

Class 3: Anatomy Made Simple -- Part 2

Blood, Bones & Flesh

"So God created man in his own image, in the image of God created he him; male and female created he them." Genesis 1:27

The Digestive System – Review.

In the last class we learned about the digestive system and how important it is to care for the bowel first, before any effective healing can take place. We also learned that bowel movement frequency is important to good health—we should have one bowel movement for every meal we eat, otherwise we are constipated. Constipation can lead to all types of diseases.

The Cardiovascular System:

"For the life of the flesh is in the blood:" Leviticus 17:11

- Cardiovascular disease is the number one killer in America—2,500 Americans die from it each day. However, over 90% of these are caused by plaque build-up in the arteries and can be reduced or entirely eliminated by a proper diet. Cardiovascular disease is a "disease of the fork."
- We have approximately 5 quarts of blood and our heart pumps it through our entire body, making about 3,000 to 5,000 round trips each day. We have about 20,000,000,000 (20 billion) blood cells which carry nourishment to each cell in our body, and collect wastes to be removed by the body.
- Blood vessels leading from the heart are called "arteries", and those leading to the heart are called "veins." Arteries carry oxygenated blood from the heart to the rest of the body, and veins carry oxygen-poor blood from the body to the heart. Veins have thinner, less muscular walls than arteries and contain valves, which prevent blood from flowing backwards.
- After we eat high fat meals our blood is filled with fat which must be filtered out. The thickness of the blood increases as the amount of fat increases, making it harder for the heart to pump it.
- Our bodies regenerate all new blood every 120 days (4 months).
- Herbs that are good for the cardiovascular system (heart, blood, blood pressure, brain): Hawthorn berry, Red Clover Blossoms, Garlic, Cayenne Peppers, Chaparral herb and resin, Ginkgo Leaf, Rosemary Flowers, & Kola Nut.

The Skeletal System

"Thus saith the Lord GOD unto these bones; Behold, I will cause breath to enter into you and ye shall live." Ezekiel 37:5

There are about 206 bones in the average adult. Bones store most of the calcium, phosphorus, and other minerals needed by the body.

Our bodies contain about 2.5 lbs. of calcium and 99% is stored in the bones and teeth—the rest circulates in the blood.

Bone tissue is as strong as steel but light as aluminum.

Although bones look solid and static, they have blood flowing through them, and are constantly being "remodeled" (broken down and re-built). Our bodies create an entirely new skeleton every 3 months.

When we eat high protein diets (such as animal flesh and dairy products) the protein is broken down into acids. Our bodies neutralize these acids using calcium, which is taken from our bones. This leads to osteoporosis (reduction in bone density). One can actually measure the amount of calcium leaching out in the urine of a person eating a high protein diet.

We need calcium for nerve sheath, veins & artery walls, bones, teeth, etc.

Things we can do to help our bones:

1. Exercise! It is proven that exercise increases bone mass.
2. DO NOT DRINK COW'S MILK! The calcium in cow's milk cannot be effectively stored in our bodies due to the excessive phosphates, fats and acids, which actually lead to calcium depletion!
3. Eat calcium rich plants such as broccoli, sesame seeds, and carob. Try to eat these raw.
4. Dr. Christopher's Calcium Herb Formula: 6 parts Horsetail Grass, 3 parts Oat Straw, 4 parts Comfrey Root, 1 part Lobelia.

The Nervous System:

"But that ye may know that the Son of man hath power on earth to forgive sins, (then saith he to the sick of the palsy,) Arise, take up thy bed, and go unto thine house." Matthew 9:6

- The body's nervous system is divided into the "central nervous system" and the "peripheral nervous system." The central nervous system consists of the brain and spinal chord. The peripheral nervous system is the communication pathway connecting the central nervous system with the various parts of the body (periphery).

- Peripheral nerves are the motor (movement), sensory (environment detecting), and involuntary (work without thinking).
- Peripheral nerves run in "bundles" like a collection of different sized cables. Pain sensing nerves have the largest "sheath", or protective, insulating layer. If you feel pain from a pinched nerve bundle, chances are that other nerves are more severely pinched or even damaged.
- Things you can do to help your nervous system:
 - Get enough rest!
 - Hot and cold hydrotherapy treatments to stimulate nerves.
 - Relaxation and deep breathing to calm nerves.
 - Eat foods that help build and restore the sheath around nerve cells (Nature's SuperFood).
 - Take nerve herbs such as Valerian Root, Lobelia, Hops, Black Cohosh Root, Blue Cohosh Root, Skullcap, Wild Yam Root, Oat Seed.

The Immune System:

"A merry heart doeth good like a medicine; but a broken spirit drieth the bones." Proverbs 17:22

- The immune system is comprised of many different types of organs, tissues, cells, and fluids. These parts are located all over the body. The major components are:
 - cells
 - the lymphatic system
 - bone marrow
 - lymphoid aggregations like tonsils, adenoids, Peyer's patches, and the appendix
 - the thymus
 - the spleen
- The immune system is responsible for protecting you from harmful alien invaders called antigens (anti-creation or life) and pathogens (disease-creation). These harmful invaders include bacteria, viruses, fungi, pollen, cancer cells, dead cells, and almost any substance that is not "you." If its not you, or if its worn out, it is killed!
- The immune system, which is supposed to destroy cells that get old or become mutated, can be overwhelmed by cells that reproduce rapidly (neoplasm). "Neo" means new, and plasm means "growth." Neoplasms can be benign or malignant. Malignant means that the growth invades surrounding tissues (spreads).
- The body has two types of defenses against infection, innate and adaptive. Innate includes mechanical barriers such as skin and chemical defenses such as antibacterial enzyme in tears. The adaptive system is based on specialized white blood cells called lymphocytes. Some of these cells are:
 - Macrophages (big eaters) which eat up all sorts of bad things
 - T-Cells—T-killers (cells that kill invaders on sight) and T-helpers (slow down the battle when it has been won).
 - B-Cells which create poisons to kill specific types of invaders (antibodies)

- Lymph is a clear, watery liquid that begins as fluid flowing between cells (interstitial fluid). It flows into the lymph capillaries located in the tissue spaces. From the lymph capillaries, lymph flows into larger vessels called lymphatics, which are studded with filters called "nodes." Lymph is not pumped, but is moved when lymph vessels are compressed by surrounding muscles as they contract during movement.
- Lymph nodes are where the macrophages ingest bacteria and other foreign matter and debris. The lymph from most tissues and organs cross one or more lymph nodes to be filtered before draining into the venous bloodstream (i.e. veins).
- Since there is no pump on the lymph system, and physical activity is necessary for lymph fluid to move, exercise of any kind can help fight off infection and help you get well quicker if you do get sick. Bouncing (trampoline), deep breathing, and riding a horse are excellent lymph draining activities.
- Things that we should stay away from:
 - Foods and drugs that suppress the immune system (alcohol, sugar, caffeine, etc.)
 - Negative emotions (remember, the immune system "listens" to our emotions via neuropeptides)
 - Lifestyles which lend themselves to excessive exposure to disease (sexually transmitted diseases, late-night partying, intravenous drug use, etc.)
- Things that we can do to improve our immune system:
 - Exercise!
 - Good nutrition
 - Positive thoughts, love, happiness, friendships
 - Echinacea, garlic, olive leaf extract (anti viral, anti fungal, anti bacterial)
 - Cleansing (colon, liver/gallbladder, kidneys, skin, blood, etc.)
 - Deep breathing

The Respiratory System

"And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul." Genesis 2:7

- The lungs are located on either side of our upper chest cavity. The right lung consists of an upper, middle, and lower lobe, but the left lung consists only of an upper and lower lobe—allowing room for the heart.
- The lungs exchange carbon dioxide for oxygen in the blood. Oxygen poor blood is carried to the lungs via the pulmonary arteries, where it is exchanged with oxygen in the tiny, sac-like, alveoli—nearly 600 million in number—and carried back to the heart via the pulmonary vein.
- The surface area involved in this gas exchange is about 40 times greater than the body's outer surface.
- If we smoke cigarettes the alveoli become plugged, reducing the amount of gas exchange which can take place.
- Things that are good for the lungs:

- Exercise!
- Deep breathing
- Lobelia for congestion—opens the bronchi and helps expel mucous, tar, and other matter from the lungs (expectorant).
- Mullein flower and leaf— expectorant and demulcent (mucous remover)
- Elecampane—expectorant and demulcent
- Supertonic— Equal Parts: Horseradish root, garlic bulb, onion bulb, ginger root, and cayenne (Habenero) peppers blended in a base of raw unfiltered apple cider vinegar. (This is also VERY good for boosting the immune system.)

The Skin:

"Thou hast clothed me with skin and flesh, and hast fenced me with bones and sinews." Job 10:11

- The skin is our largest organ. It can eliminate several pounds of gasses, solids, and liquids each day. The skin can actually help relieve our kidneys if they get blocked due to disease.
- The skin appearance can alter with both emotional states, and general health, and therefore reveals signs of a wide range of disorders.
- Dr. John R. Christopher called the skin our "hermetic seal."
- Things we can do to help our skin:
 - Avoid unnecessary cuts, scrapes, and punctures and keep the skin clean.
 - Use common sense when exposed to sunlight.
 - Skin brush!
 - Wear natural fibers that *breath* (cotton, wool, silk, leather) and avoid petroleum and chemically derived fabrics (polyester, rayon, nylon).
 - Avoid tattoos and body paints—these can poison you and cut off the "breathing" of our skin; people have died by suffocation from being covered with paint.
 - Avoid chemical based skin creams and lotions—some of these contain nasty chemicals which can be absorbed directly into the blood, as well as toxify the skin tissue—make your own salves.
 - Use natural soaps which don't contain lard (lard is made from animal fat which can be absorbed through the skin)—make your own soap.
 - Herbs good for the skin are Jojoba Oil, Tea Tree Oil, Aloe Vera, St. John's Wort, Arnica Flowers, and Olive Oil.

Muscles and Tendons:

"He hath shewed strength with his arm; he hath scattered the proud in the imagination of their hearts." Luke 1:51

- The muscles contract only (they cannot "push") and are arranged in opposition to each other to provide movement back and forth.
- Muscles are attached to bones by tendons.
- Things we can do to help our muscles and tendons:

- Exercise!
- Permit them to rest—don't over-exert or you can get muscle strain or tendinitis.
- Good nutrition.
- Hydrotherapy (hot and cold) when we do damage—also, deep tissue oil.

The Urinary System:

- The urinary system consists of the kidneys, the bladder, and the urinary tract.
- The kidneys are located near the top of the waistline. On top of the kidneys are the adrenal glands—endocrine glands that manufacture adrenaline and other hormones.
- Kidneys filter waste material from the blood and make urine, as well as help regulate blood pressure. Also, they regulate the concentration and acid-base level of body fluids.
- Some of the fluid filtered by the kidneys is reabsorbed such as glucose (sugar), so the passing of glucose in the urine is abnormal.
- Urine is stored in the bladder to avoid constant urination—since the kidneys are constantly producing urine.
- Diseases of the kidneys are often associated with high blood pressure because of disturbances in the mechanism they use to regulate blood pressure.
- Things that are good for the kidneys:
 - Drinking lots of pure water every day (about 2 quarts—more on hot days).
 - Avoid acid forming foods which cause the kidneys to work harder.
 - Herbs that help cleanse the kidneys are Juniper Berries, Corn Silk, Uva Ursi Leaves, Parsley Root, and Carrot Tops.

Miscellaneous Herbal Formulas by HEAL Marketplace:

- Female Formula—helps restore the balance of female hormones
- Male Formula—helps with prostate problems, infertility, and increases energy
- Prostate Formula—shrinks enlarged prostate gland and cleanses it (helps stop constant urination problems)
- Brain Formula—brings blood to the brain and removes congestion
- Heart Tonic—protects the heart and helps lower blood pressure
- Liver/Gallbladder Anti-Parasite Formula—cleanses the liver and gallbladder
- Kidney/Bladder Formula—cleanses the kidneys and bladder
- Deep Tissue Oil—relieves pain, inflammation and stiffness in joints, tendons, and muscles