.

	salt, iodine deficiencies are rare.			
 Women and teenage girls need at least 15 mg a day, whereas men can get by on 10. It is important that children get about 10 to 12 mg of iron per day, preferably from their diet. Breastfeeding is the best insurance against iron deficiency in babies.	Most at risk of iron deficiency are infants, adolescent girls and pregnant women. Iron deficiency in infants can result in impaired learning ability and behavioral problems. It can also affect the immune system and cause weakness and fatigue. To aid in the absorption of iron, eat foods rich in vitamin C at the same time you eat the food containing iron. The tannin in non-herbal tea can hinder absorption of iron. Take iron supplements and your vitamin E at different times of the day, as the iron supplements will tend to neutralize the vitamin E. Vegetarians need to get twice as much dietary iron as meat eaters.	While most fruits have some iron, probably the best source of iron for children is raisins, which are rich in iron. Other fruits which have a good amount of iron are: Blackberries Kiwi Strawberry Tomatoes Bananas Grapes	Vegetables: Lima Beans Peas Avocado Kale Spinach Broccoli Squash – summer Potatoes Sweet potato Squash – winter Corn Carrots Mushrooms	Most nuts contain a small amount of iron.
 Adults need 310 to 420 mg/ day. Children need 130 to 240 mg/day.	Magnesium is needed for bone, protein, making new cells, activating B vitamins, relaxing nerves and muscles, clotting blood, and in energy production. Insulin secretion and	Fruits: Kiwi Bananas Tomatoes Blackberries Strawberry Orange	Vegetables: Avocado Artichoke Peas Squash – summer Potatoes Corn Spinach Kale	Nuts: Brazil Nuts Cashews Almonds Pumpkin Seeds Pine Nuts/Pignolias Peanuts Walnuts Macadamias

	function also requires magnesium. Magnesium also assists in the absorption of calcium, vitamin C and potassium. Deficiency may result in fatigue, nervousness, insomnia, heart problems, high blood pressure, osteoporosis, muscle weakness and cramps.		Broccoli Squash – winter Sweet potato	Sunflower Seeds Pecans Pistachios Chestnuts Filberts/Hazelnuts
 2.0-5.0 mg/day for adults 2.0-3.0 mg for children 7 – 10 1.5-2.0 mg for children 4 – 6 1.0-1.5 mg for children 1 – 3 0.6-1.0 mg for children 6 mo – 1yr 0.3-0.6 mg for infants 0-6 months	The functions of this mineral are not specific since other minerals can perform in its place. Manganese does function in enzyme reactions concerning blood sugar, metabolism, and thyroid hormone function. Deficiency is rare in humans.	Most fruits contain manganese, but the following fruits have a significant amount: Blackberries Strawberry	Most vegetables have some manganese, but these have a significant amount: Peas Lima Beans Sweet potato Kale Squash – summer	Most nuts contain manganese, but the following nuts have a significant amount: Pine Nuts/Pignolias Pecans Walnuts Chestnuts
 Adults need 700 mg/day. Children need 500 to 1250 mg/day.	In combination with calcium, phosphorus is necessary for the formation of bones and teeth and of the nerve cells. Phosphorus is second to calcium in abundance in the body. It is very widely distributed in both plant and animal foods so it is unlikely that deficiency would be a problem.	Fruits: Kiwi Tomatoes Blackberries Bananas Strawberry Orange Peach Lime Cantaloupe	Vegetables: Lima Beans Peas Artichoke Avocado Corn Potatoes Asparagus Broccoli Kale Mushrooms Sweet potato	Nuts: Sunflower Seeds Brazil Nuts Cashews Pine Nuts/Pignolias Pistachios Almonds Peanuts Walnuts Chestnuts Pecans Macadamias Filberts/Hazelnuts Pumpkin Seeds

Potassium Estimated Minimum Requirements 2000 mg/day for adults and adolescents.	Potassium is essential for the body's growth and maintenance. It is necessary to keep a normal water balance between the cells and body fluids. Potassium plays an essential role in proper heart function. Deficiency may muscular cramps, twitching and weakness, irregular heartbeat, insomnia, kidney and lung failure.	Fruits: Bananas Tomatoes Blackberries Strawberry Orange Cantaloupe Peach Grapes Apples Lemon Lime	Vegetables: Avocado Lima Beans Potatoes Peas Artichoke Squash – summer Kale Sweet potato Broccoli Corn Squash – winter Carrots Spinach Asparagus Green Pepper Mushrooms Onions Cauliflower Cucumber	Nuts: Chestnuts Sunflower Seeds Pistachios Pumpkin Seeds Almonds Brazil Nuts Peanuts Cashews Pine Nuts/Pignolias Walnuts Pecans Macadamias Filberts/Hazelnuts
Selenium Men need 70 mcgs/day. Women need 55 mcgs/day.	Selenium is a part of several enzymes necessary for the body to properly function. Generally, selenium functions as an antioxidant that works in conjunction with vitamin E. Selenium deficiency is rare in humans.	Fruits: Bananas Kiwi Strawberry Blackberries Tomatoes Orange Peach Apples Grapes	Vegetables: Lima Beans Peas Mushrooms Kale Corn Sweet potato Potatoes Squash – winter Onions Squash – summer Spinach	Most nuts contain selenium, but the following nuts have a significant amount: Brazil Nuts Sunflower Seeds Cashews Pistachios Peanuts Walnuts Almonds Chestnuts Pecans
Sodium 500 mg/day for adults 120 mg for infants Daily Value recommendation – no more than 2,400 to 3,000 mg/day	Sodium is required by the body to regulate blood pressure and blood volume. It helps regulate the fluid balance in your body. Sodium also helps in the proper functioning of muscles and nerves.	Sodium occurs naturally in almost all fresh, whole fruits.	Sodium occurs naturally in almost all fresh, whole vegetables	Nuts: Peanuts Pumpkin Seeds Cashews Pistachios Chestnuts Macadamias Almonds

	Many people get far more sodium than they need, which tends to cause health problems. Different body types need different amounts of sodium.			
Zinc Men need 15 mgs/day. Women should get 12 mg/day. Children need 10 to 15 mg/day. Vegetarians need about 50 percent more zinc in their diet than meat eaters.	This metal is important in a number of key activities, ranging from protein and carbohydrate metabolism to the immune system, wound healing, growth and vision. Severe deficiency can contribute to stunted growth. Deficiency can sometimes be seen in white spots on the fingernails.	Most fruits contain a small amount of zinc, but the following have a significant amount: Blackberries Kiwi	Most vegetables have some zinc, but these have a significant amount: Peas Lima Beans Squash – summer Potatoes Corn Sweet potato	Most nuts have some zinc, but these have a significant amount: Pumpkin Seeds Pine Nuts/Pignolias Cashews Sunflower Seeds Pecans Brazil Nuts Almonds Walnuts

~~ Fruit Chart ~~

Note that only those nutrients which appear in significant quantities are listed. For more detailed information, please visit the United States Department of Agriculture (USDA) Food & Nutrition Center.

Fruits	Amount	Minerals Contained	Vitamins Contained
Apple 	One medium apple with skin contains almost 4 grams of dietary fiber.	Potassium – 158 mg Calcium – 9.5 mg Phosphorus – 9.5 mg Magnesium – 7 mg Selenium – 4 mg Also contains small amounts of iron, manganese, copper and zinc.	Vitamin A – 73 IU Vitamin C – 9 mg Folate (important during pregnancy) – 4 mcg Vitamin E – .66 IU
Avocado 	One medium avocado contains 4 grams of protein and 10 grams of fiber.	Potassium – 1204 mg Phosphorus – 82.4 mg Magnesium – 78.4 mg Calcium – 22 mg Sodium – 20 mg Iron – 2 mg Also contains small amounts of selenium, manganese, copper and zinc.	Vitamin A – 1230 IU Vitamin C – 15.9 mg Vitamin B1 (thiamine) – .2 mg Vitamin B2 (riboflavin) – .25 mg Niacin – 3.9 mg Folate – 124.6 mg Pantothenic Acid – 1.95 mg Vitamin B6 – .56 mg Contains some other vitamins in small amounts.
Banana 	One medium banana contains 1 gram of protein and 3 grams of dietary fiber.	Potassium – 467 mg Magnesium – 43 mg Phosphorus – 27 mg Calcium – 7 mg Selenium – 1.3 mg Iron – .4 mg Also contains trace amounts of zinc, manganese and copper.	Vitamin A – 95 IU Vitamin C – 11 mg Folate (important during pregnancy) – 22.5 mcg Vitamin B6 – .7mcg Niacin – .6 mg Pantothenic Acid – .31 mg Vitamin E – .67 IU
Blackberries 	One cup blackberries contains 1 gram of protein and over 7 grams of dietary fiber.	Potassium – 282 mg Calcium – 46 mg Phosphorus – 30 mg Magnesium – 28 mg Manganese – 1.9 mg Iron – .8 mg Selenium – .9 mg Zinc – .4 mg Also contains a trace amount of copper.	Vitamin A – 237 IU Vitamin C – 30 mg Vitamin E – 1.5 IU Folate – 49 mcg

Cantaloupe 	One medium wedge (slice) of cantaloupe contains .6 grams of protein and .55 grams of dietary fiber.	Potassium – 213 mg Phosphorus – 12 mg Calcium – 7.6 mg Magnesium – 7.6 mg Also contains trace amounts of iron, manganese, copper and zinc.	Vitamin A – 2225 IU Vitamin C – 29 mg Folate (important during pregnancy) – 12 mcg Niacin – .4 mg
Grapes 	One cup of grapes contains one gram of protein and 1.6 grams of dietary fiber.	Potassium – 176 mg Calcium – 13 mg Phosphorus – 9 mg Magnesium – 4.6 mg Iron – .4 mg Selenium – .3 mg Also contains trace amounts of zinc, manganese and copper.	Vitamin A – 92 IU Vitamin C – 3.7 mg Folate (important during pregnancy) – 3.6 mcg Vitamin B6 – .1 mg
Kiwi 	One cup of kiwi contains 1.75 grams protein and over 6 grams of dietary fiber.	Potassium – 588 mg Phosphorus – 71 mg Magnesium – 53 mg Calcium – 46 mg Selenium – 1.1 mg Iron – .72 mg Zinc – .3 mg Copper – .3 mg	Vitamin A – 310 IU Vitamin C – 174 mg Folate (important during pregnancy) – 67 mcg Vitamin B2 – .09 mg Niacin – .9 mg Vitamin B6 – .16 mg Vitamin E – 3 IU
Lemon 	One lemon without peel contains .64 grams protein and 1.6 grams of dietary fiber.	Potassium – 80 mg Calcium – 15mg Phosphorus – 9.2 mg Magnesium – 4.6 mg Iron – .35 mg Also contains trace amounts of selenium, zinc, manganese and copper.	Vitamin A – 2 IU Vitamin C – 4 mg
Lime 	One lime without peel contains .4 grams of protein and 1.8 grams of dietary fiber.	Potassium – 68 mg Calcium – 22 mg Phosphorus – 12 mg Magnesium – 4 mg Iron – .4 mg Also contains trace amounts of selenium, zinc, manganese and copper.	Vitamin A – 6.7 IU Vitamin C – 19 mg Folate (important during pregnancy) – 5.5 mcg
Mango 	One mango without peel contains 1.0 grams of protein and 3 grams of	Potassium – 323 mg Calcium – 20.7 mg Phosphorus – 22.8 mg Magnesium – 18.6 mg Iron – .26 mg	Vitamin A – 8060 IU Vitamin C – 57.34 mg Folate (important during pregnancy) – 29 mcg Vitamin B2 – 0.12 mg

	dietary fiber.	Also contains trace amounts of selenium, copper, zinc manganese.	Niacin – 1.2 mg Vitamin B6 – .28 mg Vitamin E – 3.51 IU
Orange 	one medium orange contains 1 gram of protein and 3 grams of dietary fiber.	Potassium – 237 mg Calcium – 52 mg Phosphorus – 18 mg Magnesium – 13 mg Selenium – .65 mg Also contains trace amounts of iron, zinc, manganese and copper.	Vitamin A – 269 IU Vitamin C – 70 mg Folate (important during pregnancy) – 40 mcg Vitamin B1 (thiamine) – .1 mg Pantothenic Acid – .33 mg
Peach 	One medium peach (with skin) contains 1 gram dietary fiber.	Potassium – 193 mg Phosphorus – 12 mg Magnesium – 6.9 mg Calcium – 5 mg Selenium – .4 mg Also contains trace amounts of iron, zinc, manganese and copper.	Vitamin A – 524 IU Vitamin C – 19 mg Folate (important during pregnancy) – 5.5 mcg Niacin – .97 mg
Strawberry 	I cup whole strawberries contains 3 grams of dietary fiber.	Potassium – 239 mg Phosphorus – 27 mg Calcium – 20 mg Magnesium – 14 mg Selenium – 1 mg Iron – .55 mg manganese – .42 mg Also contains trace amounts of zinc and copper.	Vitamin A – 39 IU Vitamin C – 82 mg Folate (important during pregnancy) – 25.5 mcg
Tomato 	One medium tomato contains 1.05 grams of protein and 1.35 grams of fiber.	Potassium – 396.7 mg Phosphorus – 62.7 mg Magnesium – 22.8 mg Calcium – 31.9 mg Sodium – 11.4 mg Iron – .51 mg Selenium – .8 mg Also contains small amounts of manganese, copper and zinc.	Vitamin A – 2364 IU Vitamin C – 25 mg Folate (important during pregnancy) – 46 mcg Niacin – .94 mg Vitamin B6 – .1 mg
Watermelon 	I medium wedge (slice) of watermelon contains 1 gram of protein and 1 gram of dietary fiber.	Potassium – 332 mg Magnesium – 31.5 mg Phosphorus – 26 mg Calcium – 23 mg Iron – .5 mg Selenium – .3 mg Also contains small amounts of manganese, copper and zinc.	Vitamin A – 1050 IU Vitamin C – 27 mg Niacin – .57 mg Vitamin B1 – .23 mg Vitamin B6 – .4 mg Folate (important during pregnancy) – 6.33 mcg

~~ Vegetables Chart ~~

Note that I have listed only those foods which contain the listed vitamins in significant quantities. The are listed in descending order by nutrient quantity. For more detailed information, please visit the United States Department of Agriculture (USDA) Food & Nutrition Center.

Vegetable	**Amount**	**Minerals Contained** (in descending order)	**Vitamins Contained** (in descending order)
Artichoke 	One medium cooked with no added salt has 4.2 grams protein and 6.5 grams of fiber.	Potassium – 425 mg Phosphorus – 103 mg Magnesium – 72 mg Calcium – 54 mg Also contains small amounts of selenium, iron, manganese, copper and zinc.	Vitamin C – 12 mg Niacin – 1.2 mg Pantothenic Acid – .5 mg Folate – 61.2 mcg Vitamin A – 212 IU Contains some other vitamins in small amounts.
Asparagus 	Half cup (about 4 spears) cooked with no added salt contains over 2 grams of protein and almost 1.5 grams of fiber.	Potassium – 144 mg Phosphorus – 48.5 mg Calcium – 18 mg Sodium – 10 mg Magnesium – 9 mg Also contains small amounts of selenium, iron, manganese, copper and zinc.	Vitamin A – 485 IU Vitamin C – 9.7 mg Niacin – .974 mg Folate – 131 mcg Contains some other vitamins in small amounts.
Avocado	Strictly speaking, an Avocado is a fruit – see the fruit chart		
Broccoli 	Half cup cooked with no added salt contains 2.3 grams protein and 2.3 grams fiber.	Potassium – 228 mg Phosphorus – 46 mg Calcium – 36 mg Sodium – 28 mg Magnesium – 18.7 mg Iron – .65 mg Also contains small amounts of selenium, manganese, copper and zinc.	Vitamin A – 1083 IU Vitamin C – 58 mg Niacin – .45 mg Pantothenic Acid – .4 mg Folate – 39 mcg Contains some other vitamins in

			small amounts.
Carrots 	Half cup cooked with no added salt contains .85 grams protein and 2.6 grams fiber.	Potassium – 177 mg Sodium – 51.5 mg Calcium – 24 mg Phosphorus – 23.4 mg Magnesium – 10 mg Iron – .48 mg Also contains small amounts of selenium, manganese, copper and zinc.	Vitamin A – 19,152 IU Vitamin C – 1.8 mg Niacin – .4 mg Folate – 11 mcg Pantothenic Acid – .2 mg Vitamin B6 – .2 mg Contains some other vitamins in small amounts.
Cauliflower 	Half cup cooked with no added salt contains 1.1 grams protein and 1.7 grams fiber.	Potassium – 88 mg Phosphorus – 19.8 mg Calcium – 9.9 mg Sodium – 9.3 mg Magnesium – 5.6 mg Also contains small amounts of selenium, iron, manganese, copper and zinc.	Vitamin C – 27.5 mg Vitamin A – 1.5 IU Pantothenic Acid – .3 mg Contains some other vitamins in small amounts.
Corn 	One ear, cooked with no salt contains 2.6 grams protein and 2.1 grams fiber.	Potassium – 191.7 mg Phosphorus – 79.3 mg Magnesium – 24.6 mg Sodium – 13 mg Calcium – 1.5 mg selenium – .6 mg Iron – .5 mg Zinc – .4 mg Also contains small amounts of manganese and copper.	Vitamin C – 4.8 mg Vitamin A – 167 IU Niacin – 1.2 mg Folate – 27.3 mcg Pantothenic Acid – .68 mg Contains some other vitamins in small amounts.
Cucumber 	Half a cup of sliced cucumber with skins contains .36 grams protein and .42 grams fiber.	Potassium – 74.9 mg Phosphorus – 1.4 mg Magnesium – 5.7 mg Sodium – 1 mg Calcium – 7.3 mg Also contains small amounts of selenium, iron, manganese, copper and zinc.	Vitamin C – 2.6 mg Vitamin A – 111.8 IU Contains some other vitamins in small amounts.

Green Pepper 	One small raw pepper contains .66 grams protein and 1.3 grams fiber.	Potassium – 131 mg Phosphorus – 14 mg Magnesium – 7.4mg Calcium – 6.7 mg Sodium – 1.48 mg Also contains small amounts of selenium, iron, manganese, copper and zinc.	Vitamin A – 467.7i u Vitamin C – 66 mg Niacin – .4 mg Folate – 6.8 mcg Contains some other vitamins in small amounts.
Kale 	One cup of cooked kale with no added salt contains 2.5 grams protein and 2.6 grams fiber.	Potassium – 296.4 mg Phosphorus – 36.4 mg Magnesium – 23.4 mg Calcium – 32 mg Sodium – 29.9 mg Iron – 1.2 mg Manganese – .5 mg Selenium – 1.2 mg Also contains small amounts of copper and zinc.	Vitamin A – 9,620 IU Vitamin C – 53.3 mg Niacin – .6 mg Folate – 17 mcg Contains some other vitamins in small amounts.
Lima Beans 	One cup of cooked large lima beans with no added salt contains 14.7 grams protein and 13.2 grams fiber.	Potassium – 955 mg Phosphorus – 208.7 mg Magnesium – 8.8 mg Calcium – 32 mg Selenium – 8.5 mg Iron – 4.5 mg Sodium – 3.8 mg Zinc – 1.8 mg Manganese – .8 mg copper – .44 mg	Pantothenic Acid – .8 mg Niacin – .8 mg Folate – 156 mcg Contains some other vitamins in small amounts.
Mushroom 	Half a cup of raw mushrooms contains 1.0 grams of protein and .42 grams of fiber.	Potassium – 129.5 mg Phosphorus – 36.4 mg Magnesium – 3.5 mg Selenium – 3 mg Calcium – 1.8 mg Sodium – 1.4 mg Iron – .36 mg Also contains small amounts of manganese, copper and zinc.	Vitamin D – 26.6 IU Niacin – 1.4 mg Vitamin C – .8 mg Pantothenic Acid – .5 mg Contains some other vitamins in small amounts.
Onions	One small onion cooked without salt contains .8 grams protein and 1.3 grams of fiber.	Potassium – 110 mg Phosphorus – 23.1 mg Calcium – 14 mg Magnesium – 7 mg	Vitamin C – 4.5 mg Folate – 9 mcg Contains some

		Sodium – 2.1 mg Selenium – .42 mg Also contains small amounts of iron, manganese, copper and zinc.	other vitamins in small amounts.
Peas 	One cup of boiled peas with no salt added contains 8.58 grams of protein and 8.8 grams of fiber.	Potassium – 433.6 mg Phosphorus – 187.2 mg Magnesium – 62.4 mg Calcium – 43.2 mg Sodium – 4.8 mg Selenium – 3.0 mg Iron – 2.5 mg Zinc – 1.9 mg Manganese – .8 mg Also contains small amount of copper.	Vitamin A – 955.2iu Vitamin C – 22.72 mg Niacin – 3.23 mg Folate – 100.8 mcg Vitamin B1 (thiamine) – .41 mg Vitamin B6 – .35 mg Contains some other vitamins in small amounts.
Potatoes 	One medium baked potato without salt contains 3.0 grams of protein and 2.3 grams of fiber.	Potassium – 610 mg Phosphorus – 78 mg Magnesium – 39 mg Calcium – 7.8 mg Sodium – 7.8 mg Iron – .55 mg Selenium – .46 mg Zinc – .45 mg Also contains small amounts of manganese and copper.	Vitamin C – 20 mg Niacin – 2.18 mg Pantothenic Acid – .9 mg Vitamin B6 – .5 mg Folate – 14 mcg Contains some other vitamins in small amounts.
Spinach 	One cup of raw spinach contains .86 grams of protein and .81 grams of fiber.	Potassium – 167.4 mg Phosphorus – 14.7 mg Magnesium – 23.7 mg Calcium – 29.7 mg Sodium – 23.7 mg Iron – .81 mg Selenium – .3 mg Also contains small amounts of manganese, copper and zinc.	Vitamin A – 2014.5 mg Vitamin C – 8.43 mg Folate – 58.2 mcg Contains some other vitamins in small amounts.

Squash, Summer 	One cup of sliced summer squash, baked with no added salt contains 1.65 grams of protein and 2.5 grams of fiber.	Potassium – 345.6 mg Phosphorus – 7.2 mg Magnesium – 43.2 mg Calcium – 48.6 mg Sodium – 1.8 mg Iron – .65 mg Manganese – .38 mg Selenium – .36 mg Zinc – .7 mg Also contains small amount of copper.	Vitamin A – 516.6 mg Vitamin C – 9.9 mg Niacin – .92 mg Folate – 36 mcg Contains some other vitamins in small amounts.
Squash, Winter 	One cup of cubed winter squash, baked with no added salt contains 1.02 grams of protein and 2.07 grams of fiber.	Potassium – 181.3 mg Phosphorus – 21.7 mg Magnesium – 17.0 mg Calcium – 32.5 mg Sodium – 27.9 mg Iron – .52 mg Selenium – .46 mg Also contains small amounts of manganese, copper and zinc.	Vitamin A – 17.5 mg Vitamin C – 5.4 mg Niacin –1.25 mg Folate – 57.4 mcg Pantothenic Acid – .55 mg Contains some other vitamins in small amounts.
Sweet Potatoes 	One medium sweet potato baked in its skin contains 1.96 grams of protein and 3.42 grams of fiber.	Potassium – 273 mg Phosphorus – 29.5 mg Magnesium – 13.5 mg Calcium – 6.2 mg Sodium – 11.0 mg Iron – .55 mg Selenium – .5 mg Manganese – .6 mg Zinc – .3 mg Also contains small amount of copper.	Vitamin A – 24,877 mg Vitamin C – 28.0 mg Pantothenic Acid – .74 mg Niacin – .69 mg Folate – 26.2 mcg Contains some other vitamins in small amounts.
Tomatoes – See fruit chart.			
Zucchini – See Summer Squash.			

By living true to ourselves, true to our feelings, we are living true to God. It's that simple.

Feelings first

LIVE FEELINGS FIRST

FEELINGS FIRST For Kids

~~ Nuts & Seeds Chart ~~

Note that only those nutrients which appear in significant quantities are listed. For more detailed information, please visit the United States Department of Agriculture (USDA) Food & Nutrition Center.

Nut/Seed	**Protein/Fiber** (raw, unsalted)	**Minerals** (in descending order)	**Vitamins** (in descending order)
Almonds 	1 ounce (24 whole nuts) raw contains 6 grams protein and 3.35 grams of dietary fiber.	Potassium 206 mg Phosphorus 134 mg Calcium 70 mg Sodium 0.2 mg Magnesium 77 mg Selenium 1.2 mcg Iron 1.2 mg Zinc 0.95 mg Manganese 0.7 mg Also contains a small amount of copper.	Folate 8.2 mcg Vitamin E 7.3 mg Vitamin A 2.8 IU Niacin 1.1 mg
Brazil Nuts 	1 ounce (6-8 whole nuts) raw contains 4 grams of protein and 2.1 grams of fiber.	Phosphorus 205.3 mg Potassium 186.8 mg Magnesium 106.6 mg Selenium 543.5 mcg Calcium 45.4 mg Zinc 1.15 mg Iron 0.69 mg Also contains small amounts of manganese and copper.	Folate 6.24 mcg Vitamin E 1.6 mg Vitamin C 1.0 mg Contains some other vitamins in small amounts.
Cashews 	1 ounce whole nuts raw contains 5.17 grams of protein and 0.94 grams of fiber.	Potassium 187 mg Phosphorus 168 mg Magnesium 82.8 mg Calcium 10.5 mg Sodium 3.4 mg Iron 1.9 mg Zinc 1.64 mg Selenium 5.6 mcg Also contains small amounts of manganese and copper.	Vitamin K 9.7 mcg Folate 7.0 mcg Contains some other vitamins in small amounts.
Chestnuts	Ten (10) roasted kernels with no salt added contains 2.7 grams protein and 4.3 grams fiber. (Note:	Potassium 497 mg Phosphorus 90 mg Calcium 24.4 mg Magnesium 27.7 mg Sodium 1.7 mg Iron .76 mg Selenium 1.0 mcg	Vitamin A 20.1 IU Vitamin C 21.8 mg Niacin 1.12 mg Pantothenic Acid .46 mg Folate 58.8 mcg Vitamin K K 6.55 mcg Contains some other

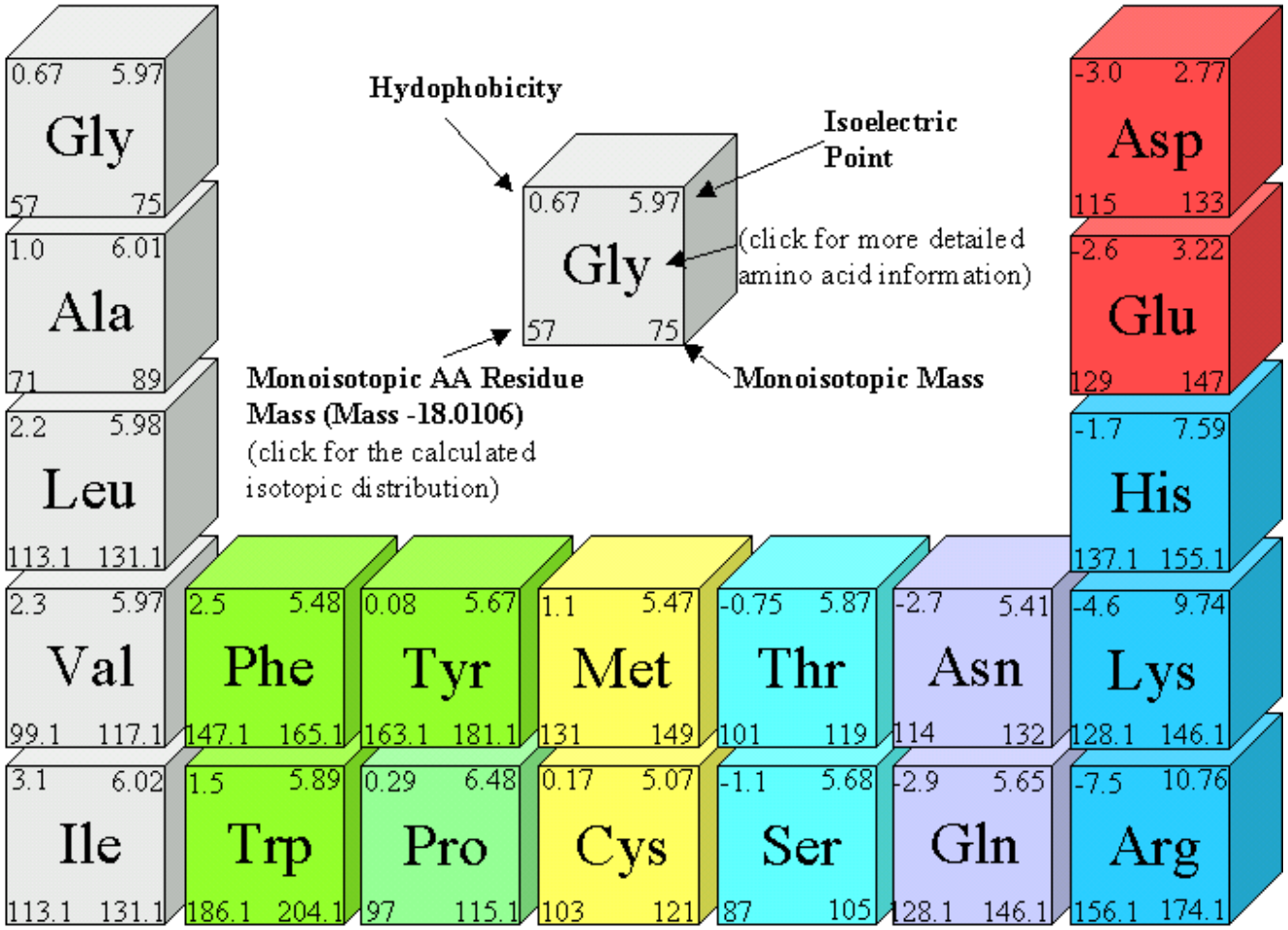
	chestnuts must be boiled or roasted before eating due to the high levels of tannic acid.)	Manganese 1.0 mg Zinc Also contains small amounts of copper and zinc.	vitamins in small amounts.
Hazelnuts 	Ten (10) nuts raw contain 2 grams protein and 1.4 grams fiber.	Potassium 95.2 mg Phosphorus 40.6 mg Magnesium 22.8 mg Calcium 16 mg Iron .66 mg Also contains small amounts of selenium, manganese, copper and zinc.	Vitamin A 2.8 IU Vitamin C .9 mg Folate 15.8 mcg Vitamin K 2 mcg Contains some other vitamins in small amounts.
Macadamias 	10-12 kernels (1 ounce) raw contains 2.24 grams protein and 2.44 grams fiber.	Potassium 104.3 mg Phosphorus 53.3 mg Magnesium 36.9 mg Calcium 24 mg Sodium 1.4 mg Iron 1.0 mg Also contains small amounts of selenium, manganese, copper and zinc.	Folate 3.1 mcg Contains some other vitamins in small amounts.
Pecans 	1 ounce (20 halves) raw contains 2.6 grams protein and 2.7 grams fiber.	Potassium 116.2 mg Phosphorus 78.5 mg Magnesium 34.3 mg Calcium 19.8 mg Zinc 1.3 mg Iron .7 mg Manganese 1.3 mg Selenium 1.0 mcg Also contains a small amount of copper.	Vitamin A 15.8 IU Folate 6.23 mcg Contains some other vitamins in small amounts.
peanuts 	One ounce raw peanuts contains 7.31 grams protein and 2.4 grams fiber.	Potassium 200 mg Phosphorus 107 mg Magnesium 47.6 mg Calcium 26 mg Sodium 5.1 mg Iron 1.3 mg Selenium 2.0 mcg Also contains small amounts of manganese, copper and zinc.	Niacin 3.4 mg Vitamin E 2.4 mg Folate 68.0 mcg Contains some other vitamins in small amounts.
Pine Nuts /	1 ounce dried nuts contains 3.9	Potassium 169 mg Phosphorus 163 mg	Vitamin E 2.6 mg Niacin 1.2 mg

Pignolias 	grams protein and 1.0 gram fiber.	Magnesium 71.2mg Calcium 4.5 mg Manganese 2.4 mg Zinc 1.8 mg Iron 1.6 mg Also contains small amounts of selenium and copper.	Folate 19 mcg Vitamin A 8.2 IU Vitamin K 15.3 mcg Contains some other vitamins in small amounts.
Pistachios 	1 ounce (49 kernels) dry roasted contains 6.0 grams protein and 3.0 grams fiber.	Potassium 295.4 mg Phosphorus 137.5 mg Magnesium 34.0 mg Calcium 31.2 mg Sodium 2.8 mg Iron 1.2 mg Selenium 2.6 mcg Also contains small amounts of manganese, copper and zinc.	Vitamin A 74.3 IU Folate 14.2 mcg Contains some other vitamins in small amounts.
Pumpkin Seeds 	1 ounce of roasted pumpkin or squash seeds without salt contains 5.3 mg protein and no fiber.	Potassium 260.5 mg Magnesium 74.3 mg Phosphorus 26.1 mg Calcium 15.6 mg Sodium 5.1 mg Zinc 2.9 mg Iron 0.9 mg Also contains small amounts of manganese and copper.	Vitamin A 17.6 IU Folate 2.6 mcg Contains some other vitamins in small amounts.
Sunflower Seeds 	1 ounce dry roasted sunflower seeds contains 5.5 mg protein and 3.1 mg fiber.	Phosphorus 327.4 mg Potassium 241 mg Magnesium 36.6 mg Calcium 19.8 mg Zinc 1.5 mg Iron 1.0 mg Selenium 22.5 mcg Also contains small amounts of manganese and copper.	Vitamin A 6.5 IU Folate 67.2 mcg Vitamin E 6.0 mg Contains some other vitamins in small amounts.
Walnuts 	1 ounce (14 halves) English walnuts contains 4.3 mg protein and 1.9 mg fiber.	Potassium 125 mg Phosphorus 98.0 mg Magnesium 44.8 mg Calcium 27.8 mg Manganese 1.0 mg Zinc .9 mg Iron .8 mg Selenium 1.4 mcg Also contains small amounts of copper.	Folate 27.8 mcg Contains some other vitamins in small amounts.

The Amino Acid Chart

http://www.ionsource.com/virtit/VirtualIT/aainfo.htm

Use the information on the face of each block for basic amino acid information, and use the hotspots on each block to access more detailed specific information, such as a monograph on each amino acid, and theoretical isotopic distributions. Follow the Glycine key below for instructions on how to access more detailed information. At the bottom of this page are links that will lead you to additional amino acid information



Amino acids are essential to the production of proteins such as enzymes, hormones and collagen. Of the 20 amino acids found in the human body, nine are termed "essential" amino acids since they cannot be made by the body and therefore must be provided in the diet. The other 11 amino acids are termed "non-essential" as they can be produced by the body from other components of the diet.

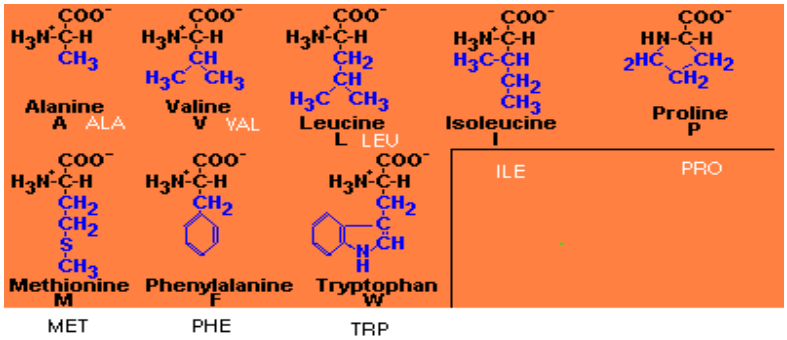
When a meal is eaten, the concentration of amino acids and glucose in the blood rises. These increases stimulate the pancreas to produce insulin which enhance the uptake of amino acids and glucose in the blood.

Amino Acids

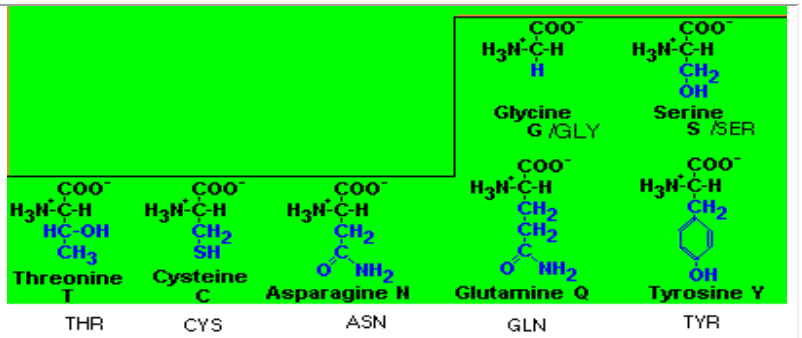
(Adapted from University of Virginia Site)
Amended with information from http://www.russell.embl-heidelberg.de/aas/aas.html

Each amino acid has an amino and carboxyl group, in black and a unique side chain, or radical, in **blue/dark black.**

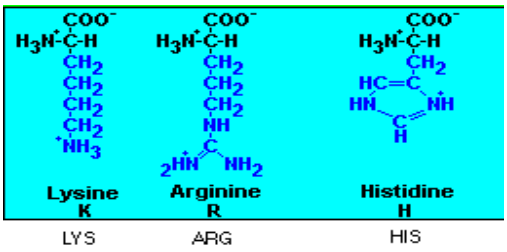
NON-POLAR AMINO ACIDS. Their side chains have no charge and they do NOT react with water, so we call them "hydrophobic "or "water-fearing."



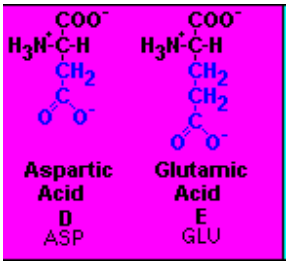
POLAR AMINO ACIDS. ALL the amino acids below have side chains that react to water. They are all "hydrophilic", or "water-loving".



Polar but no net charge
Asparagine is quite polar, whilethe others are less polar or "indifferent."



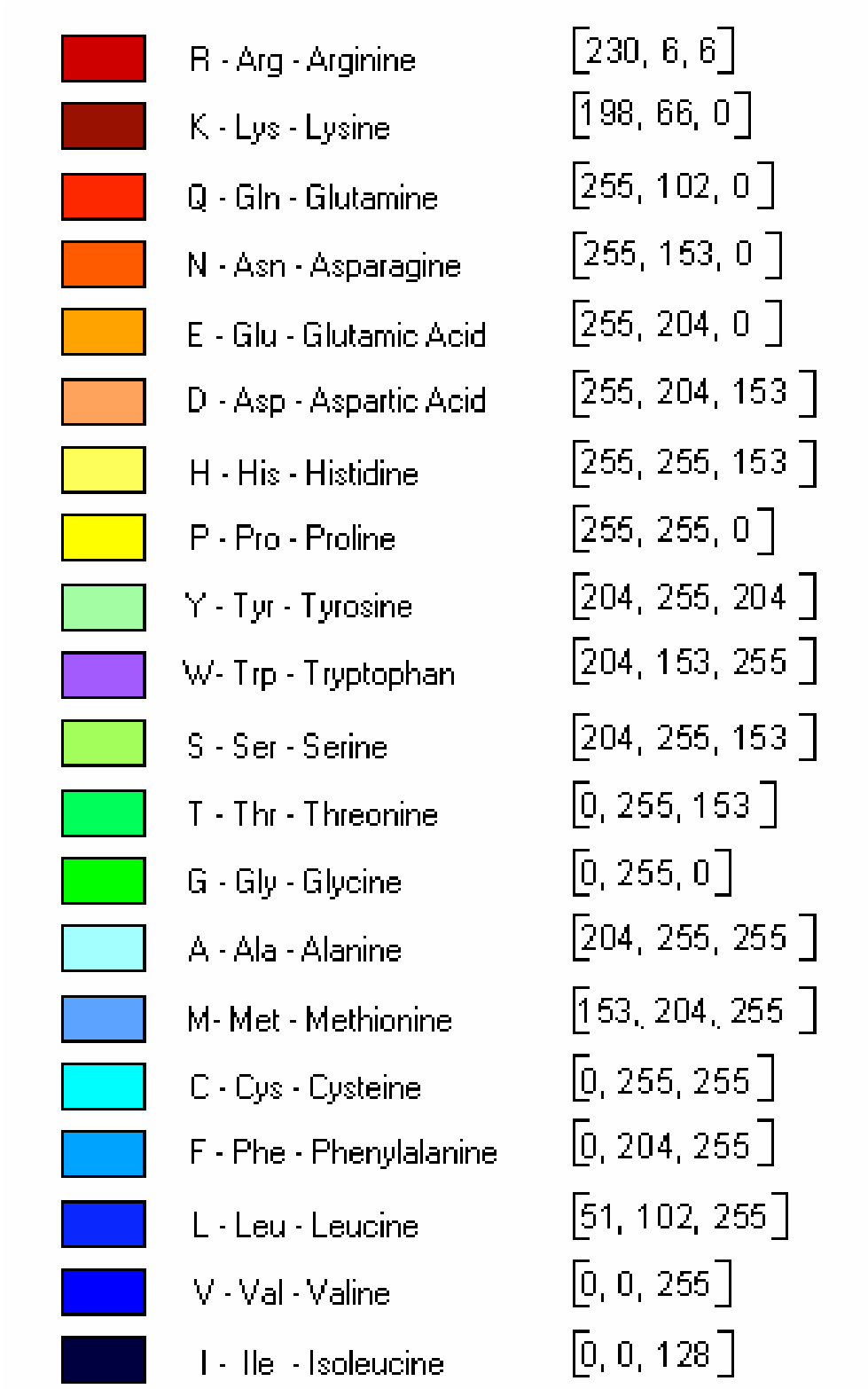
These three amino acids are basic at the pH commonly found in living things.



These two amino acids are <u>acidic*</u>, (as is clear in their name) at the pH commonly found in living things.

Colour menu for amino acids

The amino acids are coloured according to physico-chemical or specific amino acid characteristics



http://www.ncc.gmu.edu/dna/genetic.htm

Each of the 20 different **amino acids** shares the amino group, the carboxyl group, the Hydrogen atom, and the central Carbon atom. The only group which differentiates them is the "R" group. R is simply a symbol for the side group.

There is the specialized apparatus for making proteins called the ***ribosome***. There are many ribosomes in the cytoplasm of a cell, and all the ribosomes are made of a ***small subunit*** and a ***large subunit***. These two subunits open up like a "pac-man" allowing the mRNA message to slide through. Once the mRNA message is in place and protein synthesis is ready to begin, the two subunits close again so that the mRNA is now in between the two subunits.

The next player on the list is the tRNA (transfer RNA molecule). This molecule is responsible for bringing in the proper amino acids. The mRNA is now held within the two subunits of the ribosome and is relatively immobile. The amino acids (which are the building blocks of proteins) are floating free in the cytoplasm.

So how can we bring the amino acids down to the mRNA?

This problem is solved by the action of tRNA. The tRNA molecule acts as a "taxi" whose job is to read the code from the mRNA and bring the corresponding amino acid into place. What do I mean by "corresponding" amino acid? Every tRNA molecule has its own set of three bases which is called an ***anticodon.*** This anticodon is complementary to mRNA codons. The other "end" of the tRNA molecule has an "acceptor" site where the tRNA's specific amino acid will bind.

Even though there are only 20 amino acids that exist, there are actually 64 possible tRNA molecules:

4 X 4 X 4 = 64 possible combinations

There are four choices of bases for the first space (A, U, G, or C), the same four choices for the second space (you can repeat the same bases), and the same four bases as a choice for the third spot. So, 4 x 4 x 4 is 64! 61 of the tRNAs code for specific amino acids and 3 code for chain termination as a result of pairing up with "stop codons", signaling the end of the mRNA message. The table shows which codons code for which amino acids:

AMINO ACID	RNA CODON
ALANINE	**GCC, GCA, GCG, GCU**
ARGININE	**AGA, AGG, CGU, CGA, CGC, CGG**
ASPARAGINE	**AAC, AAU**
ASPARTIC ACID	**GAC, GAU**
CYSTEINE	**UGC, UGU**
GLUTAMIC ACID	**GAA, GAG**
GLUTAMINE	**CAA, CAG**
GLYCINE	**GGA, GGC, GGG, GGU**
HISTIDINE	**CAC, CAU**
ISOLEUCINE	**AUA, AUC, AUU**
LEUCINE	**UUA, UUG, CUA, CUC, CUG, CUU**
LYCINE	**AAA, AAG**
METHIONINE (INITIATION)	**AUG**
PHENYLALANINE	**UUC, UUU**
PROLINE	**CCA, CCC, CCG, CCU**
SERINE	**UCA, UCC, UCG, UCU, AGC, AGU**
THREONINE	**ACA, ACC, ACG, ACU**
TRYPTOPHAN	**UGG**
TYROSINE	**UAC, UAU**
VALINE	**GUA, GUC, GUG, GUU**
STOP	**UAA, UAG, UGA**

After looking at this chart, something should strike you...why does each amino acid have more than one codon? Isn't one codon sufficient for each amino acid? In theory, yes, this would be correct. But cellular processes do not occur in a perfect world! What if the coding sequence in a particular codon should be GUA, but, due to a mutation, the coding sequence became GUC? What would happen? Check the chart to find out!

OK, so your next question might be...

HOW IN THE WORLD CAN ONLY 20 AMINO ACIDS CREATE THE PRACTICALLY INFINITE NUMBER OF PROTEINS PRESENT IN THE BODY?!!??

It seems impossible, doesn't it? The key to all the variety is that the 20 amino acids can be linked in *different combinations* and in *different numbers*. For example,

alanine-valine-tryptophan.....serine

is a different protein than

valine-serine-tryptophan.....alanine

because the sequence is different, even though the same amino acids are represented. Similarly, a protein made of 200 amino acids is quite different than a protein that is 2,000 amino acids. The reason for this is because a protein's function is directly related to its shape (which is related to its amino acid sequence). Thus, if you change a protein's amino acid sequence, then you change its shape; and if you change the protein's shape, you change its function!

So, the key to remember here is that the **FUNCTION** OF THE PROTEIN IS DIRECTLY RELATED TO THE **SEQUENCE** OF AMINO ACIDS! To go one step further, the sequence of amino acids is related to the code on the mRNA molecule, which is determined by the code on the DNA molecule itself! This is how DNA eventually codes for proteins!!

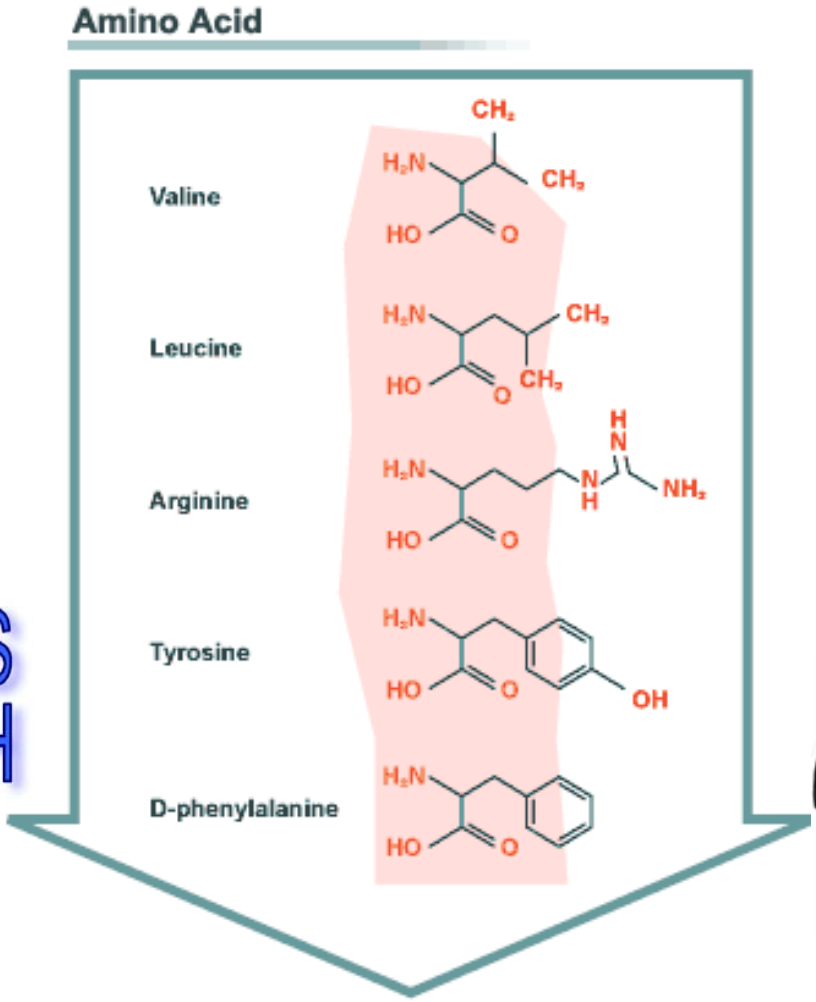
Now you know WHY it's so important that the DNA code stays intact (no mutations) because if you change the DNA, you change the mRNA, you change the amino acids coded for, and thus, you change the protein! The problem is if you change the protein, it usually renders the protein biologically inactive (in other words, it won't work properly!).

As the term "anticodon" on tRNA implies, it is complementary to the ***codon*** on mRNA**.** The codon is ALSO a set of three bases, but because the codon is found on the mRNA molecule, it is called something different. So, let's review this…

- A series of three nucleotide bases on a DNA molecule is called a triplet;
- A set of three nucleotide bases on an mRNA molecule is called a codon; and
- A set of three nucleotide bases on a tRNA molecule is called an anticodon.

You might be saying to yourself, "Isn't this just a case of the same thing being called a different name depending on where it is?" YES, YOU ARE CORRECT! Try to compare yourself to this example: You may be called by your first name here at the centre, by a nick-name by someone you know well, and Mr. or Ms. on a job interview. So, you are still the same person, you're just called a different name depending on where you are!

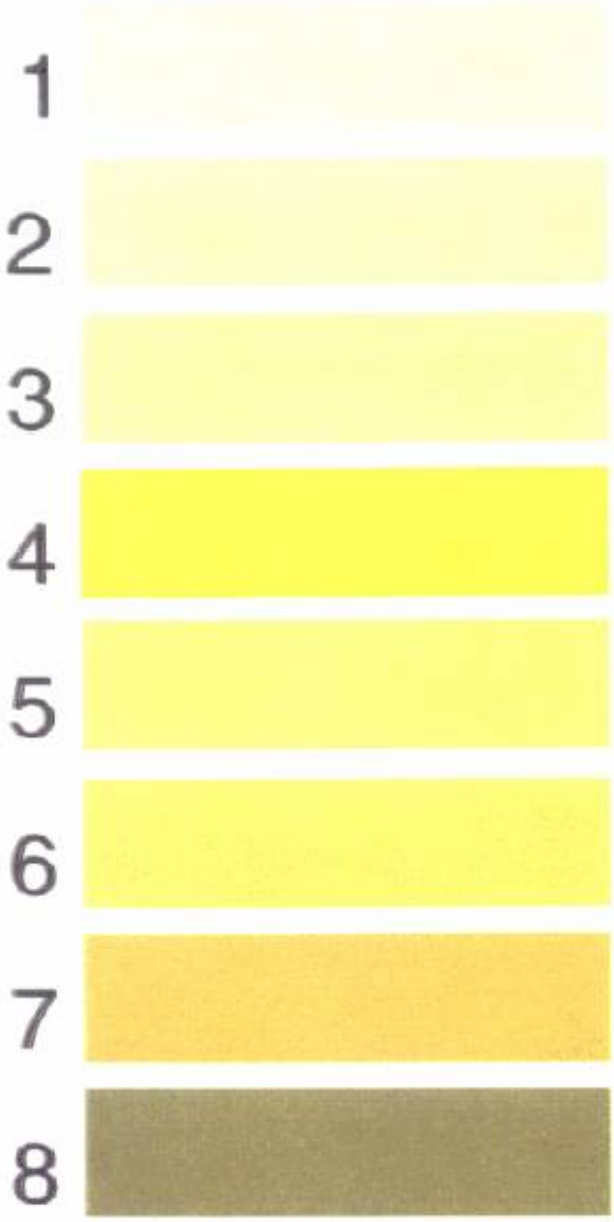
Protein synthesis occurs in three stages: Initiation, Elongation and Termination.



PASCAS HEALTH

Feeling Healing with Divine Love is the key!

Am I Hydrated?
Urine Color Chart



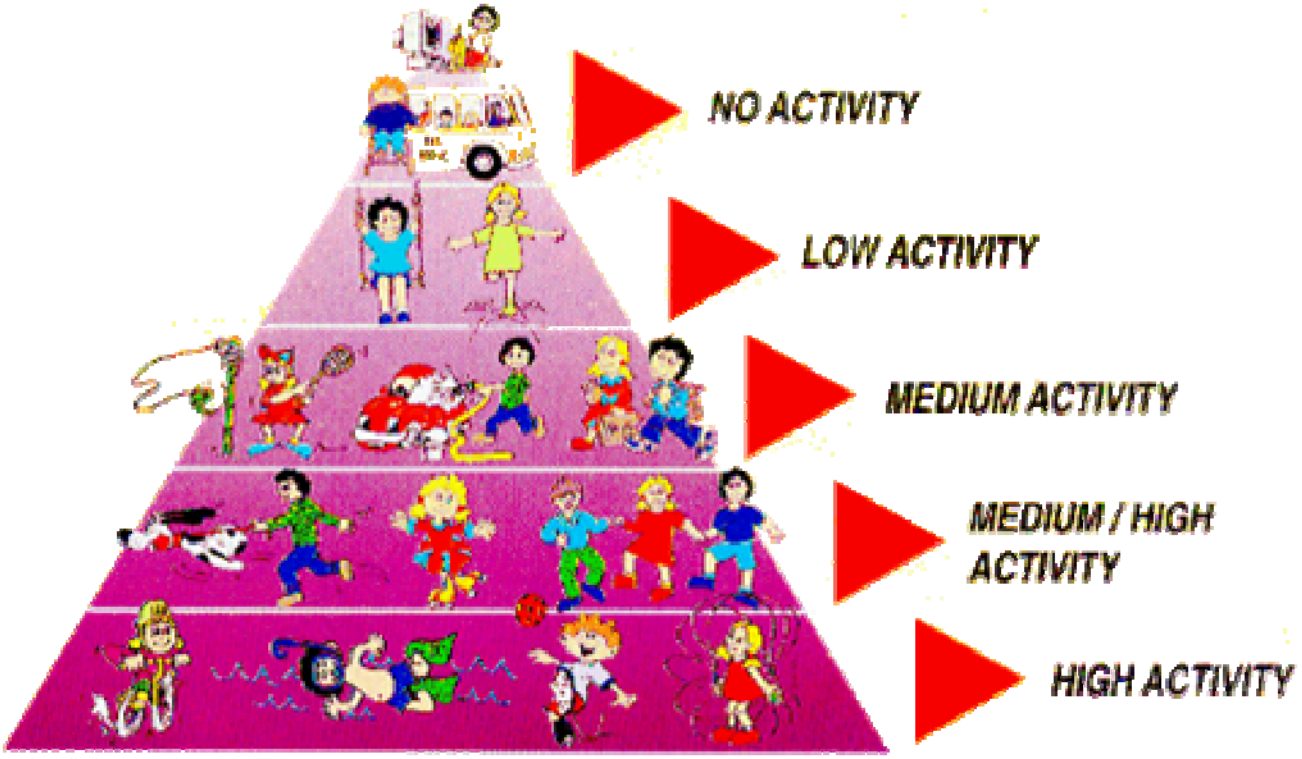
This urine color chart is a simple tool your can use to assess if you are drinking enough fluids throughout day to stay hydrated.

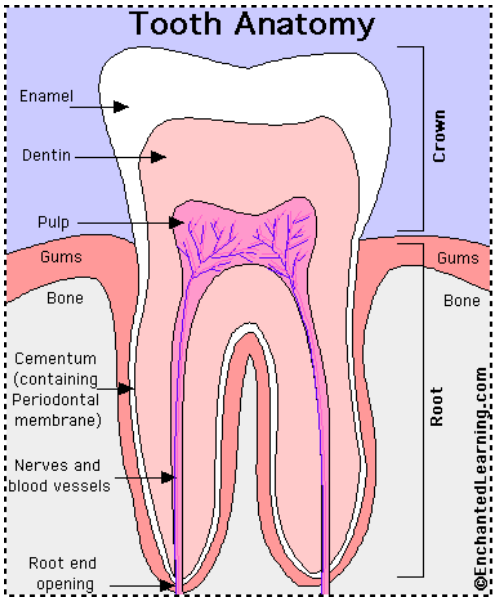
If your urine matches the colors numbered **1, 2, or 3 you are hydrated**.

If your urine matches the colors numbered **4 through 8 you are dehydrated** and need to drink for more fluid.

Be Aware! If you are taking single vitamin supplements or a multivitamin supplement, some of the vitamins in the supplements can change the color of your urine for a few hours, making it bright yellow or discolored.

If you are taking a vitamin supplement, you may need to check your hydration status using another tool like Handout #15: Hydration Check: Body Weight Log.


NO ACTIVITY
LOW ACTIVITY
MEDIUM ACTIVITY
MEDIUM / HIGH ACTIVITY
HIGH ACTIVITY


Tooth Anatomy
Enamel
Dentin
Pulp
Gums
Bone
Cementum (containing Periodontal membrane)
Nerves and blood vessels
Root end opening
Crown
Gums
Bone
Root
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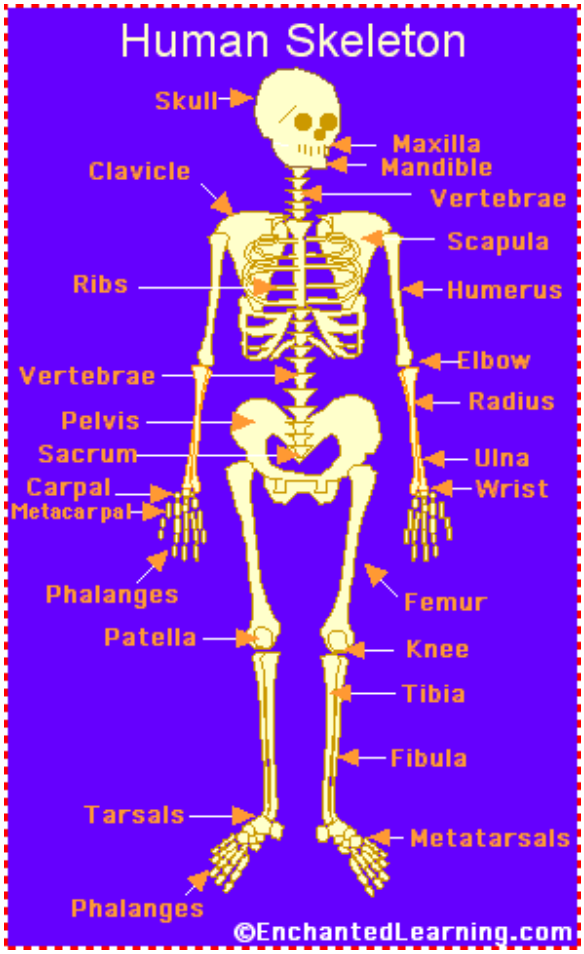
Human Skeleton
Skull
Maxilla
Mandible
Clavicle
Vertebrae
Scapula
Ribs
Humerus
Elbow
Vertebrae
Radius
Pelvis
Sacrum
Ulna
Carpal
Wrist
Metacarpal
Phalanges
Femur
Patella
Knee
Tibia
Fibula
Tarsals
Metatarsals
Phalanges
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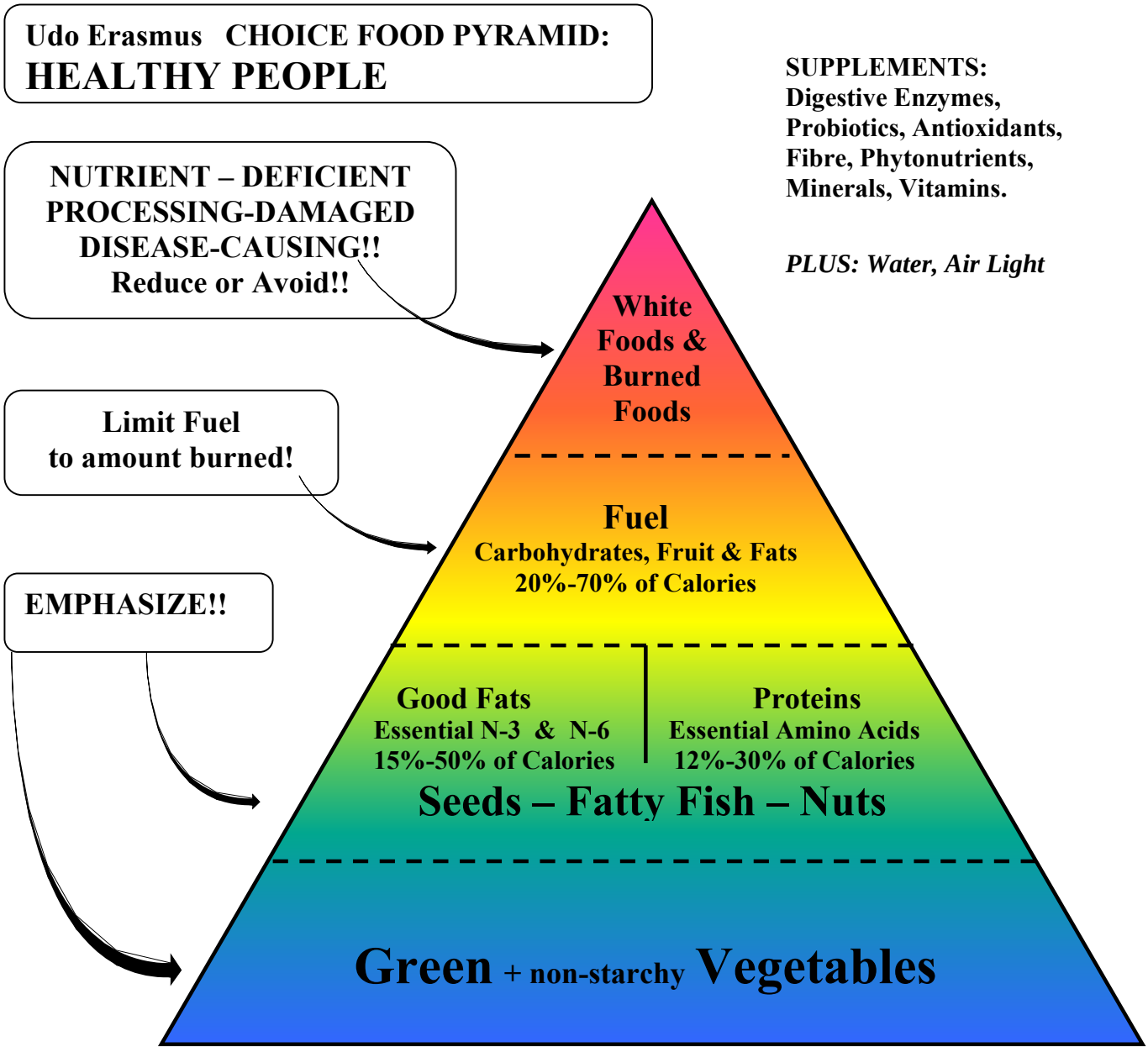


Udo's Choice ™ Food Pyramid
Illustrates health food choices as forming the base or bottom.
As you proceed higher on the pyramid, you encounter foods that present more of an obstacle to digestion and metabolism.

HOW DOES the COMPLEXITY of DIET FIT IN WITH OUR HEALING?

Our Healing, which is healing our untrue state, comes first – then our diet. Our Healing is the focus, understanding that as we're dysfunctional on all levels by being unloving to ourselves because of our childhood, then really it's irrelevant what we eat because of the thousands of layers and levels within us that are in denial. This is also explaining why it's so different for each of us. Because we've all had such different upbringings, resulting in different levels of repressed feelings within us. Broadly we can generalise, if we eat too much of this it will have this negative effect on us, however that's not on everyone, with some people eating and doing all the wrong things with seemingly no detrimental effects.

It is our inner that drives the outer. So our inner state, which is hugely complex, drives what foods we are drawn to. And we can try and control our diet using our mind, just as we can try and control any part of ourselves using our mind, however that only adds yet more complications to the already complicated mess.

So we are to focus on ourselves by attending properly to our feelings doing our Healing. And as we progress in our Healing, so our diet will change. And we might go this way and that, all of which brings up yet more bad feelings, all so we can embrace and express and seek the truth of them. With what we eat in the end being taken care of solely by our feelings – we will feel good about what we eat and when we eat it and how much we eat of it, it eventually giving us no further bad feelings, once we've completed our Healing.

So whilst doing our Healing, we can use our mind to look at the effects certain foods have on us so far as what science can determine; we can look at how that food is grown, how its prepared and so on; we can look at every aspect of it, yet all whilst still fully attending to our feelings. And so what one person will want to eat, how much and when, another person might not feel the same way about; even with people possibly going against all the suggested principles of 'what's best for you' worked out scientifically as humanity progresses in its wrongness, and showing no detrimental effects whatsoever.

So you can say, right, no more wheat, no more processed sugar... and see how that makes you feel, looking to the truth of those feelings. And you can say, oh but I can't be bothered going to all the trouble preparing such alternative food, and the added expense, and what am I going to do without bread – how will I survive when bread has always been my main comfort food? All more bad feelings to work with.

And you can say, all right, only raw vegetables, eggs and a bit of cheese, and start the new regime, only to reject it three days later because the chewed vegetables get caught in your throat making you cough and annoying the shit out of you. More bad feelings to accept, express and seek the truth of.

So as with anything through our Healing, we can look to our mind for its control, and try things we determine by it believing they will be helpful to us, all so long as we also keep paying attention to all the bad feelings (and good ones of course) that come up. And the feelings will be stronger, so we'll end up going against what our mind says, provided we want to give up our mind control and live a truly feeling-led life. All of which overall will have an effect upon us and our diet and every other aspect of our life. All initially, whilst we're doing our Healing, to show us the whole truth of our wrongness. And then once Healed, to live being true.

And then as your Healing progresses and you reclaim your will, so it starts working positively and lovingly for you rather than unloving and negatively against you. And suddenly you might feel and know: right, no more read meat, or no more milk, or no more of that dried fruit, or no more of that

vegetable, or no more of that chocolate, or even more of that different chocolate and more of those vegetables. And you know it's right for you.

We can either keep living being told by our minds what is the best way for us to live, what are the best foods for us and so on; or we can stop and pay complete attention to our feelings, wanting and allowing them to show us the way we are to be. And by doing our Feeling-Healing we are doing this, all of which is healing all that's wrong within us and preventing us from simply naturally doing it as we should have done had we been allowed to grow up lovingly and without any unloving interference.

So we can try and wrestle it all out with our minds; or, we can look to our feelings instead.

Note from James Moncrief Saturday 13 January 2018

Live true to your feelings, and you ARE living true, not only to your own soul, but also true to God's soul. So doing your Healing by honouring all your feelings, IS living the will of God. And being fully Healed, IS living even more truly the Will of your Mother and Father.

By living true to ourselves, true to our feelings, we are living true to God. It's that simple.

Feelings first

LIVE FEELINGS FIRST

FEELINGS FIRST For Kids

MODERN MEDICINE IGNORES OUR SUBTLE BODIES:

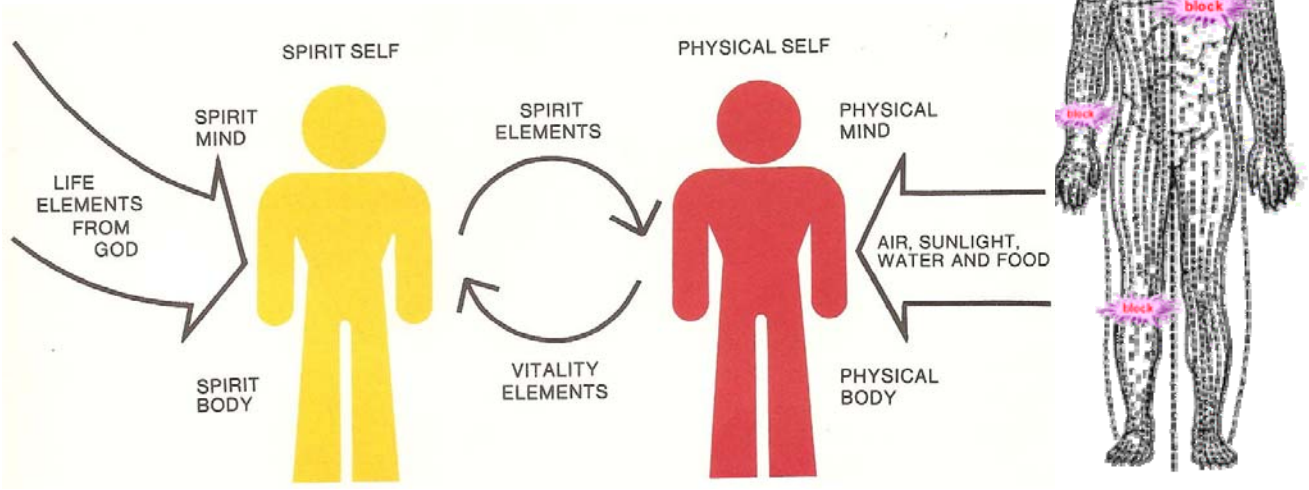
It is the injuries to our subtle bodies caused by our wayward mind that bring about the manifestation of mild discomfort, then acute pain within our physical body, and ultimately the illnesses and diseases that we then seek medical assistance to suppress. Modern medical systems do not address the cause of such illness. Ask yourself, when was the last time that a medical professional told you what the underlying cause of an illness was?

The auric field, that some can see, is the template for our physical body. Childhood Repression brings about energy flow blockages, being stuck and frozen emotional injuries, which then retard the flow of energies within our physical bodies. Modern medicine ignores this reality. The result is that treatments provided are only temporary as the underlying injury remains within our subtle bodies.

We have other bodies that are just as real as the physical body, they are all connected, if we have a problem within these subtle bodies, such problems most likely will manifest on the physical, so why not attend to it utilising a healers help on these subtle levels thereby helping yourself on the physical.

Example, our genes are multi-layered. Our genes are not only part of our physical being but are far reaching. They are:
on the physical level
on the emotional level
on the mental level
on the psychic level
on the spiritual level.

We need to understand our **genes are not just physical, but on all levels**.



In fact our issues and illness that we recognise within the physical body are on all levels.

Only by one engaging in the process of Feeling Healing can one delve down into the core emotional issues originating from our childhood, being in the form of childhood repression and suppression, that we can then express and release such injuries and bring about permanent health to our physical body. The process of Feeling Healing is the only way to remove the underlying cause of physical illness and discomfort.

Primary recommended reading: consider commencing with: Paul – City of Light

The Book of Truths	1914 – 1923	xxx	– Joseph Babinsky
containing the Padgett Messages or			
Little Book of Truths			– Joseph Babinsky
True Gospel Revealed anew by Jesus Vol I, II, III, IV		xxx	– Geoff Cutler
The Rejected Ones	2002 – 2003	xxx	– James Moncrief
Messages from Mary & Jesus	2003	xxx	– James Moncrief
Paul – City of Light	2005	xxx	– James Moncrief
Mary Magdalene and Jesus'			
comments on the Padgett Messages	2007 – 2010	xxx	– James Moncrief
Speaking with Mary Magdalene & Jesus	2013 – 2014	xxx	– James Moncrief
Sage and the Healing Angels of Light	2017	xxx	– James Moncrief
Road map of Universe and history of Universe:			
The Urantia Book	1925 – 1935	xxx as primary reading	
Divine Love supporting reading:			
Revelations	1954 – 1963		– Dr Daniel Samuels
Judas of Kerioth	2001 – 2003		– Geoff Cutler
The Golden Leaf	2008		– Zara & Nicholas
The Richard Messages	2012 – 2013		– James Reid
The Divine Universe	2012 – 2013		– Zara & Nicholas
Family Reunion Afterlife Contact	2014 – 2015		– Joseph Babinsky
Traveller, An Immortal Journey	2014 – 2015		– Zara & Nicholas
Destiny, Eternal Messages of Divine Love	2015 – 2016		– Zara & Nicholas
Feeling Healing	2017		– James Moncrief
Religion of Feelings	2017		– James Moncrief
The Way of Divine Love			– Joseph Babinsky
Divine Love – The Greatest Truth in the World			– Joseph Babinsky
The Human Soul			– Joseph Babinsky
Divine Love Flowing			– Joseph Babinsky
The Truth			– Werner Voets
Through the Mists, The Life Elysian, The Gate of Heaven			– Robert James Lees
Life in the World Unseen			– Anthony Borgia
Gone West			– J M S Ward
Post Mortem Journal			– Jane Sherwood
After Death / Letters from Julia			– William T Stead
Thirty Years Among the Dead			– Carl A Wickland
A Wanderer in the Spirit Land			– Franchezzo
Life Beyond the Veil Vol I thru to V – Rev George Vale Owen			– Geoff Cutler
The Holy Bible from the Ancient Eastern Text			– Dr George M Lamsa

Available generally from:

www.lulu.com **www.amazon.com** **www.bookdepository.com**

For Divine Love focused websites and forums:

Pascas Health: **http://www.pascashealth.com/index.php/library.html**

Spiritual Development: **http://new-birth.net/spiritual-subjects/**

Padgett Books: **http://new-birth.net/padgetts-messages/**

http://divinelovesp.weebly.com/my-free-books-and-free-padgett-messages.htm

James Moncrief's books, the Padgett Messages and The Urantia Book at:

DIVINE LOVE SPIRITUALITY – DLS:

http://divinelovesp.weebly.com/my-free-books-and-free-padgett-messages.html

All Padgett Messages	(for condensed versions – see below)	1914 – 1923	Pages 945
The Urantia Book	(see suggested papers to read below)		

James Moncrief Books:	MoC		
The Rejected Ones – the Feminine Aspect of God	1,490	Nov 2002 – Jan 2003	228
Messages from Mary and Jesus book 1	1,485	Feb – Apr 2003	189
Messages from Mary and Jesus book 2	1,485	Apr – Oct 2003	170
Mary Magdalene and Jesus' comments on the Padgett Messages – book 1		Aug 2007	164
Messages from 31 May 1914 – 12 January 1915	1,495		
Mary Magdalene and Jesus' comments on the Padgett Messages – book 2		Sep 2010	177
Messages from 13 January 1915 – 29 August 1915	1,494		
Speaking with Mary Magdalene and Jesus blog – book 1	1,490	Jan – Apr 2013	206
Speaking with Mary Magdalene and Jesus blog – book 2	1,489	Apr – May 2013	229
Speaking with Mary Magdalene and Jesus blog – book 3	1,490	Oct – Jan 2014	187
Speaking with Mary Magdalene and Jesus blog – book 4	1,491	Jan – May 2014	191
Mary Magdalene comments on Revelation from the Bible KJV	1,485	Dec 2013 – Jan 2014	84
		This group being pages of	1,825

Paul – City of Light	1,488.5	2005	149
Ann and Terry		2013	235
Feeling bad? Bad Feelings are GOOD!	feeling-healing book 1	2006	179
Feeling bad will make you feel BETTER – Eventually!	feeling-healing book 2	2006	159
Breaking the Golden Rule.	feeling-healing book 3	2006	168
Feeling-Healing exercises, and other healing points to consider.		2009	175
Cathy and Mark – a novel introducing Feeling-Healing.		2010	151
Introduction course to Divine Love Spirituality		2006	139
Speaking with the Dead, Death and Dying		2009	173
Spirits and their Childhood Repression Healing		2010	179
With Verna – a nature spirit		2008	279
Communication with spirits – meet a spirit friend		2010	37
Introduction to Divine Love Spirituality website			362
Sage – and the Healing Angels of Light		2017	260
Divine Love Spirituality	1,500	2017	201
Feeling Healing – you can heal yourself through your feelings		2017	153
Religion of Feelings	1,500	2017	44
		This group being pages of	3,043

Religion of Feelings http://religionoffeelings.weebly.com/
Introduction to Divine Love Spirituality http://dlspirituality.weebly.com/
Main website of DLS http://divinelovesp.weebly.com/
Childhood Repression website http://childhoodrepression.weebly.com/
DLS and CR forum http://dlscr.freeforums.net/

http://withmarymagdaleneandjesus.weebly.com/blog---and-free-books-speaking-with-mary-and-jesus

FEELING HEALING and SOUL HEALING with the DIVINE LOVE:
James Moncrief Publications: **all publications are free downloads:**
http://divinelovesp.weebly.com/my-free-books-and-free-padgett-messages.html
It is suggested for one to consider reading as follows:
Speaking with Mary Magdalene and Jesus – books 1 – 4
These four books encapsulate the second of the revelations with the first having been introduced by James Padgett one hundred years previously. These four books provide a wide range of guidance that has never previously been made available.

Paul – City of Light
As a gentle intro into the Divine Love and Healing; being James Moncrief's first novel and it's been criticised as being too heavily clichéd, but that's the point because it's a reflection of how he was back then.

Ann and Terry
For an example of people who might want to immediately start working on themselves and doing their Healing.

Feeling Bad? Bad Feelings are GOOD
For more understanding about our denial of our feelings and why we should not deny our feelings, and it includes how it all came about for James, using himself as an example.

Feeling bad will make you feel BETTER – Eventually!
This includes specific examples of Marion and James working on expressing particular bad feelings, again with the hope that it will help others gain something of an idea as to what's involved in doing your Feeling Healing.

Sage – and the Healing Angels of Light
Through Sage who's 13 years old, the story is primarily about the two aspects of healing; that being, with the help of our angels, and the full Healing we can do by looking to our feelings for their truth.

Religion of Feelings **Welcome to LOVE – the Religion of Feelings**
Feeling Healing **you can heal yourself through your feelings**

So these books, including the four Speaking with Mary Magdalene and Jesus books, provide the essence of it all and are examples of James' work. Then it's up to whatever takes one's fancy. Other reading to consider may include:
The Padgett Messages being published as:
The True Gospel Revealed Anew by Jesus volumes 1 – 4
Book of Truths by Joseph Babinsky
The Urantia Book

Release one's pain through expressing one's feelings.

in conjunction with

Longing for the Truth when also longing for Divine Love.

FEELING HEALING with DIVINE LOVE is SOUL HEALING:

A collection of 'papers' that draw together specific topics including all of the above and more from other sources of information and revelation designed to help increase one's awareness about why we have the problems we do and how to heal them, all whilst living a more healthy and sustainable life. They provide a brief snapshot of the more complicated topics and issues.

Firstly, consider discovering the truth of your emotional pain through Feeling Healing.
Secondly, consider longing for our Heavenly Parents' Love as you progress with your healing.
Primary and most important readings are the writings of James Moncrief.
Then consider the Padgett Messages, and then The Urantia Book.

Pascas Papers, being free, are located within the Library Downloads **www.pascashealth.com**
http://www.pascashealth.com/index.php/library.html

PASCAS – document schedule.pdf **downloadable index to all Pascas Papers.**

FH denotes Feeling Healing; SH denotes Soul Healing, which is: Feeling Healing with the Divine Love; DL denotes Divine Love – living with the Love.

PASCAS INTRODUCTION NOTES: *All papers below can be found at Library Downloads link..*

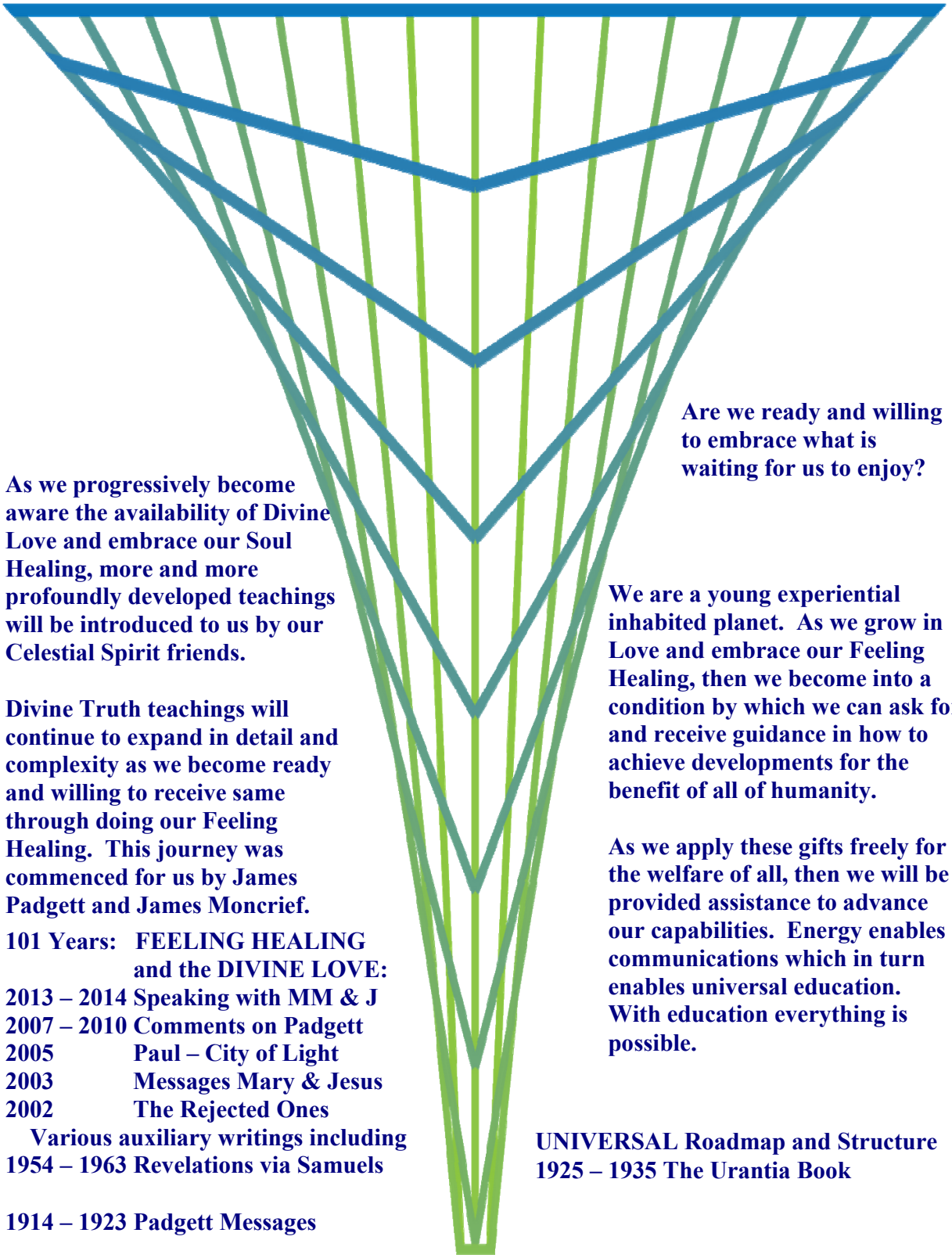
Pascas Care Letters A Huge Upturn
Pascas Care Letters Big Revelation
Pascas Care Letters Feeling Healing Benefits Children
Pascas Care Letters Feeling Healing Way
Pascas Care Letters Little Children
Pascas Care Letters Women's Liberation and Mother

MEDICAL – EMOTIONS:

Pascas Care – Feeling Healing
Pascas Care – Feeling Healing All is Within
Pascas Care – Feeling Healing and Health
Pascas Care – Feeling Healing and History
Pascas Care – Feeling Healing and Parenting
Pascas Care – Feeling Healing and Rebellion
Pascas Care – Feeling Healing and Starting
Pascas Care – Feeling Healing and Will
Pascas Care – Feeling Healing Angel Assistance
Pascas Care – Feeling Healing Being Unloved
Pascas Care – Feeling Healing Child Control
Pascas Care – Feeling Healing Childhood Repression
Pascas Care – Feeling Healing End Times
Pascas Care – Feeling Healing is Rebelling
Pascas Care – Feeling Healing Live True
Pascas Care – Feeling Healing Mary Speaks
Pascas Care – Feeling Healing My Soul
Pascas Care – Feeling Healing Perfect State
Pascas Care – Feeling Healing Revelations X 2
Pascas Care – Feeling Healing the Future
Pascas Care – Feeling Healing Trust Yourself
Pascas Care – Feeling Healing Versus Cult

PASCAS PAPERS

DIVINE LOVE and DIVINE TRUTH Revelations and Teachings escalating:



Are we ready and willing to embrace what is waiting for us to enjoy?

As we progressively become aware the availability of Divine Love and embrace our Soul Healing, more and more profoundly developed teachings will be introduced to us by our Celestial Spirit friends.

Divine Truth teachings will continue to expand in detail and complexity as we become ready and willing to receive same through doing our Feeling Healing. This journey was commenced for us by James Padgett and James Moncrief.

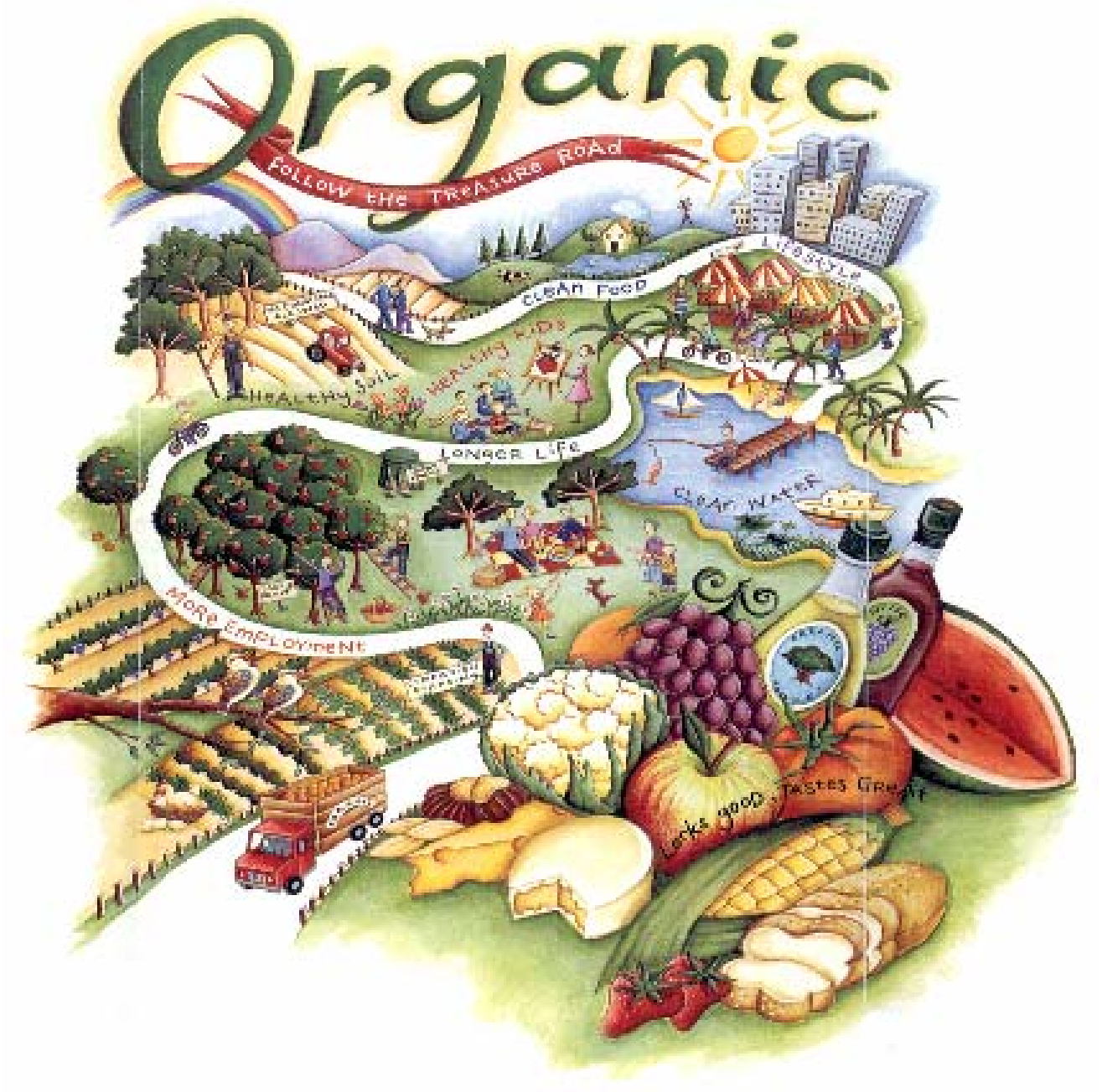
We are a young experiential inhabited planet. As we grow in Love and embrace our Feeling Healing, then we become into a condition by which we can ask for and receive guidance in how to achieve developments for the benefit of all of humanity.

As we apply these gifts freely for the welfare of all, then we will be provided assistance to advance our capabilities. Energy enables communications which in turn enables universal education. With education everything is possible.

101 Years: FEELING HEALING and the DIVINE LOVE:
2013 – 2014 Speaking with MM & J
2007 – 2010 Comments on Padgett
2005 Paul – City of Light
2003 Messages Mary & Jesus
2002 The Rejected Ones
Various auxiliary writings including
1954 – 1963 Revelations via Samuels

1914 – 1923 Padgett Messages

UNIVERSAL Roadmap and Structure
1925 – 1935 The Urantia Book


Organic
Follow the Treasure Road
Clean Food
Healthy Soil
Longer Life
Clear Water
More Employment
Looks good, Tastes Great