Health Care / Self Care

Wellness Mini-Course

Congratulations! You have decided to embark on a journey of self-discovery that, I guarantee, will change your life. By choosing this program I assume you believe there is a need in your life for such change. A change to become a healthier individual and a change that will result in all the benefits an improved state of health affords.

Like any focused venture this journey will require effort. Time will need to be set aside each day in order for you to grasp the information presented and develop the healthy habits necessary for your body to maximize its self-healing capabilities.

But don't let this scare you. While this journey may at times challenge your comfort zones it is designed to pique and satisfy your intellectual curiosity and to provide a healthy community within which you will receive the support needed to easily achieve your goal of improved health.

Education: The program will cover on a basic level many areas of human physiology, allowing you to master the anatomy and physiology of the **body's stress response.** It is the body's stress response that, while normal and life-saving during periods of acute distress, is at the root of chronic illness.

Belief Systems: This program will not force any particular "belief system" on you. Belief systems are simply intellectual conclusions you arrive at yourself after any educational experience.

Behavior: After being educated on how our bodies are programmed for health and not disease I believe new and self-concluded belief systems will empower you to choose healthy behaviors regarding diet, exercise, and positive attitudes that support these self healing abilities.

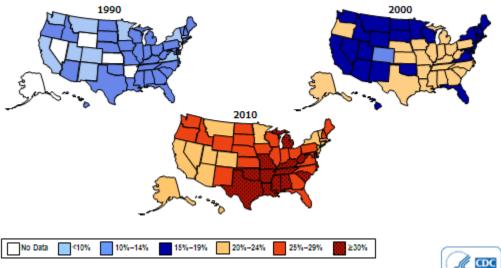
Health: By addressing your diet, exercise habits and attitude based on Health Care / Self Care concepts you will enjoy all the benefits that an improved healthy state allows: vitality, energy, intellectual stimulation, and improved focus on pursuing whatever it is that you believe will make you a more fulfilled human being.

Yours in Health,

Joe Dockery, D.C. Certified Chiropractic Wellness Practitioner

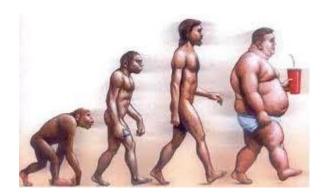
Obesity Trends* Among U.S. Adults

BRFSS, 1990, 2000, 2010 (*BMI ≥30, or about 30 lbs. overweight for 5'4" person)



Source: Behavioral Risk Factor Surveillance System, CDC.





You Do Have A Choice!!











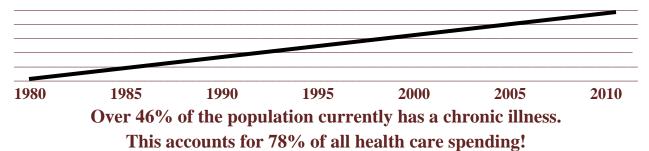


The Problem

Collectively, cardiovascular disease (including stroke), cancer, and diabetes account for approximately **two-thirds** of all **deaths** in the United States.

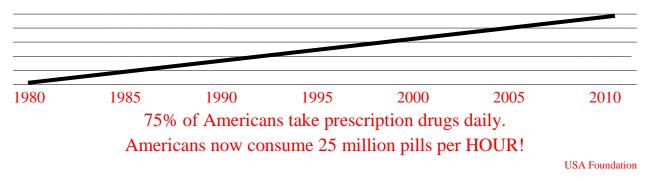
The American Cancer Society

Chronic Illness Rates in U.S.



Rand Corporation

Per Capita Drug Use is Increasing Exponentially



The Cost of Sickness is Increasing Exponentially



Between 1980 and 2002 spending on prescription drugs increased by 55 times!!

In 2002 spending reached 3.5 billion dollars – **PER DAY**By 2013 it will reach over 7 billion dollars – **PER DAY**

U.S. Medical Spending

Heart Disease - \$501,000,000

Cancer - \$430,000,000

Digestive Disorders - \$337,000,000

Obesity - \$320,000,000

Diabetes - \$273,000,000

Arthritis - \$118,000,000

Osteoporosis (fractures only) - \$38,000,000

PER DAY!!

U.S. National Institutes of Health

Look carefully:

We are spending more than ever on health care!

Yet, we are becoming ill more than ever!

Where is the sense in that?!!

Clearly: SOMETHING IS WRONG!



And What IS Wrong Is NOT Necessarily Your Fault!





As our society became more industrial...

...and more technological...





... "quicker and easier" became tempting to embrace.

But as we will see, faster and easier does not always mean healthier!



- You have NOT been educated as to what IS healthy.
- You have NOT been encouraged to seek health as a lifestyle!!



Health Care in America has become synonymous with "patch up" care, and "disease management."







We need a health care system in place...





...where health is the norm!





... Is true Health Care

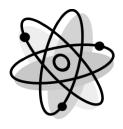
Our bodies are programmed for HEALTH not DISEASE!



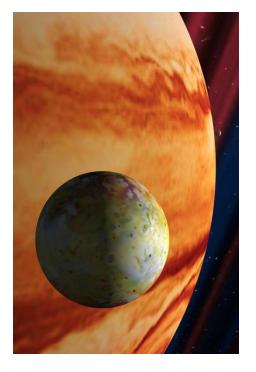
Before We Get Started there is one fact whose importance I want you to understand and firmly grasp.

Everything in our universe, including our own Earth and all its living creatures obey the laws of physics.

This is not only true of the galaxies, stars and planets...



...but of the atoms that are the basis of all gases, liquids and solids.





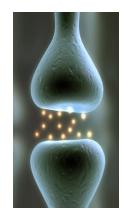
And it is also true of our body's own physiological processes!

Our world is exquisitely organized!



The laws of physics and chemistry are a gift from our Creator; they are not only laws that hold our world together, but are laws that, if we respect them, allow us to live a long, happy and fruitful life.

Unfortunately, if we do not respect them, we are guaranteed to suffer the consequences



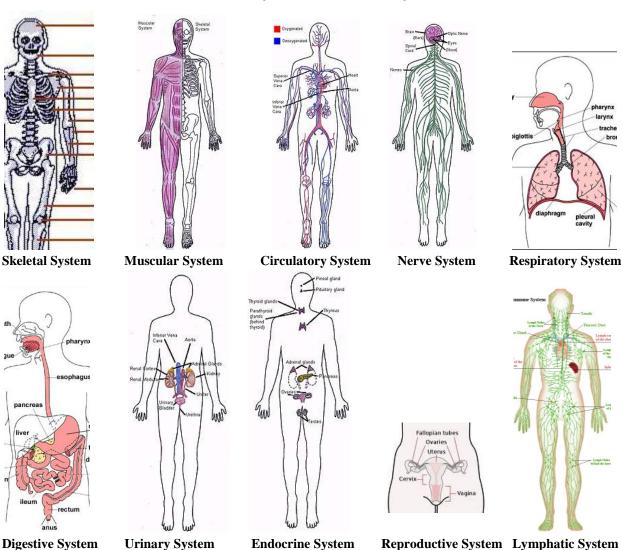
We do not need to study physics or know each law specifically, we simply need to realize that our world is organized because of them!



This course teaches how proper diet, exercise and positive attitude, all work harmoniously within these fundamental physical truths.

My decision to attend chiropractic college resulted from excitement that was generated by a Health Class I enrolled in during my freshman year of undergraduate school. Up until that point my interests involved the areas of athletics, music, math, and language arts, while I purposefully avoided anything that had to do with biological science. The Health Class was a requirement and covered, in a general way, the **systems of the body**. The brief course presented each system's gross anatomy and explained their basic functions.

The Systems of the Body



I had a great teacher who not only explained each system as a separate entity, but emphasized how they interrelated with each other to produce the "me" that could take my body to the limit during sports, solve complex mathematical functions, recover from illness and injury, feel the widest ranges of emotion, experience a spiritual connection with the beyond, and dream about "being something" one day. Frankly it was a pivotal moment in my life when I first gave the mechanics of my body functions any serious thought, **and I was hooked**. I remember being most astounded by the fact that these complex systems, packed tightly and side by side beneath

my skin, needed no direct instruction from my conscious mind in order to do their jobs. It was during that time when my physical being became my friend.

Skeletal System - Bones, cartilage, tendons and ligaments.

- Not only does our skeleton provide a rigid frame for the body, it provides protection for delicate internal organs, provides attachments for muscles, and allows intricacy of movements with its many joints.

Muscular System – Striated and smooth muscles

- Striated muscles provide movement, working in pairs called antagonists, which allow opposite directional motion.
- Also, smooth muscles move materials through the body as in digestion and blood circulation.

Circulatory System – Heart, arteries, arterioles, capillary beds, venules, and veins.

- Transports nutrients, oxygen and hormones for use in every part of the body, along with wastes for elimination.

Nerve System – Brain, spinal cord, peripheral nerves

- Communication system brain to the body and the body back to the brain.
- Controls autonomic functions (those things you don't have to think about) such as digestion, breathing while you sleep, and circulation.
- Directs muscles to carry out tasks like walking, talking and other behaviors.

Respiratory System – Nasal and mouth air passages, trachea, lungs and alveoli.

- Picks up oxygen from the atmosphere, allows transportation into the blood stream.
- Eliminates carbon dioxide, a poisonous byproduct.

Digestive System – Mouth, esophagus, stomach, small and large intestines.

- Breaks down and allows nutrients to be absorbed for nourishment of every part of our body.
- Elimination of solid wastes.

Excretory (Urinary) System – Kidneys, ureters, bladder and urethra.

- Filters wastes, toxins and excess water from the circulatory system.

Endocrine System - Pituitary gland, thyroid, pancreas, adrenal glands, etc.

- Helps control multiple physiological functions including nutrient absorption and growth.
- The adrenal glands and the role of its hormones will be studied at length in HC/SC.

Reproductive System – Male and female sex organs.

- Manufacture cells that allow reproduction

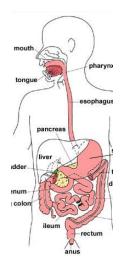
Lymphatic system – Lymph nodes, lymph vessels, white blood cells, T- & B- cells

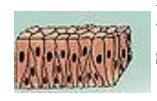
- Part of the body's immune system. Destroys invading microorganisms and viruses from the body.
- Helps remove fat and excess fluids from the blood.

Each of these systems work in harmony with each other in order to produce and sustain the miracle of life.



But, technically speaking, it is NOT the organs (of the digestive system, for example) that perform our bodies' vital functions!





It is the CELLS of those structures that do the work!

There are trillions of <u>cells</u> that make up the human body! Wow!!

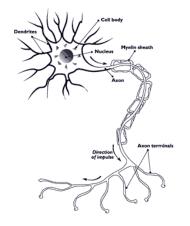
And that is where the action is!



The heart pumps blood only because each muscle cell of the heart contracts.

Our kidneys are said to filter blood, but only because its nephrons (basic kidney units) actually do the filtering.





The brain thinks, feels, regulates and reacts because of specialized nerve cells that secrete chemicals, stimulating nerve impulses within an unimaginably complex communication network...

...you get the idea!

ALL human physiological processes ultimately function at the **cellular** level.

So what's my point?

What we will learn in Health Care/Self Care is that it is indeed at this cellular level where our diet, our activities, and our attitudes manifest themselves – either for HEALTH or for DIS-EASE.

Respect your cells and you will respect yourself!!

Metaphor of Musical Composition



If we consider any musical composition, whether it be Cold Cold Heart by Hank Williams or a Mozart Sonata, we can understand the important role that cells play when we compare them to musical notes.



When we strike a key (musical note) on a piano we hear a pleasant sound. However, if we strike a series of keys on the piano it may or may not be pleasant. It depends on whether those musical notes are played within the rules of a particular musical "scale". (Do you remember the rule of "whole-whole-half-whole-whole-whole-half" when constructing a major scale?)



The notes are like the cells of the body. Individually they are marvelous things yet no note on its own can be considered a sonata or a country song. The musical notes must first be "in tune" with the rest of the keys (or shall we say, healthy) and then must obey the laws of



the scale to complete the composition. Similarly, one cell or even a collection of cells working separately do not comprise a complete human organism. The cells of the body must first be "healthy" (or shall we say, in tune) and then follow the laws of physics for the organism to function at all.

Also, within a musical composition there are verses, a chorus, maybe a bridge, and movements that of themselves are like the organ systems of the body. Alone they are interesting but it is how you put them together, how they integrate, that determines the beauty of the composition.

We don't think of every individual note while listening to a musical composition just like we don't think of all the individual cells when we observe another person.

However!!

Just as each individual note of a musical composition MUST be in tune (healthy) to deliver a pleasing experience, individual cells MUST be healthy (in tune) for the human being to be healthy.

Tune up your cells and your beauty will rival Beethoven or the Beatles!!

Hierarchy of Structures

Subatomic particles combine to form an <u>atom</u> (H)



Atoms combine to form molecules (chemicals) (H2O)



Molecules combine to form cells (stomach cell)



Cells combine to form <u>tissues</u> (stomach lining)



Tissues combine to form organs (stomach)

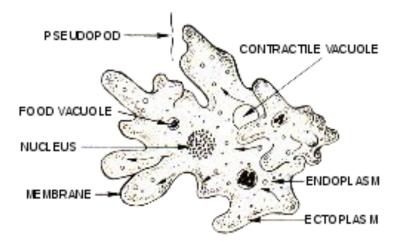


Organs combine to form systems (digestive)

Systems combine to form the organism (human being)



The smallest structure that is considered "living" is the CELL



An amoeba – a one celled animal

Brief History Lesson

- The "Big Bang" (beginning of space/time) occurred about 15 billion years ago.
- The **Earth** is about 4.6 billion years old.
- The first cells appeared 1.5 billion years ago
- At some point self-replicating molecules of RNA, initially just hanging out, decided that being encapsulated within a membrane was far more efficient when it came to survival and reproduction.
 - When the cell membrane was formed the first cell was born!
- **DNA** replaced RNA as the instruction guide within the cell.
- Next to arise are large molecules of **proteins**, which carried out the instructions to keep the cell alive.
 - A continuing series of gene mutations evolved according to natural selection, advancing its biochemistry and making the cell more and more efficient in the game of survival.
- Eventually this led to the sophisticated state of **one celled animals**, which are hypothesized to have been bacteria.
- The next advancement in "life" occurred with the **multi-celled** animals.
 - Earliest fossils date the beginning of multi-celled organisms at 600 million years ago.
- From this evolution of molecule development via RNA, and the ascension of one celled animals via DNA, the planet eventually became inhabited by a potpourri of plants and animals whose differentiation was stimulated by environmental factors until we get to our human ancestors at about 150 200,000 years ago!

Well at least that's what modern science is teaching!

Creationists have it easier – God simply created a pretty cool functioning organism that, we can all agree, also is governed by the laws of physics!

Let's not get too hung up on physics!!

I only introduce these concepts to impress upon you the point that our body's physiology **makes sense.**

Like
$$\longrightarrow$$
 2 + 2 = 4

One thing leads to another. Not some of the time, but ALL of the time.

Put two chemicals together and you come up with a compound. Put the same amount of those two chemicals together again and you end up with the same compound! Every time or every time? Hey, that's right, every time!

Our body is like that.

A human laboratory where chemicals are constantly being mixed and synthesized for the purpose of nourishment and the burning of fuel.

KNOW THIS!!

Everything we put into our bodies **either nourishes** the cells **or is toxic** to the cells. No in between! The body may "get used" to something that is toxic and may adapt to it for the time being, but eventually the toxicity will do enough damage to cause disease. Think smoking!

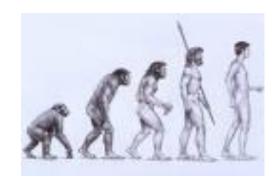
Smoking leads to emphysema and cancer Sugar leads to obesity and diabetes Bad fats lead to heart disease

Learn what nourishes our cells

(proper diet, adequate exercise and positive attitude)

Develop a lifestyle with habits that nourish the cells rather than poison them!

Now that we appreciate the importance of the cell let's take a step back and look at our species as a whole.



One of the most damaging oversights we as a society are guilty of is not appreciating that we are members of the animal world.

For some reason we believe that since we are higher in intelligence that somehow we transcend the laws of nature











Would you consider feeding the above animals Mountain Dew, fast



food burgers, french fries, cocoa puffs, pop tarts, chocolate cake and the like and expect them to survive? Of course not!

These animals, when in the wild, eat the food they've been eating for millions of years, food that is congruent with their genes.

And they don't suffer with pandemic levels of heart disease, diabetes and cancer!



Take them out of the wild, put them in zoos, feed them food not natural to their species and they suffer similar diseases that we do.

Think like a Biologist not a Pathologist



When fish washed ashore in Lake Michigan and other nearby lakes in Wisconsin the state's department of environmental conservation didn't call in the fish doctors and surgeons to administer drugs and surgery to the fish.

No, that would be ridiculous!

They realized there was something wrong with the fish's ENVIRONMENT, and they knew the ONLY solution was to change the toxic environment.

WE HUMAN ANIMALS live in a toxic environment: high fat, high sugar, high salt, and highly processed foods along with a stressful and sedentary lifestyle.

Our lifestyle diseases can only be treated by CHANGING OUR ENVIRONMENT



By definition, we humans, under the *Order* of primates" belong within the *Kingdom* "animalia"

So, there you have it, You are an animal.

And like all other animals we have a genetic requirement for certain foods. We are made for certain foods.

The foods our ancestors ate!

And also like all other animals we have a genetic requirement to expend a certain amount of energy.

Our ancestors did not sit around watching t.v.

Our Ancestors' Lifestyle

Our food and energy requirements developed over millions of years as our species, homo sapiens, evolved. As noted earlier, the first humans came to be 150,000 - 200,000 years ago. (**Mitochondrial Eve and Y-Chromosomal Adam**) But evolutionary human ancestors can be traced to 4 - 6 million years ago when we diverged from the ancestors of the apes.

4.5 mil. years ago

1 mil. years ago

200,000

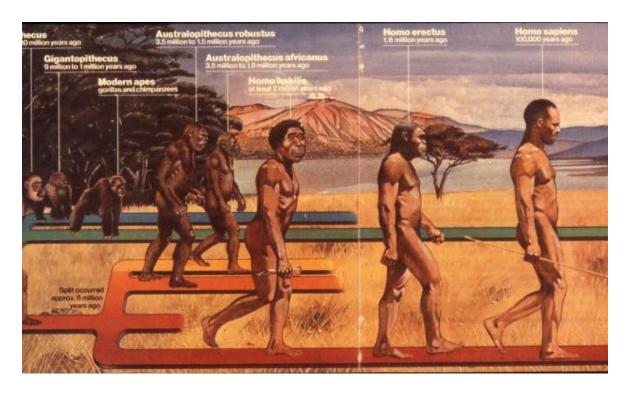
10,000

Diverge from the apes (Ardi)

Homo this' and that's

Homo Sapiens

Agriculture



Why did we become human?

The very origins of the human species can be traced to pivotal changes in diet and activity that led to the development of our large, metabolically active brains.

It was diet and exercise that literally helped make us human!!

Homeostasis

(Ability to maintain internal balance)

- 1. We are composed of individual living cells working harmoniously together in a self-healing and self-regulating ecosystem to maintain homeostasis, health and life.
- 2. Our cells are innately equipped from birth with all the necessary intelligence to function properly. They never function undesirably without a physical, emotional, chemical, or spiritual stressor they cannot adapt to.
- 3. The state of our cells determines our state of health.
- 4. All health stressors can be divided into one of two categories.
 - i. Deficiencies in the required ingredients for homeostatic cell function.
 - ii. Toxicities that drive cell function away from homeostasis.

IMPORTANT CONCEPT!!

- Cells always function intelligently!
- You may not always like the way they function but it's not their fault!
 - Cells can only function with the tools they are given.
 - Symptoms do not represent an error.
 - 1. The cells simply are reacting (adapting) to a deficiency or toxicity.
 - 2. Symptoms are simply warning signs telling you that something is wrong.

So Let's Now Consider The Solution

Simply mimic our ancestors...

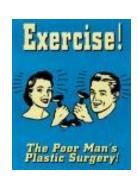
...those who did not suffer from the lifestyle diseases of today.

Health Care Self Care is divided into three sections:



Nutrition
Exercise
Mental Health





Each section will address the lifestyle of the ancestral hunter-gatherer, and examine how our modern living



can be transformed to provide the genetic requirements for our bodies to be in balance (homeostasis).



Now move on to the Nutrition Module, then to the Exercise Module, and finally to the Mental Health Module of *Health Care/Self Care*.