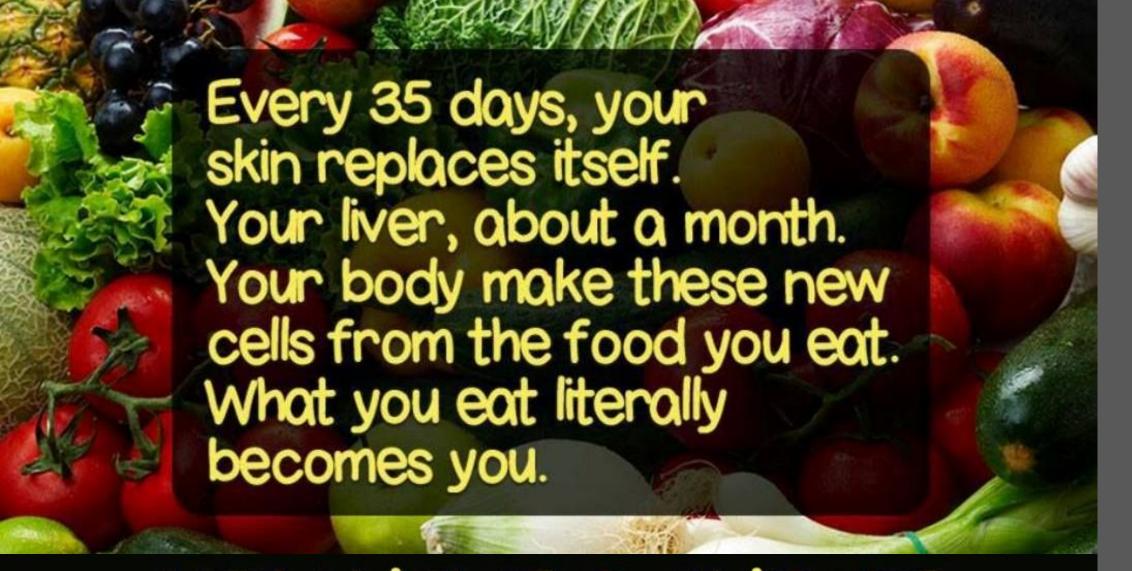


You Are What You EatWater

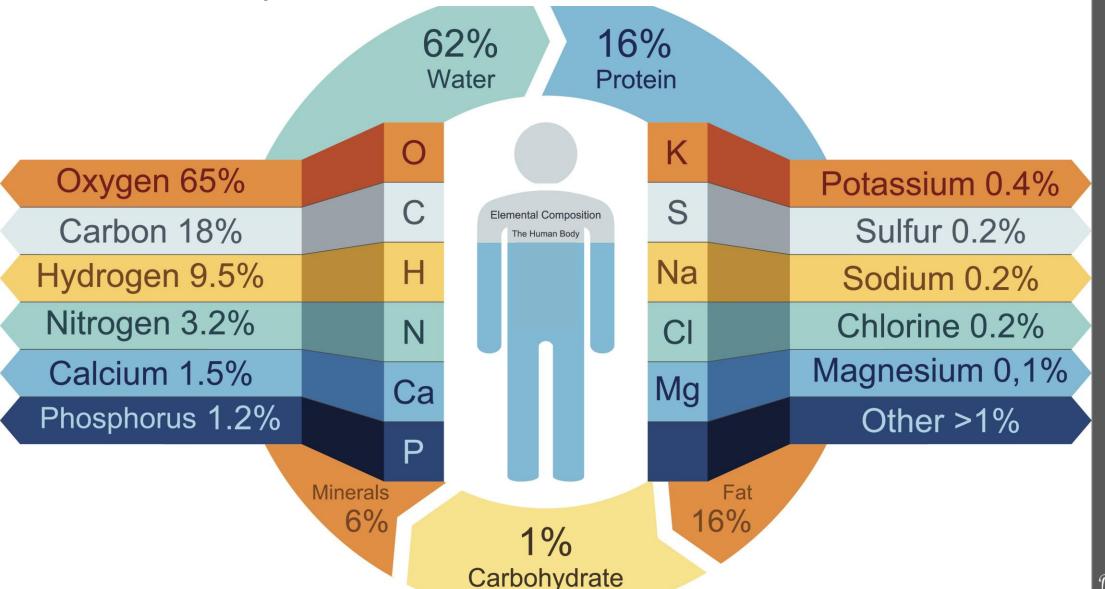




YOU HAVE A CHOICE IN WHAT YOU'RE MADE OF



What are you made of?









Water -

Drinking Enough Water Can:

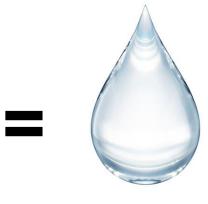
- · Banish Headaches
- · Improve Your Mood
- · Relieve Fatigue
- · Boost Your Energy Levels
- · Relieve Constipation
- · Flush Out Toxins
- Improve Digestion
- Promote Weight Loss
- · Prevent Kidney Stones
- · Boost Your Immune System
- Improve Your Complexion
- · Alleviate Back Pain
- · Regulate Body Temperature





How much water should you drink?

Your body weight (lbs.)



Fluid oz. of water daily





DIURETIC BEVERAGES:

- COFFEE
- CAFFEINATED TEAS (AS WELL AS SOME HERBAL TEAS SUCH AS PEPPERMINT)
- -SODA
- -ALCOHOLIC BEVERAGES
- -PACKAGED FRUIT JUICES



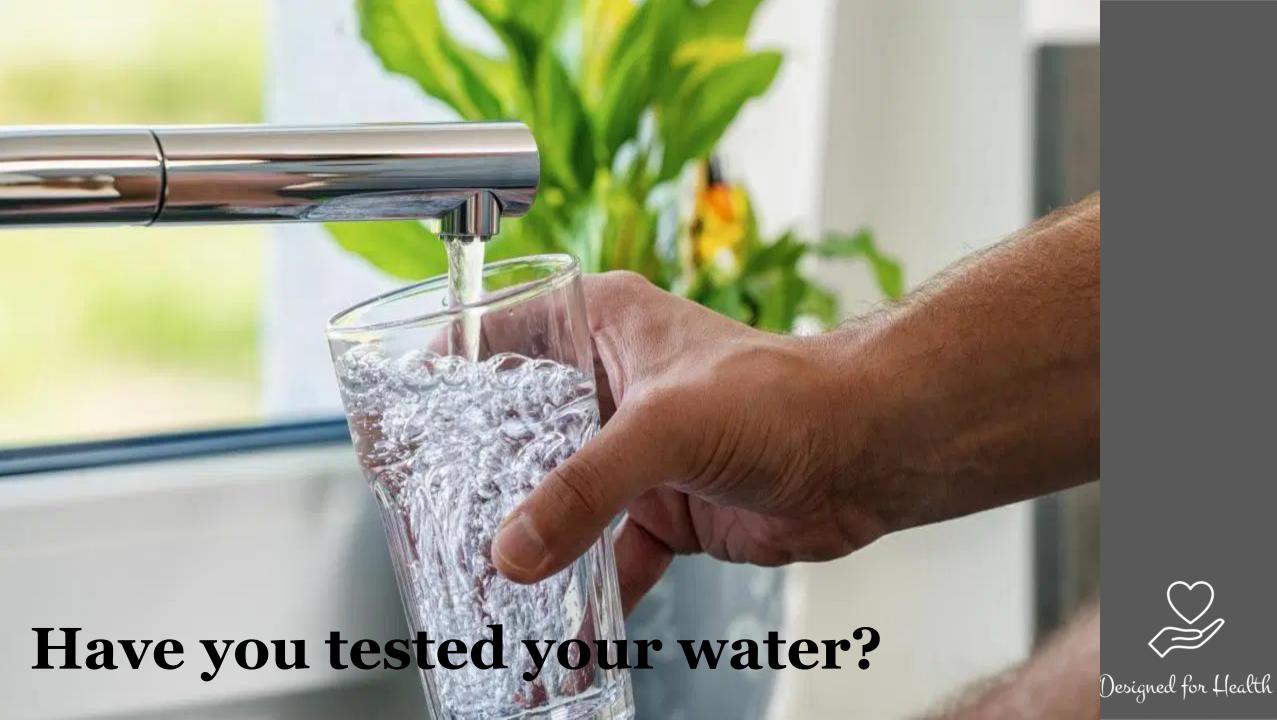
What does water do?



- Improves oxygen delivery to cells
- Transports nutrients
- Enables cellular hydration
- Cushions bones and joints
- Absorbs shocks to joints and organs
- Prevents tissues from sticking
- Lubricates joints

- Removes waste
- Flushes toxins
- Moistens oxygen for easier breathing
- Regulates body temperature
- Improves cell-to-cell communications
- Maintains electrical properties of cells
- Empowers natural healing processes





Chlorine, fluoride, bacteria...



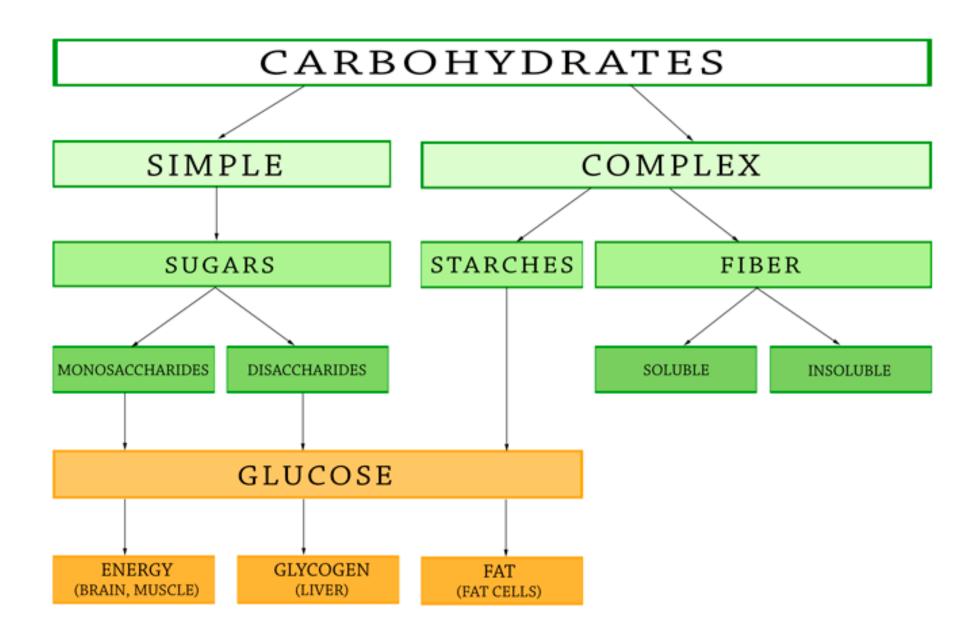




You Are What You EatCarbohydrates











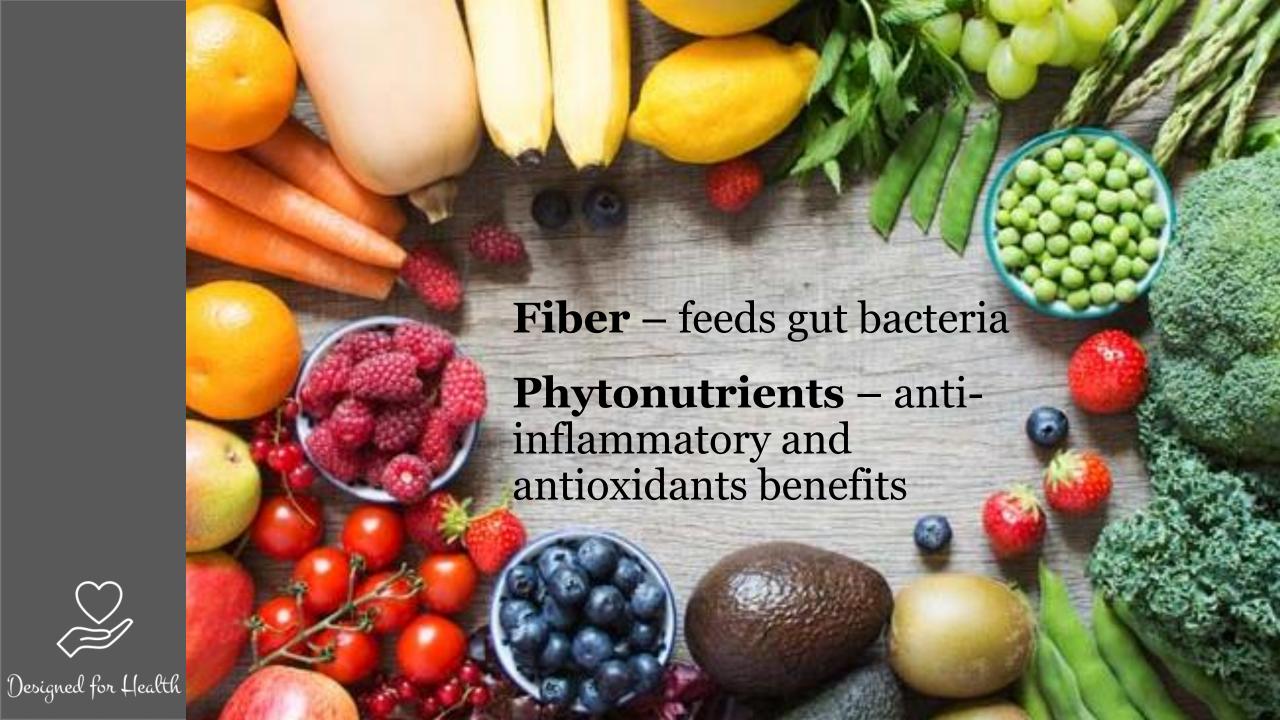
The Role Of Carbohydrates

- Your body converts all carbs to Glucose
 - A simple sugar that's the main source of energy for our bodies
 - The glucose that is not used is stored in the liver and muscles as a starch-like substance called; glycogen.
 - When your body needs more energy the glycogen is converted back to glucose.
 - Excess carbs taken in and not used are converted to body fat



Essential Carbohydrates:







CARBOHYDRATES TO EAT

Vegetables: Eat a wide variety of local, organic, in-season vegetables, aiming to eat as many colors as possible, at least some raw, with an emphasis on leafy green vegetables

Fruit: Always in their whole form (avoid fruit juices), preferably organic and in-season

Tubers & Squash: Active, pregnant, or breastfeeding individuals should include a variety of starchy vegetables, including sweet potato, yams, carrots, beets, taro, plantains, pumpkin, parsnips, rutabaga, etc.

Properly Prepared Grains & Legumes: Only if tolerated, only if there are no blood sugar dysregulation issues and only when properly prepared to deactivate phytic acid (*i.e. soaked, spouted, or fermented*)





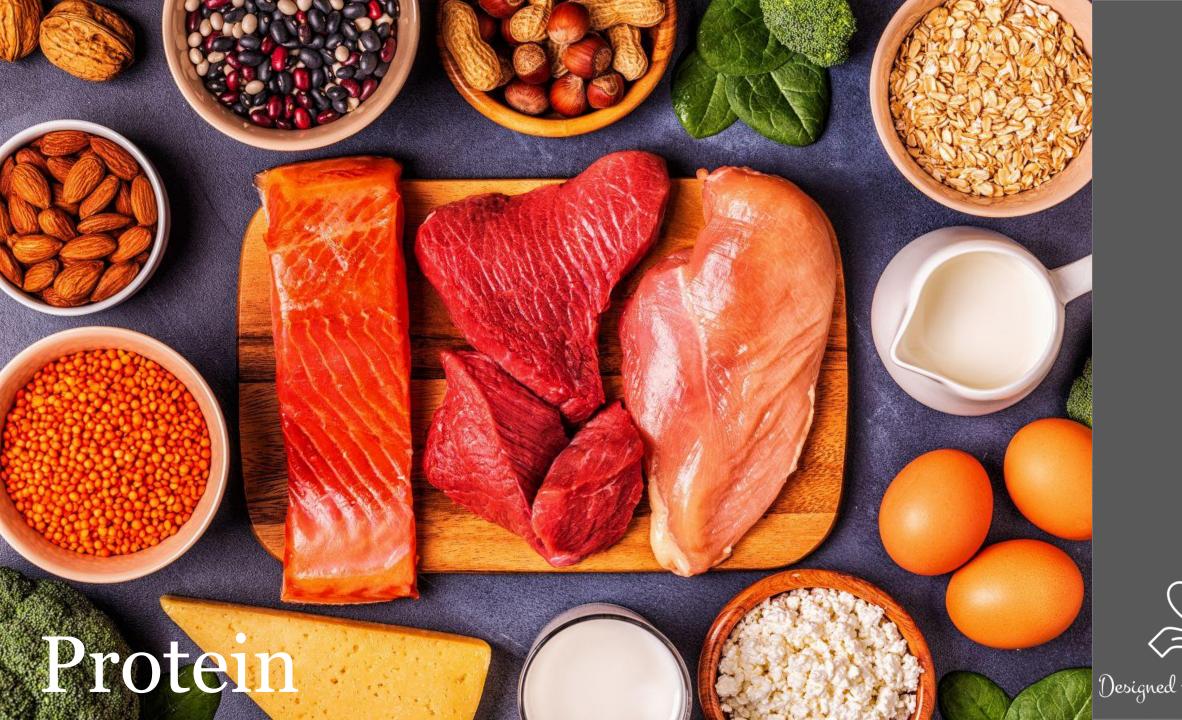


Designed for Health



You Are What You EatProtein





Designed for Health



Proteins in the Human Body

Proteins in the Immune System

- Antibodies fight invaders
- Complement System system of 20 protein molecules that are activated during infections



 Cytokines - communicate with other cells



Proteins in the Muscle

- Actin and Myosin interactions with each other for muscle movement
- Myoglobin release oxygen to muscles
- Ferritin stores and release oxygen

Proteins in the Blood

- Hemoglobin transports oxygen
- Fibrinogen clots blood
- Albumin maintain proper amount of liquid in blood

Enzymes

 Digestive Enzymes - helps break down food



Structural Proteins

- Cytoskeleton network of protein filaments and tubules that maintain cell shape
- Keratin found in skin, hair, and nails
- Collagen provides strength
- Elastin provides flexibility

Cell Membrane

- Form channels for substances to move through membrane
- Act as enzymes
- Act as receptors
- Three types of proteins: peripheral protein, integral protein, and lipid-bound protein





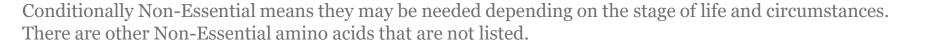
Proteins-Peptides-Amino Acids

Tryptophan

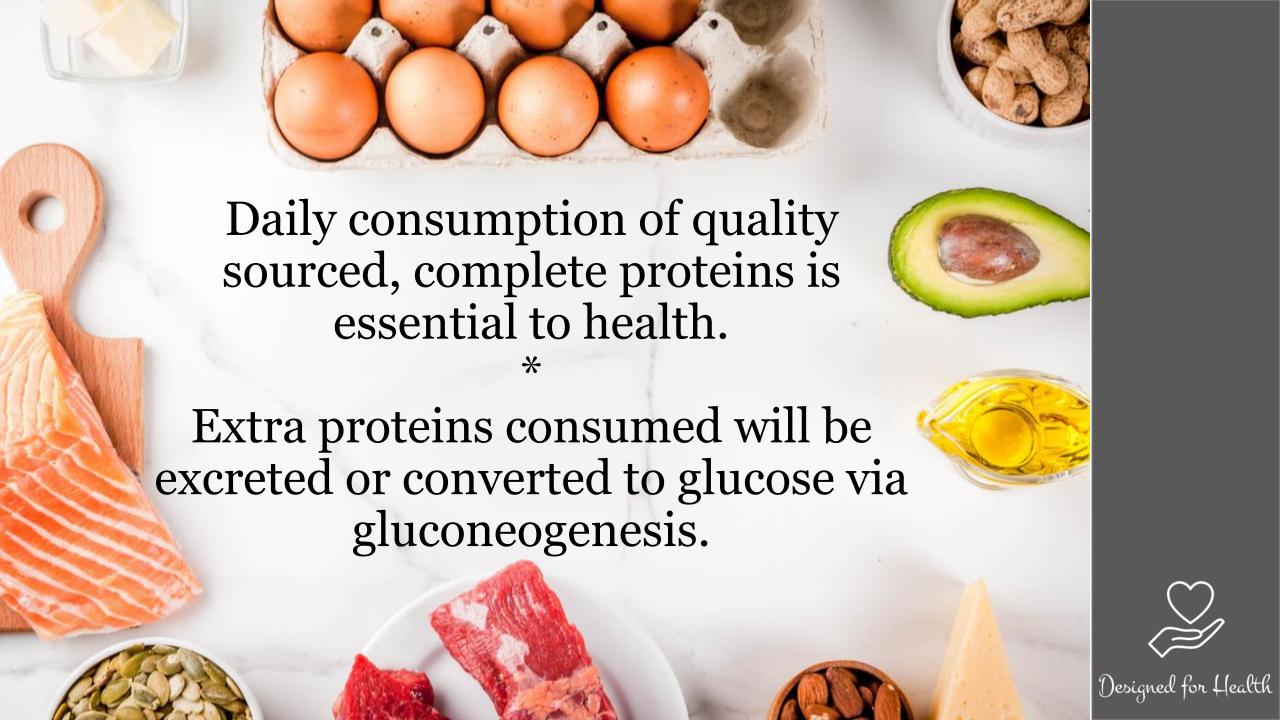
Valine

Essential	Conditionally Non-Essential	Non-Essential
Histidine	Arginine	Alanine
Isoleucine	Cystine	Asparagine
Leucine	Glutamine	Aspartate
Lysine	Glycine	Glutamate
Methionine	Proline	Serine
Phenylalanine	Tyrosine	
Threonine		

Amino Acids are the building blocks of hormones, neurotransmitters, muscles and DNA/RNA.











"You are what you eat eats."















See handout for details! Sourcing your Food



Beef

Grass Finished Organic



Chicken

Organic Pastured / Free-Range -**Eating Bugs!**



Eggs

Organic Pastured / Free-Range - Eating Bugs! Local



Fish

Wild Caught Lower on the Food Chain Sustainably Harvested



Milk

Organic Raw Non-Homogenized A2/A2**Grass Fed**

The price of your food is an investment in your health.

You are what you eat eats!





You Are What You EatFats

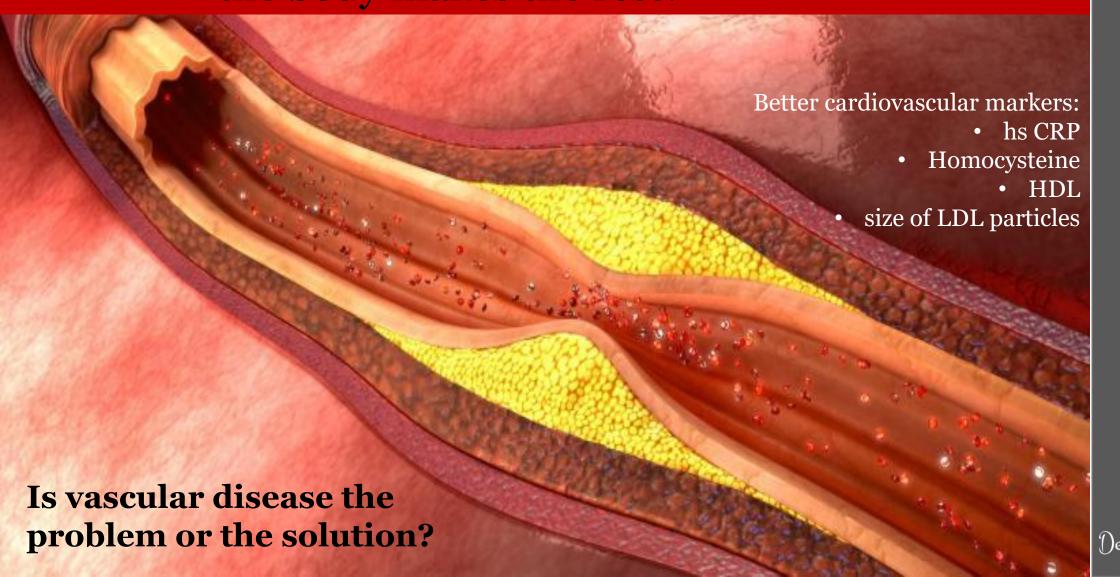






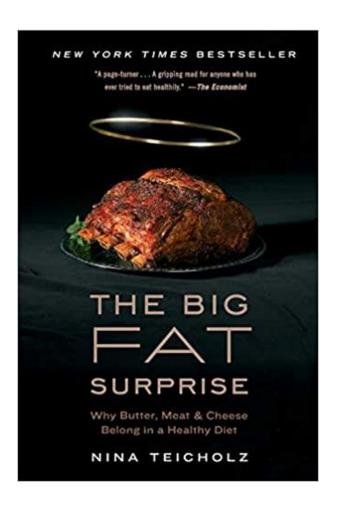


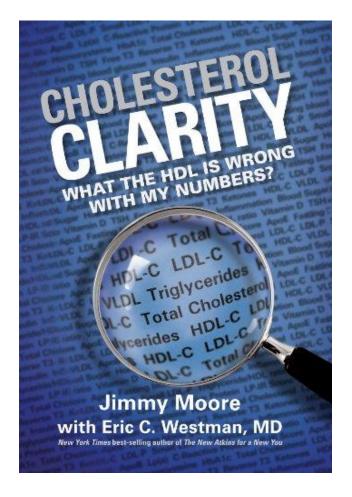
Did you know that since we only eat about 20% of the cholesterol that our body needs, the body makes the rest?

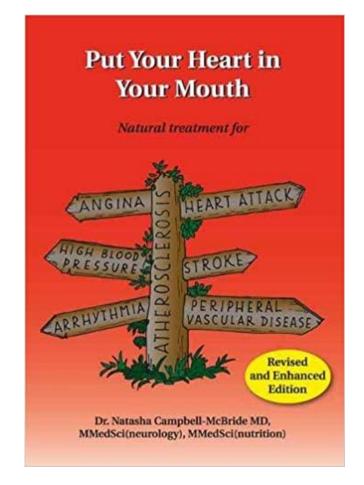




If you want to learn more about heart disease and fats, I recommend these:









Why do we need fats?

- Provide a cleaner, concentrated source of energy
- Promote fat burning
- Increase satiety helps curb cravings
- Make food taste good!

- Help body absorb fat soluble vitamins A, D, E, & K
- Provide building blocks for:
 - Cell membranes
 - Prostaglandins
 - Myelin sheaths
 - Brain
 - Hormones
 - Bile





Science Ahead

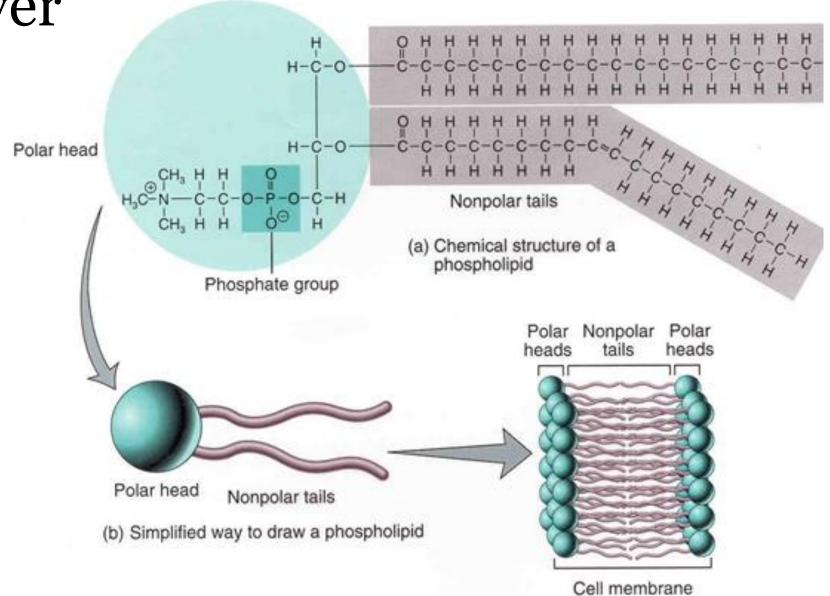


UNSATURATED FATTY ACID OCCUPATION OF THE HEAD OF THE STATE OF THE STA

Omegas are given their numbers by counting from the methyl end (CH3) until the first carbon double bonded



Phospholipid Bilayer





Saturated

- Highly stable
- Do not go rancid easily
- Non-essential b/c body can make these from carbs
- Found in animal fats and tropical oils
- Solid or semi-solid at room temp
- Safe at higher heat



Monounsaturated

- Relatively stable
- Do not go rancid easily
- Non-essential b/c body makes them from saturated fats
- Found in olives, avocados, some nuts
- Liquid at room temp
- Safe at low heat

- Relatively unstable
- Go rancid easily
- Two are essential: Linoleic Acid (omega 6) and Alphalinolenic Acid (omega 3)

Polyunsaturated

- Found in fish, flax, some nuts and seeds
- Usually liquid
- Never heat











What makes fats go rancid?

Light Heat Air (Oxygen)



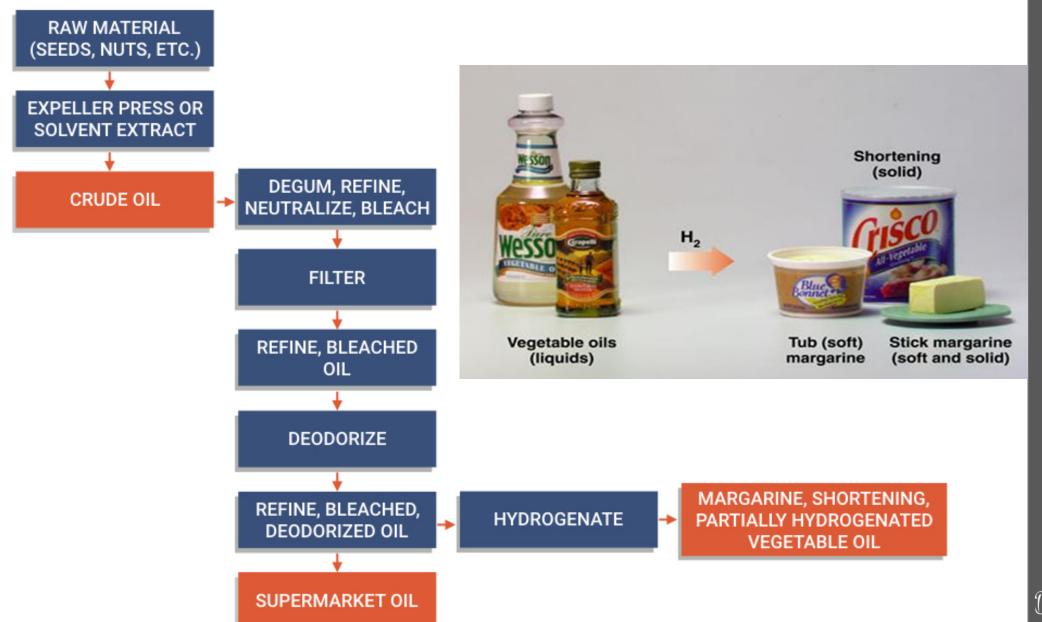


Why is vegetable oil unhealthy?

- Due to heavy processing and oxidation, they are rancid which causes inflammation in the body
- Many vegetable oils undergo hydrogenation to make them solid or semi-solid, which turns them into trans fats
- Vegetable oils are associated with cancers of the colon, breast and more



Steps in Oil Processing









The Skinny On Fats...



Versus











Versus Bad Fats



Butter Olive Oil Coconut Oil Eggs Avocado Oil Tallow Ghee Fish Oil Palm Oil

Canola Oil Soybean Oil X Sunflower Oil Margarine Corn Oil Vegetable Oil X Safflower Oil Grapeseed Oil Cottonseed Oil Peanut Oil



Where Do Vegetable Oils Lurk?











You Are What You EatVitamins







Fat Soluble

A, D, E, K

- Dissolves in fat
- Requires bile to be absorbed
- Transported by carrier protein
- Stored in liver and fatty tissues
- Toxicity is possible esp. with synthetic forms
- Required in periodic doses (weeks or months)
- Body creates active form of A and D, vitamin K also made by gut bacteria

Water Soluble

B1, B2, B3, B5, B6, B7, B9, B12, C, Choline

- Dissolves in water
- Some require stomach acid HCl) to be absorbed
- Travels freely in the blood
- Not stored (except B12), surplus goes through kidneys and out in urine
- Generally non-toxic
- Required in frequent doses (every 1-3 days)
- B vitamins made by some gut bacteria, we cannot make vitamin C



Fat Soluble Vitamins





See handout for details!

Vitamin	Food	Symptoms	Benefits		
Vitamin A Retinol	Retinol- liver, cod liver oil, fatty fish, butter, dairy, egg, meat, caviar; beta carotene— carrot, sweet potato, winter squash, greens, bell peppers	Night blindness, cornea failure, dandruff, bumps on the back of upper arms, infertility, delayed growth, poor wound healing, acne,	Vision, neurological function, healthy skin, hormones, organ support		
Vitamin D D3 cholecalci- ferol	SUN, fatty fish, beef liver, cheese, egg yolks, butter, cod liver oil	Fatigue, bone pain, muscle aches/cramps, moodiness, osteoporosis, tooth decay - Rickets	Strong bones, immune function, blood pressure, cancer mod, brain function		
Vitamin E mixed tocopherols	Almonds, hazelnuts, peanuts, sunflower seeds, greens	Disorientation, Lack of coordination, muscle pain/weakness, vision problems, trouble maintaining pregnancy	Cholesterol balance, antioxidant, skin repair, thick hair, balances hormones, PMS symptoms		
Vitamin K K2 mena- quinone	K2- natto, sauerkraut, liver, dairy, beef, pork, egg yolks, chicken; K1 – greens, cruciferous veggies	Easy bruising, excessive bleeding, oozing from nose/gums, heavy periods	Bone health, blood sugar control, heart disease, blood clotting, cancer		



Water Soluble Vitamins



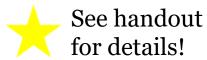
See handout for details!

			, Tor details:			
Vitamin	Food	Symptoms	Benefits			
Vitamin C – ascorbic acid & bioflavonoids	Citrus, berries, kiwi, peppers, greens, herbs, guava, papaya, broccoli, kale, black currant, star fruit, Kakadu plum, camu camu, acerola cherry	Fatigue, bone issues, dry skin, painful joints, swelling, sick often, weight gain, shortness of breath, depression, poor wound healing, coiled hair, bleeding gums - Scurvy	Immune system, antioxidant, wound healing, bone formation, connective tissue,			
Vitamin B1 - Nutritional yeast, Thiamine seaweed, sunflower seeds, macadamia nuts, lentils, beans, liver		Chronic fatigue, loss of appetite, irritability, nerve damage, muscle weakness, gut issues, irritability, muscle weakness/cramps, burning in feet, confusion - Beriberi	Metabolism, heart and nerve function, immune, helps treat alcoholism, brain disorders, enhances learning, positive mood, vision			
Vitamin B2 - Riboflavin	Beef liver, dairy, spinach, almonds, eggs, lamb, legumes	Anemia, fatigue, nerve damage, slow metabolism, lip sores, skin disorders, sore throat, swelling of mouth, moodiness	Coenzyme, antioxidant, prevent headaches, eye health, anemia, energy, neurological support, hair and skin,			



Water Soluble Vitamins



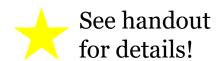


			, Tor dotails:		
Vitamin	Food	Symptoms	Benefits		
Vitamin B3 – Niacin	Chicken, liver, tuna, turkey, salmon, sardines, beef, sunflower seeds, peanuts, peas, brown rice	Dermatitis, diarrhea, dementia, mucous membrane swelling, digestive disturbances, brain impairment - Pellagra	Lowers cholesterol, heart function, skin health, brain function, metabolism, arthritis, erectile dysfunction, prevent birth defects		
Vitamin B5 – Pantothenic acid	Liver, avocado, sunflower seeds, duck, portabella, egg, salmon, lentils	Fatigue, depression, irritability, insomnia, stomach pain, vomiting, burning feet, upper respiratory infections, muscle cramps	Metabolism, energy, neurotransmitters, hormones, red blood cells, immunity, digestion		
Vitamin B6 - Pyridoxine (P5P)	Turkey, beef, pistachios, tuna, pinto beans, avocado, chicken, blackstrap molasses, sunflower seeds	Mood changes, confusion, muscle pain, mouth sores, fatigue, PMS, worsening of anemia symptoms, migraines	Metabolism, nerve and liver function, skin and eye health, blood vessels, brain function, mood, anemia, lower blood pressure, less morning sickness, sleep, prevent kidney stones		



Water Soluble Vitamins





			, , ===================================		
Vitamin	Food	Symptoms	Benefits		
Vitamin B7 – Biotin	Liver, eggs, nutritional yeast, salmon, dairy, legumes, avocado, berries, bananas, sweet potatoes, cauliflower	Hair loss, brittle nails, aciduria, skin infections, fatigue, depression, conjunctivitis, neurological issues, developmental delays	Metabolism, digestion, neurological, cardiovascular support		
Vitamin B9 – Folate	Spinach, liver, black eyed peas, asparagus, broccoli, Brussels sprouts, greens, kidney beans, avocado	Frequently getting sick, fatigue, poor digestion, anemia, canker sores, moodiness, pale skin, premature graying	Prevent birth defects, anemia, cancer, heart health, cognitive function, depression		
Vitamin B12 – Cobalamin	Liver, sardines, mackerel, lamb, salmon, nutritional yeast, feta, beef, cottage cheese,	Fatigue, depression, GI issues, pernicious anemia	Energy, antidepression, less sugar cravings, neurological		
Choline	Liver, salmon, chickpeas, split peas, navy beans, eggs, beef, turkey, chicken, cauliflower	Fatigue, memory loss, cognitive decline, learning disabilities, muscle aches, nerve damage, mood disorders	Energy, brain function, metabolism, methylation, detox		



Goldilocks effect – not too much or too little of a nutrient but "just right" in terms of quantity









You Are What You EatMinerals





Minerals

- Minerals compose about 4% of our body
- Minerals are provided solely from food sources (not produced by the body)
- Minerals are what remain as ash when plant or animal tissues are burned
- Out of the 103 known minerals, at least 18 are necessary for good health

- Assist in chemical reactions in cells
- Crucial to Immune System function
- Fluid balance
- Nutrient transport into cells
- Help skeletal muscle contract
- Maintain heart beat

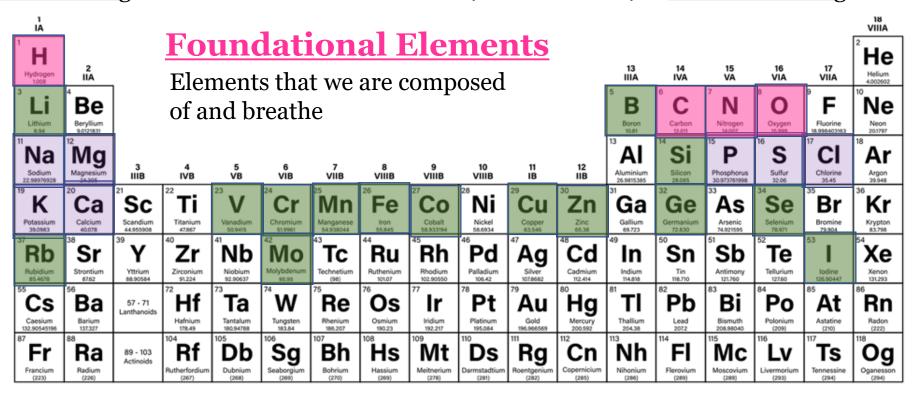


Macrominerals

Daily requirement of macrominerals exceeds 100mg

Microminerals

Daily requirement of microminerals (trace elements) is <u>less than 100 mg</u>



Lanthanum 138.90547	Cerium 140,316	Praseodymium	Neodymium	Promethium	Sm Samarium 150.36	Europium	Gd Gadolinium 157.25	Tb Terbium 158.92535	Dy Dysprosium 162.500	Ho Holmium 164.93033	Erbium	Tm Thulium 168.93422	Yb Ytterbium 173.045	Lutetium
Ac Actinium	Th Thorium	Protectioium	U Uranium	Np Neptunium	Plutonium	Americium	Cm Curium	Bk Berkelium	Cf Californium	Es Einsteinium	Fermium	Md Mendelevium	No Nobelium	Lr Lawrencium



MINERALS AND YOUR BODY

Manganese

Nervouse system function

Zinc

Brain function and alertness

Potassium

Sends Oxygen to the Brain

Molybdenum

Enzyme production and activation

Zinc

Brain function and alertness

Phosphorous, Calcium

Tooth and bone formation

Manganese

Thyroid function

Copper

Blood cell production

Calcium

Strong bones and muscles

Calcium

Cardiovascular health

Magnesium

Heart regulation

Chlorine

Aids in digestion

Potassium

Blood pressure

Zinc

Prostate, food processing

Iron

Blood production

Iron

Disease resistance

Sulphur

Healthy skin, hair, nails

Sodium, Potassium

Manganese

Enzyme production

Nerve and muscle function

Manganese

Bone strength



What does this look like?



