

# Cellular Voltage in The Body

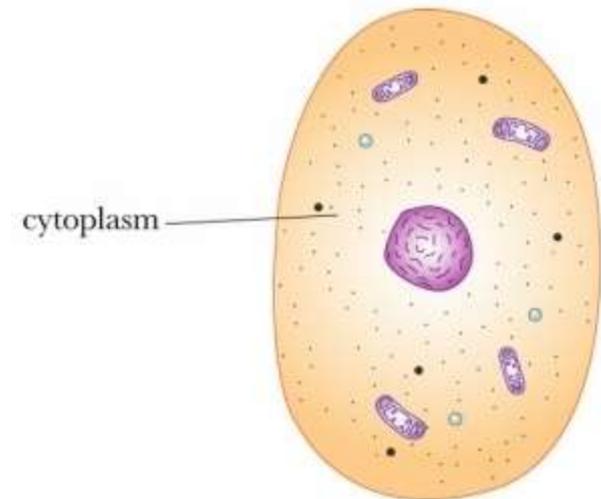
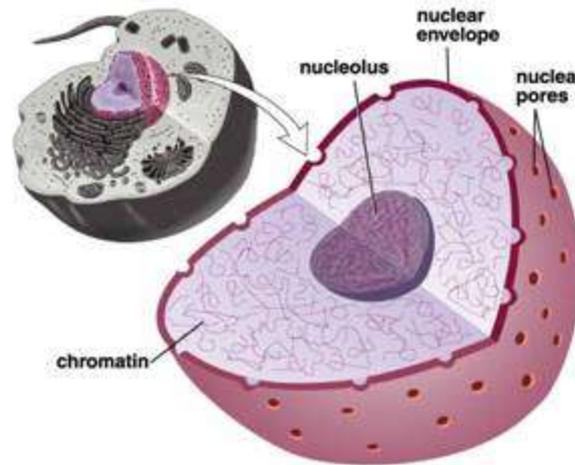
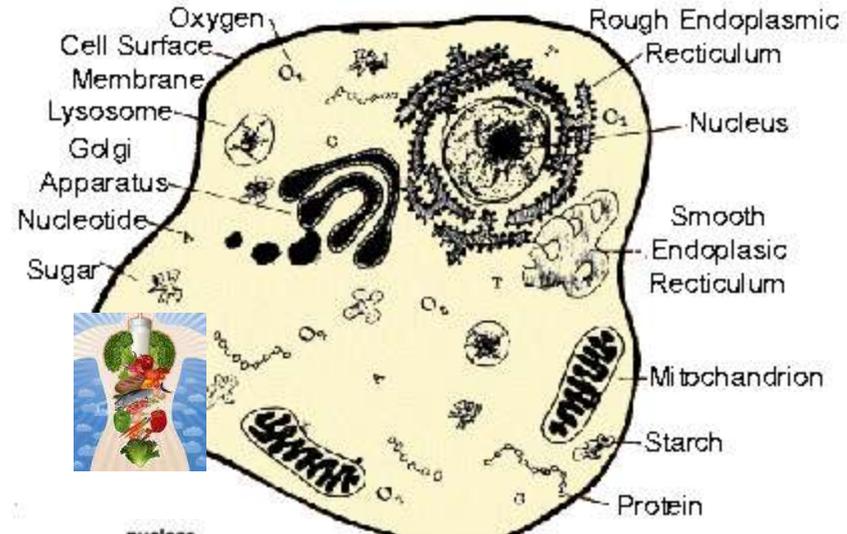
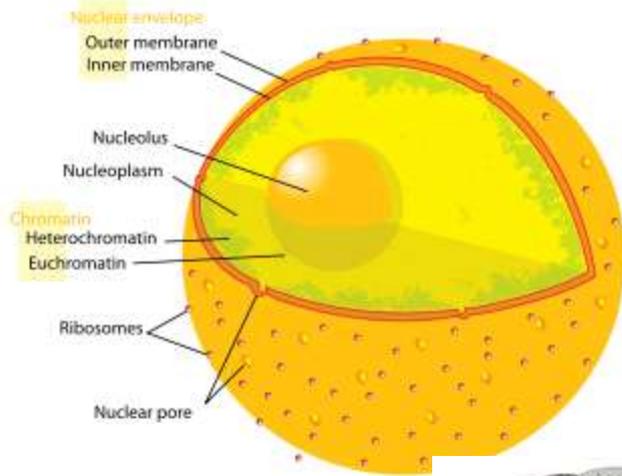
*presented by*

*Molecular Hydration  
Specialist Michael Kinnett*

Copyright Future Foundation Wellness 2010



# This training is for those with chronic disease and those wishing to avoid chronic disease by understanding cellular voltage





# Legal Notice from Future Foundation Wellness

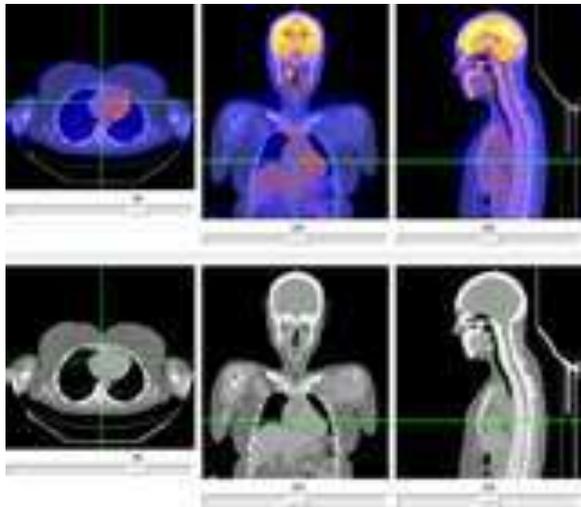
- The information provided in this training is intended to educate about certain medical conditions and certain possible treatments. It is not a substitute for examination, diagnosis and medical care provided by a licensed medical professional. If you believe you, or your child or someone you know suffer from any condition described in this training, please see your health care provider. Do not attempt to treat yourself, your child or anyone else without proper medical supervision.
- **US FDA Disclaimer**  
The products and the claims made about specific products on or through this training have not been evaluated by the United States Food and Drug Administration and are not approved to diagnose, treat, cure or prevent disease.
- The information provided in this training is for informational purposes only and is not intended as a substitute for advice from your physician or other health care professional or any information contained on or in any product label or packaging.
- You should not use the information on this site for diagnosis or treatment of any health problem or for prescription of any medication or other treatment.
- You should consult with a healthcare professional before starting any diet, exercise or supplementation program, before taking any medication, or if you have or suspect you might have a health problem.



# The First Year when Doctors Go to Medical School



- They are taught basic physiology which teaches them how the body normally works.



# The Second Year

- They are taught what goes wrong with the body.

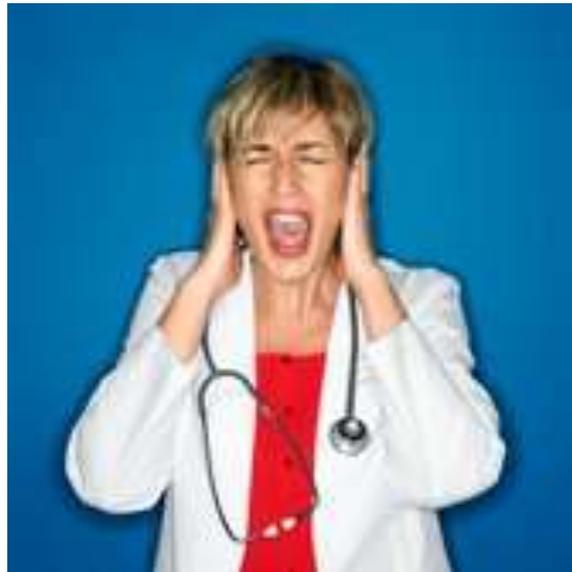


# The Third Year

They are taught to forget most of the first two years  
And memorize symptom complexes as “diseases”.



- [AIDS](#)
- [allergies](#)
- [Alzheimer's disease](#)
- [anxiety disorders](#)
- [arthritis](#)
- [asthma](#)
- [astigmatism](#)
- [autoimmune diseases](#)
- [benign prostate hyperplasia \(BPH\)](#)
- [bipolar disorder](#) (manic-depressive)
- [brain cancer](#)
- [breast cancer](#)
- [cancer](#)
- [candidiasis](#)
- [cataracts](#)
- [celiac disease](#)
- [cervical cancer](#)
- [chicken pox](#)
- [Chlamydia](#)
- [chronic fatigue syndrome \(CFS\)](#)



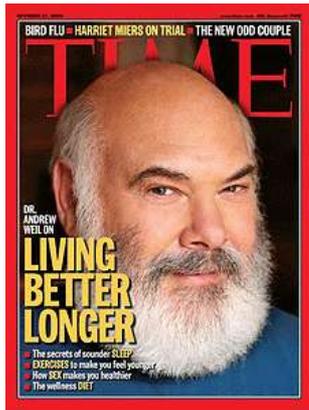
Then they are taught which drugs cover up the symptoms of those diseases.



# The Fourth Year



- When that doesn't work, they are taught to attempt to remove the offending part.
- **The appendix**, a virtually useless organ some anthropologists think used to be used as a second stomach in processing uncooked foods
- **The Tail Bone**: another useless item in the human body, that is unless your distant ancestors had a tail attached to help balance/grasp things
- **Ear muscles**: Yes, there are muscles in your ears, and some people can actually move their ears around, yet it is another remnant of a time when our ancestors had limited neck movement and/or needed to move their ears to listen for predator or prey
- **Wisdom teeth**: The source of much pain for the late teenager crowd, this third set of molars may have been useful in early humanoids, but since we learned to cut, cook, and tenderize our food, we've lost the need for them...indeed, most of our jaws are too small to handle them, thus the necessity of removal.
- We can live without one of our **lungs or kidneys** , so we can donate one of them.
- A person can donate **half** a **pancreas** and still live normally.
- We can live without hands , eyes , legs , reproductive organs
- This list is far from exhaustive

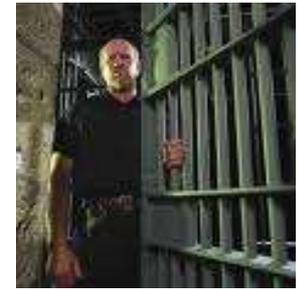


## Most People have heard of Andrew Weil, MD, the famous Professor at the medical school in Tucson, AZ.

- His teaching about the use of nutrition to support health is widely known, respected, and practiced.
- In spite of that the FDA & FTC told him that if he didn't stop suggesting that improving your immune system would help prevent you from getting the flu, he would be put in Jail & fined.



# Thus we see



- That even a medical school professor, backed by reams of scientific literature proving the efficacy of an improved immune system, can be threatened by fines & imprisonment by our government.
- In a different case, a medical school professor & dermatologist was fired from his position for recommending that exposing our skin to sunshine to increase our vitamin D levels is healthy.



**So today MD's are no longer able to treat patients according to scientific literature.**

- MD's are no longer able to treat patients according to scientific literature, the experiences of the physician, or the desires of the patient.
- MD's are required to treat patients according to what are called "standards of care."
- These guidelines are not really guidelines at all, but are considered mandatory edicts by medical boards.



# After they get into practice



- Control of the patient is taken from the doctor by the insurance companies.
- When a doctor makes a diagnosis, he/she must select a code number for whatever diagnosis is made. That code number activates what are called “standards of practice”.
- That means that a computer programmed by an insurance company is now in control of your medical care.
- It tells the doctor what drugs must be prescribed and whether you can have surgery.
- It tells the doctor when you can be hospitalized and how many days you can stay there.
- Unless your doctor can justify another diagnosis code, you are controlled by the first one.



# Most HMO's and PPO's also set “standards for doctors”



- As far as when you can see a specialist and how many patients must be seen by the doctor daily.
- Many family practice doctors are required to see 60 patients/day or lose their job.
- Under such circumstances, there is little time to talk to patients about the basics of diet and other things needed to stay well. Like Kangen Water®
- There is no time to do anything but quickly write another prescription and get you out the door.





# Oriental Medicine is not Recognized



- By the FDA and insurance companies and thus is not commonly used or understood.
- Nor is basic freshman medical school physiology or oriental medicine combined with modern electronics.
- There are no codes that exist for them, so they are not recognized.
- It's in put in the same category as Voodoo.





# So Your True Health is up to You!

- Your Body does not reward or punish you.
- Your body is a consequence machine.
- If you understand what it needs and follow the directions it will work well for a long time.
- If you don't know what it needs, you will probably blow it up.
- It's entirely up to you.



# How Do Cells Normally Get Voltage?

- There are many ways our bodies are intended to get electrons, however our modern culture has tended to eliminate most of these sources.
- The earth is a large electromagnet.
- If you take the probes of a voltmeter and stick them into the dirt, you will measure voltage.
- An area of high voltage always causes electrons to flow to areas of low voltage.
- If your body has lower voltage than the earth, walking barefoot on the dirt or grass will cause electrons to flow from the earth into your body, recharging you.
- However, if you walk with shoes, this cannot occur.

# So How does the Body make Electricity and How does it use it?

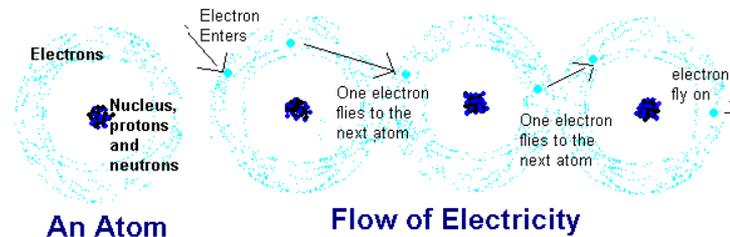
- Without [electricity](#), you wouldn't be reading this slide right now. And it's not because my projector wouldn't work. It's because your [brain](#) wouldn't work.
- Everything we do is controlled and enabled by electrical signals running through our bodies.
- As we learned in intro physics, everything is made up of [atoms](#), and atoms are made up of protons, neutrons and electrons.
- Protons have a positive charge,
- Neutrons have a neutral charge,
- And electrons have a negative charge.





# Synapses "firing"

- When these charges are out of balance, an atom becomes either positively or negatively charged.
- The switch between one type of charge and the other allows electrons to flow from one atom to another. This flow of electrons, or a negative charge, is what we call electricity. Since our bodies are huge masses of atoms, we can generate electricity
- When we talk about the nervous system sending "signals" to the brain, or synapses "firing," or the brain telling our hands to contract around a door handle, what we're talking about is electricity carrying messages between point A and point B.



- It's sort of like the digital [cable](#) signal carrying 1s and 0s that deliver "Law & Order." Except in our bodies, electrons aren't flowing along a wire; instead, an electrical charge is jumping from one [cell](#) to the next until it reaches its destination.



# Electricity is a key to survival.

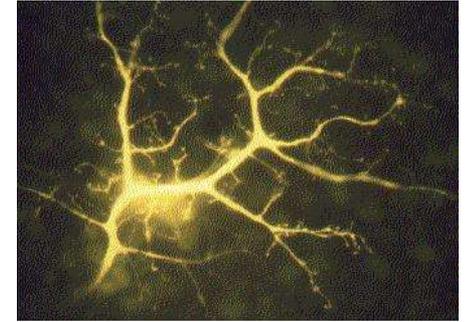
- Electrical signals are fast. They allow for a nearly instantaneous response to control messages. If our bodies relied entirely on, say, the movement of chemicals to tell our [hearts](#) to speed up when something is chasing us, we probably would've died out a long time ago.



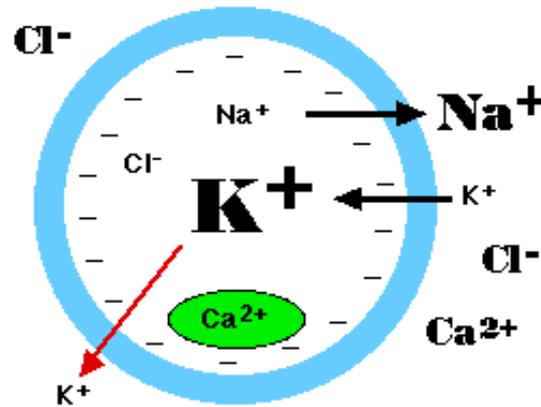
- Those crucial signals that tell our hearts to speed up when we're in danger come from a mass of cells in our heart called the **sinoatrial node**, or **SA node**. It's located in the right atrium, and it controls the rhythm of our heartbeat and the movement of [blood](#) from the heart to every other part of our body.
- It's our body's natural pacemaker, and it uses electrical signals to set the pace. But our pulse isn't the only thing that relies on electrical impulses generated by our cells. Almost all of our cells are capable of generating electricity.



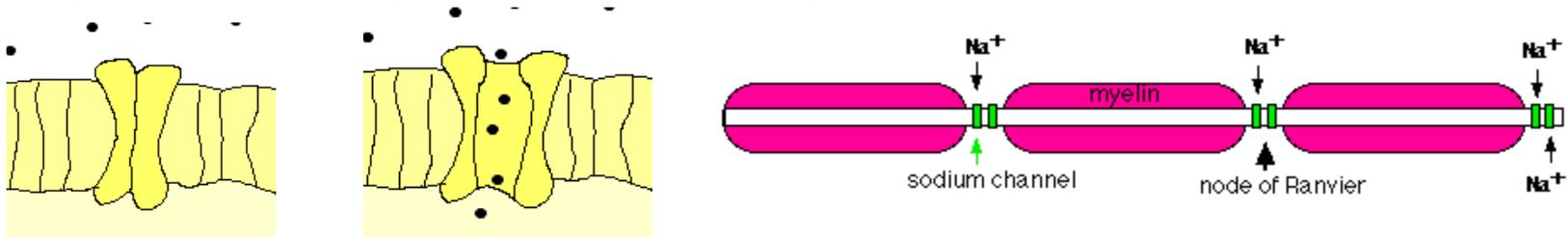
# The starting point



- Right now, any cells in your body that aren't actively sending messages are slightly negatively charged.
- Negativity is the natural resting state of your cells. It's related to a slight imbalance between potassium and sodium ions inside and outside the cell.
- This imbalance sets the stage for your electrical capacity.



- At rest, your cells have more potassium ions inside than sodium ions, and there are more sodium ions outside the cell. Potassium ions are negative, so the inside of a cell has a slightly negative charge. Sodium ions are positive, so the area immediately outside the cell membrane is positive. There isn't a strong enough charge difference to generate electricity, though, in this resting state.



- When the body needs to send a message from one point to another, it opens the gate. When the membrane gate opens, sodium and potassium ions move freely into and out of the cell. Negatively charged potassium ions leave the cell, attracted to the positivity outside the membrane, and positively charged sodium ions enter it, moving toward the negative charge.
- The result is a switch in the concentrations of the two types of ions -- and rapid switch in charge. It's kind of like switching between a 1 and 0 -- this flip between positive and negative generates an electrical impulse. This impulse triggers the gate on the next cell to open, creating another charge, and so on. In this way, an electrical impulse moves from a [nerve](#) in your stubbed toe to the part of your brain that senses [pain](#).



# Everything relies on these Electrical Signals



shutterstock · 54097552

- Since everything relies on these electrical signals, any breakdown in your body's electrical system is a real problem.
- When you get an [electric shock](#), it interrupts the normal operation of the system, sort of like a power surge. A shock at the [lightning](#) level can cause your body to stop. The electrical process doesn't work anymore -- it's fried.
- There are also less dramatic problems, like a node misfire that causes a **heart palpitation** (an extra heartbeat), or a lack of blood flow to the heart that upsets the pacemaker and causes other parts of the heart to start sending out impulses.
- If the heart is constantly being told to contract, it never gets in a full contraction, and it can't get enough blood to the rest of body, leading to oxygen deprivation and a possible heart attack or stroke.

# Could human beings really power the Matrix?



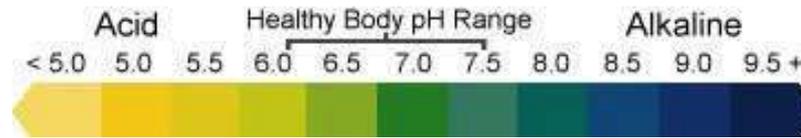
- Probably not.
- With so much electricity jumping around, it may seem like the body is a really great power source.
- But could human beings really power the Matrix?
- 1 Mv is  $1/1000^{\text{th}}$  of a volt. A human body can only generate between 10 and 100 Millivolts.
- A standard flashlight battery only generates 1.5 volts
- A cathode ray tube requires about 25,000 volts to create a picture on a TV.
- If the machines could gather millions of electric eels, on the other hand, they'd be well juiced up. A single eel can produce in the area of 600 volts



# Human Voltage



# pH and Calcium



- pH stands for “Potential Hydrogen”. It is a way of talking about the amount of acid and base in our bodies. It is also a way of talking about the amount of voltage in our body.
- pH is measured on a log rhythmic scale where 0 is the most acidic and 14 is the most alkaline.
- Seven (7) is considered neutral.
- Water ( $H_2O$ ) ionizes into hydrogen ( $H^+$ ) and hydroxyl ( $OH^-$ ) ions. When these 13 ions are in equal proportions, the pH is a neutral 7.
- When there are more  $H^+$  ions than  $OH^-$  ions then the water is said to be "acid".
- If  $OH^-$  ions outnumber the  $H^+$  ions then the water is said to be "alkaline". The pH scale goes from 0 to 14 and is logarithmic, which means that each step is ten times the previous.
- In other words, a pH of 4.5 is 10 times more acid than 5.5, 100 times more acid than 6.5 and 1,000 times more acid than 7.5.

# pH is also a measure of voltage



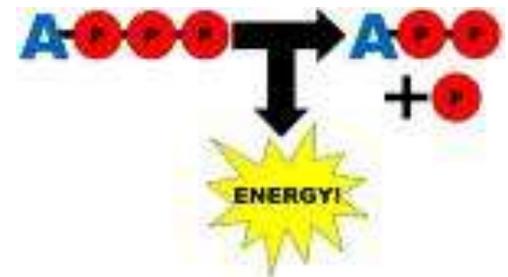
- A pH of 0 is the same as +400 mVolts.
- A pH of 14 is the same as -400 mVolts.
- Cells normally operate at about pH of 7.2 or -22 mVolts.
- Chronic disease and pain are almost always associated with an acidic pH which is the same as saying that chronic disease and pain are almost always associated with a loss of voltage.
- Health is associated with the presence of voltage which is the same as saying that healthy people have an alkaline pH.
- In the body, being able to hold a charge of voltage is associated with minerals in general and calcium in particular.

# Cellular pH (Voltage) and Disease

Values are Approximate					
Nakatani	Cell Voltage	Cell pH	Salivary pH	Cell pH	Symptoms
210	-105	8.84	8.04		
200	-100	8.75	7.95	Viruses Bacteria Cancer Cells Die 7.8-8.8	Symptoms of Healing
190	-95	8.66	7.86		
180	-90	8.58	7.78		
170	-85	8.49	7.69		
160	-80	8.40	7.60		
150	-75	8.31	7.51		
140	-70	8.23	7.43		
130	-65	8.14	7.34		
120	-60	8.05	7.25		
110	-55	7.96	7.16		
100	-50	7.88	7.08		
90	-45	7.79	6.99		
80	-40	7.70	6.90		
70	-35	7.61	6.81		
60	-30	7.53	6.73		
50	-25	7.44	6.64		Vigorous Healthy
40	-20	7.35	6.55	Normal Cell	Tired Illness Fatigue
30	-15	7.26	6.46	Cell Mitosis 6.5-7.4	Cancer Develops 6.3-7.0
20	-10	7.18	6.38		
10	-5	7.09	6.29		
0	0	7.00	6.20		
	5	6.91	6.11		
	10	6.83	6.03		
	15	6.74	5.94		
	20	6.65	5.85		
Can't Read	25	6.56	5.76		
Reversed Polarity	30	6.48	5.68		
	35	6.39	5.59		Pain
	40	6.30	5.50		
	45	6.21	5.41		
	50	6.13	5.33		
	55	6.04	5.24		
	60	5.95	5.15		
	65	5.86	5.06		

# Our cells contain a process of turning fatty acids into glucose

- They are processed through a series of chemical reactions called the Krebs cycle.
- The end result is a rechargeable battery called ATP or Adenosine triphosphate
- As ATP provides the cells with electrons to keep the cell functioning, it becomes a discharged, rechargeable battery called ADP.





# When oxygen is available

- For every unit of fatty acids cycle run through the Krebs, we create 38 molecules of ATP (energy to burn)
- However is oxygen is unavailable, only 2 molecules of ATP are created for every unit of fatty acids.
- Thus as voltage drops and oxygen levels drop, our metabolism goes from “38 miles per gallon to 2 miles per gallon”.
- Thus it is difficult for cells to have enough energy to function with such inefficient metabolism.

# Another Problem of Decreased Oxygen is Infections



- Our bodies contain perhaps 1 trillion microorganisms.
- However most of these are inactive as long as oxygen is present.
- However when oxygen levels drop, these bugs wake up.
- And the first thing they want to do is have lunch, and they want to have you for lunch.
- Since these bugs don't have teeth they must put out digestive enzymes to dissolve you so that they can acquire the nutrients in your cells.





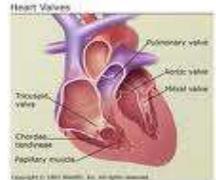
# One of the Problems has do with these Digestive Enzymes

- Let's assume that you have a strep bacteria having lunch on your tonsil.

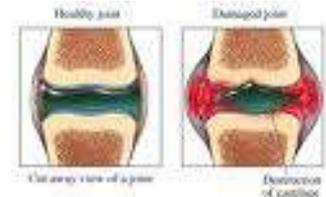


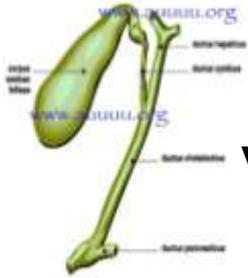
- You recognize this as a sore painful throat.

- What you may not know, however is that these enzymes produced by the strep bacteria can enter your blood stream and cause damage our heart valves.



- They can also damage your joints and the same process can happen anywhere in the body.

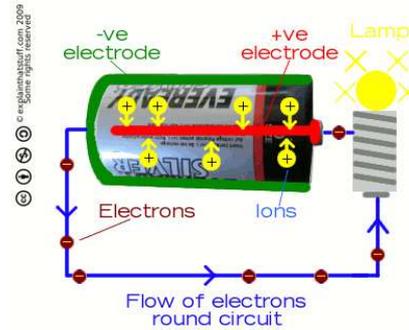
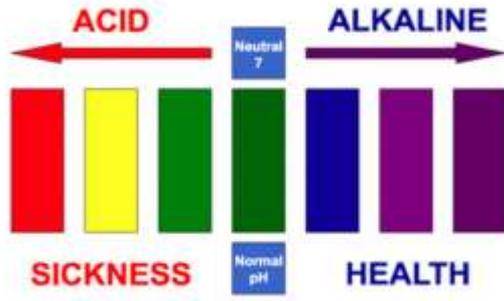




# Let's Assume you have Low Voltage in your Gallbladder

- This means your gallbladder will hurt, have decrease metabolism, will have decreased oxygen and inefficient metabolism.
- And will have bugs lunching on your gallbladder.
- The toxins produced by these bugs can enter the blood stream and cause brain damage.
- You may have infections in your large intestines, your sinuses or other places causing damage and creating an autoimmune problems.
- However, it is simply bugs having lunch because your voltage and thus your oxygen levels are low.

# I want to focus on the importance of pH



- pH is shorthand for “potential Hydrogen” and is really a measurement of voltage.
- When electrons are running through a conductor like a copper wire, they are there or they are not there.
- If the switch is on you have an electron donor.
- If the switch is off there are no electrons

# However, a Solution provides a different situation

- The solution may be an “electron donor” or an “electron stealer”.
- If the solution is a donor one puts a negative sign in front of the voltage (-)
- If the solution is a stealer one puts a positive sign in front of the voltage (+)



# Oxidation Reduction Potential

- If your voltmeter measures + 150 Millivolts it is an “electron stealer” with 150 Millivolts of **taking power**. It’s an oxidant.



- If your voltmeter measures – 200 Millivolts it is an “electron donor” with 200 Millivolts of **giving power**. It’s an anti-oxidant

# **After Measuring the voltage of a solution one can convert that to a logarithmic scale called pH**

- A voltage of +4000 mv is the same as a pH of zero.
- A voltage of -4000 mv is the same as a pH of 14.
- A solution of neither an electron donor or a stealer is called a pH of 7, or neutral.
- With this understanding, one can see that a pH of 7.35 is -20 mv & 7.45 is -25 mv.
- Thus all cellular biology texts tell us that all cells are designed to run between -20 & -25 mv of electron donor status.

The following chart help us understand the difference between electron donors & stealers in the human body

• **Voltage**

- -800
- -50
- -45
- -25
- -20
- -15
- -10
- 0
- +5
- +10
- +20
- +30
- +500
- +700



**Cell pH**

- 9.50
- 7.88
- 7.61
- 7.44
- 7.35
- 7.25
- 7.18
- 7.0
- 6.91
- 6.83
- 6.65
- 6.48
- 4.00
- 2.50

**Status**

- Kangen water
- Makes New cells
- Normal for kids
- Normal for adults
- Tired
- Sick
- Change polarity
- Obesity
- Cancer occurs
- Reverse Osmosis
- Soda



# Salivary & Urinary pH

- Salivary & Urinary pH are about 0.8 pH units less than cell pH.
- Salivary pH is a rough indicator of the cellular voltage, while
- Urinary pH is a rough indicator of the voltage in the fluids around the cells.
- When normal, both should be 6.5 pH
- If you add 0.8 to 6.5 you get a pH of 7.3.
- This equates to a voltage of -20 mv.

# Now let's consider my thumb

- My thumb is running at a voltage of -25 mv
- It is pink, feels fine, works well.
- Now I hit it with a hammer.
- The thumb is red, swollen, hot & pulsing with pain.
- It has automatically gone to -50 mv
- This is necessary to make new cells needed to replace the ones that I damaged with the hammer.



# At -50 Millivolts



- Blood vessels dilate and dump raw materials protein, carbohydrates, fats, vitamins, minerals, etc. into the neighborhood.
- I need these raw materials to build new cells.
- I also need -50 mV to have the energy to turn these raw materials into new cells.
- As soon as I make enough cells to replace the ones I damaged with the hammer, my thumb goes back to -25 mV.
- It is normal and I am happy

Now let's assume I ran out of voltage before I was able to make enough new cells that I damaged with the hammer.



- My voltage dropped to -10 mV.
- Now I'm stuck in chronic disease.
- I cannot heal unless I can make new cells.
- I cannot make new cells unless I have -50 mV and all the raw materials I need to make new cells.
- In chronic disease, my thumb hurts all the time, it's the wrong color and doesn't work very well.

# Thus we see



- That chronic disease is always defined as having low voltage.
- One cannot address chronic disease unless one can insert enough electrons to achieve  $-50$  mV.
- One must also have the raw materials necessary to make new cells and to eliminate the toxins or infections present that will damage the new cells.
- You can take all the medications and have all the surgery you like, but you will not heal unless you have  $-50$  mV, raw materials and lack of toxins.

Once you begin to understand that chronic disease and healing are controlled by voltage, one must ask the following questions

1. How do cells normally get voltage?
2. How do cells store voltage?
3. Why did my voltage drop enough to allow me to get sick?
4. How do I measure the voltage of organs?
5. What do I do when I find the voltage is low?



# There are several bad things that happen when voltage drops

- The obvious one is that organs



simply don't have enough

horsepower to do their jobs.

- Another is they don't have enough energy to get rid of toxic waste and it begins to accumulate.



- Remember at -50 mV there is a pulsing pain. When you have low voltage it simply hurts all the time.

- Thus pain is simply a symptom of abnormal voltage. You correct it by correcting the voltage.



- A drop of voltage causes a drop in oxygen.

A drop in oxygen causes chronic pain, poor metabolism & infections.



If you put a tube into a glass of water



- And begin bubbling oxygen into the water, the amount of oxygen dissolved into the water is dictated by the voltage of the water.
- As voltage is raised, more oxygen is dissolved in the water.
- However as voltage drops, oxygen comes out of solution and leaves the water.
- Our cells are 70% water, thus as voltage begins to drop in ourselves, oxygen leaves the cells and this has serious consequences.

# Chronic disease & pain are always associated with and Acidic pH

- Which is the same as saying that chronic disease & pain are always associated with a loss of voltage.



- Health is associated with the presence of voltage which is the same as saying that healthy people have an alkaline pH.
- In the body, being able to hold a charge of voltage is associated with minerals in general and calcium in particular.





# Daytime is a time of “Running the Machinery” and creating acids

- You turn on the body machinery and this creates a by-product of carbonic acid.
- This acid must be eliminated from the body or the body loses its charge. (becomes acidic)
- This is accomplished by having the carbonic acid dissociate into carbon dioxide and water.
- The carbon dioxide is breathed out through the lungs, however one cannot breath fast enough to get rid of all the necessary carbon dioxide.
- So some of it is removed by combing with ammonia from the liver & intestines to form urea nitrogen and is eliminated through the kidneys.





# Nighttime is a time of replacing worn out cells



- Nighttime is a time of replacing worn out cells and eliminating the acids you created earlier and didn't get rid of during the day.
- Measurement of the salivary pH gives you a good indication of how much voltage is stored in your cellular batteries. It should never be lower than 6.5.
- Measurement of the urinary pH gives you an indication of how much acid is being dumped out by the kidneys. It should also be about 6.5.
- If your urine pH is less than 6.5, you are dumping more acid because your tissue has become too acidic.
- To be accurate, your pH must be tested either the first thing when you wake up before you drink any water or two hours after a meal. Test it with pH strips.



## **If your urine or your salivary ph falls below 6.5, you need more calcium**



- However, you can't just take any calcium.
- Calcium citrate is acidic. If you take it, you will make yourself more acidic.
- Calcium carbonate is alkaline with a pH of about 10.
- It will cause your system to become more alkaline.
- A good source of calcium carbonate is from coral. In addition to the calcium, you get trace minerals as well.



## The normal human cell has a lot of molecular oxygen and a slightly alkaline pH



- The cancer cell has an acid pH and lack of oxygen.
- Cancer cells cannot survive in an oxygen rich environment.
- At a pH slightly above 7.4 (salivary pH 6.7) cancer cells become dormant
- And at pH 8.5 (salivary pH 7.8) cancer cells will die while healthy cells will live.
- Again, the higher the pH reading, the more alkaline and oxygen rich the fluid is.
- Cancer and all diseases hate oxygen/pH balance.
- Thus it is sometimes advantageous to push the pH above 6.5 if you are trying to overcome a chronic illness.

# So now let's apply this to YOU



- Let's assume that you have bought an old house that hasn't been lived in for several years.
- However, you love that old house and want to return it to its former glory.
- You dream of living in that wonderful house and all the fun you will have in it.

# Well...your body is that house

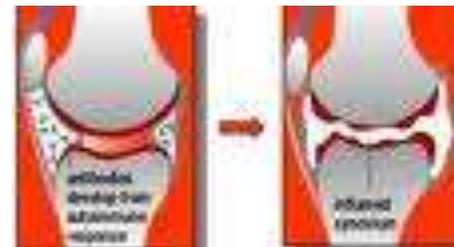
- Now we have to start the process of returning it to normal. It won't happen overnight, and there are no miracle pills to make it normal.
- In fact, medications are simply paint. If you paint over a board eaten by termites, you may not see the holes in the board for awhile, but they are still there and the rotting goes on.





# Medications cover up the symptoms

- Medications cover up the symptoms, but the degeneration in your body continues.
- If you have arthritis and you take medication, the degeneration in your joints continues.
- You just don't feel the pain while the joints continue to rot.



# So now that you own the old house

- What must be done before you can move in?
- First you will want to restore the utilities.  
You will need **water, sewage, and electricity.**
- So let's get started on those:





# Water



- Since the body is about 70-80% water, it is the basis of who you are and how healthy you are. Unfortunately, you have probably been lead to believe that drinking things containing water is the same as drinking water-----not so.
- When things are put into water to make them into some other drink, it changes how the water reacts in the body.
- That means it steals electrons and they are no longer available for your body to use in its metabolism.
- And if you put chlorine and/or fluoride in it, it becomes acidic.
- Anything that is acidic is an electron stealer.
- Anything that is alkaline is an electron donor.
- Drinking acidic water steals electrons from your cells and damages them. Drinking water that has been made into carbonated beverages is drinking acid that is so concentrated, you can use it to clean the grease off your engine or clean out your toilet!
- That can't possibly be good for you.



# Your cells are composed of water

- Your cells are composed of water, but it is also what your body uses to wash the inside of your body to clean away the garbage that gets into the body.
- Would you wash your car with coffee? Then consider washing the inside of your body with coffee or tea or sodas.
- In addition, zinc is one of the most important elements in the body. Without zinc, you can't make stomach acid.
- Without stomach acid, you can't digest your food. Without nutrition, the body can't repair itself.
- In addition, without zinc, you can't make neurochemicals like serotonin, dopamine and epinephrine & you won't sleep well.



# Many think it is healthy to drink distilled water

- It is not!
- Distilled water pulls minerals out of your cells and into the water.
- You can kill yourself drinking distilled water.
- For example, if you put one drop of distilled water inside an eye, the cornea immediately becomes opaque and the cells inside the eye are killed as the minerals are pulled out of them.



So in our old house analogy, you will begin by washing out the debris inside and outside your house



With Kangen Alkaline water



- Start with  $\frac{1}{2}$  oz per lb of 8.5pH -650 mV
- When Herxheimers detox symptoms cease then increase pH to 9.0, -750 mV
- As energy begins to build, increase to 9.5 ph, -800 mV
- After acclimating to 9.5 pH, gradually increase amount consumed to continue increasing your voltage.
- A good rule of thumb is to drink water every time you feel hungry. The sense of **hunger** is often the signal the body really wants more **water**.

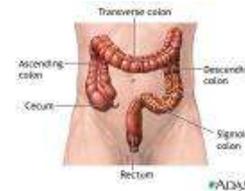
# What Is The Herxheimer Reaction?



- The Herxheimer Reaction is an immune system reaction to the toxins (endotoxins) that are released when large amounts of pathogens are being killed off, and the body does not eliminate the toxins quickly enough.
- Simply stated, it is a reaction that occurs when the body is detoxifying and the released toxins either exacerbate the symptoms being treated or create their own symptoms.
- The important thing to note is that worsening symptoms do not indicate failure of the treatment in question; in fact, usually just the opposite.

# Sewage

- As we clean up our old house now and in the future we will wash out the debris and need a functional sewage system to get rid of the toxic and waste materials.
- One of the most important systems in the body is the **large intestine**.
- We will start our cleanup by flushing out the large intestine to remove the debris that has accumulated there.
- Micro clustered Kangen Water<sup>®</sup> can penetrate the built up mucoid plaque that has built up in the colon for years and restore oxygen balance.



Early colonoscopy

# Probiotics

- The word “probiotic” refers to bacteria that normally live in our intestines and help with digestion.
- They are an important part of the digestive process and need to be replaced if they are diminished in numbers by the use of antibiotics.



# Cooking Oils

- This is one of the most important parts of getting well.
- If you don't stop putting Trans Fats ("Plastic Fats") into your body, you will never get well!
- Please pay particular attention to this

# Food suppliers recognized that the major loss of profits was from spoilage

In order to stop spoilage and increase their profits, they did two things:

- 1. They added chemicals to the food to keep it from spoiling. These chemicals not only preserve food, they preserve the person who eats them.
- 2. They began to cook the fats in the food. Cooking fats at 350-380 degrees for 5-6 hours changes the fats into something that is one carbon atom away from plastic.

You can tell if this is what you are eating if the label says, "Partially Hydrogenated".

These partially hydrogenated fats are called "Trans Fats".

# Trans Fats



- When a cell in your body is worn out, it makes a new one. It looks around to see what building materials you have provided to make a new cell.
- If all you have given your body is plastic fat, it makes a new cell out of plastic.
- Remember that the cell membrane that surrounds every cell is made of fat. If you make that out of plastic, the cell doesn't work very well.
- It is like wrapping all your cells in cellophane.

# **The cell sends a message to your brain that it's hungry.**

- Your body sends the cell some glucose and insulin.
- However, the glucose can't get through the "cellophane" and the cell keeps complaining that it's hungry.
- The body keeps sending more insulin and glucose.
- Much of it gets put into fat cells.
- Your cells keep complaining that they are hungry.
- Your brain keeps you eating to try to solve the hunger, but not much gets through the cellophane to the cells.
- Soon you are obese and your pancreas is worn out from making so much insulin.
- With all that glucose in your blood stream, you are diagnosed with Type II diabetes.
- Drugs lower the levels of sugar in your blood, but your cells are still coping with being made of plastic.
- Soon they began to wear out and you get symptoms of worn out cells = heart attacks, strokes, liver & kidney failure, blindness, chronic fatigue etc

# Most restaurants use plastic fats for frying food

- If you eat out, you must choose a restaurant that doesn't use plastic fats.
- Most cheese is made from plastic fats.
- Thus cheeseburgers and French fries are major sources of plastic fats.
- Fast food isn't dangerous because it's fast---it is dangerous because it's plastic.
- The point you must understand is that if you insist on feeding your body plastic fats, you will never get well!
- However, if you give your body good fat and the other things it needs, your body will build a new you that is vibrant and healthy!

# Cells need the following to work:

1. Water with voltage (alkaline water)
2. Fats to make cell membranes
3. Proteins to make the cytoplasm (“machinery”) inside cells.
4. Vitamins to allow the body to make the fats and proteins work.
5. Minerals to make the fats and proteins work and as On-Off switches and keep your pH in the operating range.
6. Oxygen
7. Sunshine
8. Voltage is the same as pH. The body must have voltage to function (the same as saying a normal body has an alkaline pH). The body normally runs at a pH of 7.2 inside cells which is the same as -22 mV.

# There is a lot of confusion about the type of fat to eat.

- Many people are becoming toxic from too much Omega-3 fats (from fish oil, etc.).
- Your cell membranes are like your home. They need to be strong enough to be substantial but have doorways and windows to let things in and out.
- If you build your house out of concrete blocks with no windows or doors, it will be strong but won't work because you can't get in or out.
- If you build it with mostly doors and windows, the next storm will take it down.

# In cells, saturated fats are strong and unsaturated fats are porous.

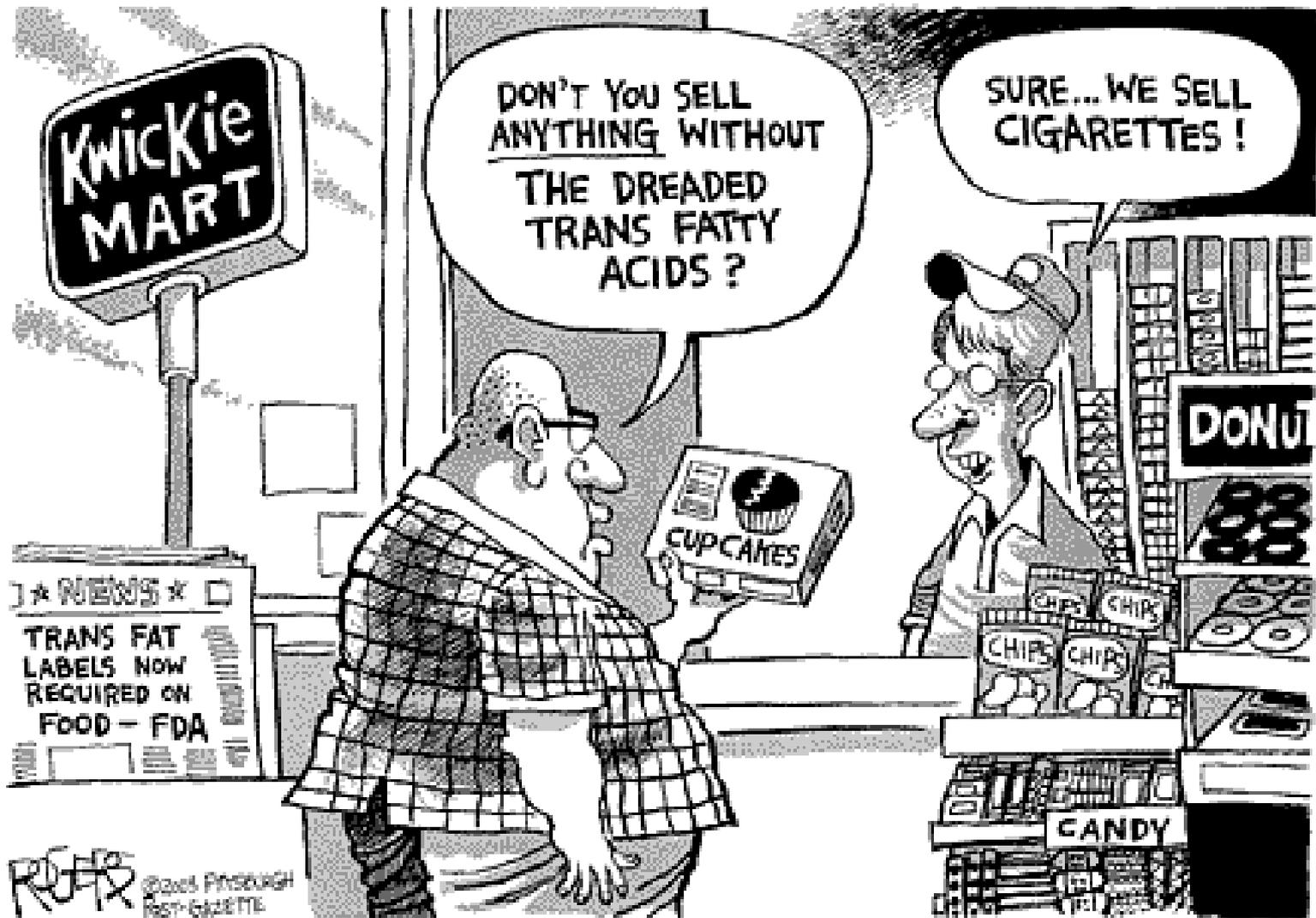
- You need saturated fat (animal fat for example) to make strong cells
- And unsaturated fats (fish oils for example) for doors and windows.
- The ratio needs to be 4/1 meaning that you need to eat four times as much saturated fat as unsaturated fats = four times as many bricks as doors and windows.
- Saturated fats have gotten a bad reputation because plastic fats are saturated.
- There is a difference between plastic fats and normal saturated fats.

# Hydrogenation.

- This is the process that turns polyunsaturates (margarine and shortening) normally liquid at room temperature, into a fat that is solid at room temperature.
- To produce them, manufacturers begin with the cheapest oil (soy, corn, or cottonseed) already rancid from the extraction process.
- These oils are then mixed with tiny metal particles—usually nickel oxide.
- Nickel oxide is very toxic when absorbed and is impossible to eliminate totally from margarine. (Nickel is a severe neurotoxin. JLT)
- The oil with its nickel catalyst is then subjected to hydrogen gas in a high-pressure, high-temperature reactor.
- Next, soap-like emulsifiers and starch are squeezed into the mixture to give it a better consistency.
- The oil is yet again subjected to high temperature when it is steam cleaned.
- This removes its horrible odor.
- Margarine's natural color, an unappetizing grey, is removed by bleach.
- Coal tar dyes and strong flavors must then be added to make it resemble butter.
- Finally the mixture is compressed and packaged in blocks or tubs, ready to be spread on your toast. (and make “plastic cell membranes” JLT)

# Canola Oil

- It is genetically engineered rapeseed.
- Canada paid the FDA the sum of \$50 million to have rape seed registered and recognized as "safe". (Source: Young Again and others)
- Rapeseed is lubricating oil used by small industry. It has never been meant for human consumption.
- It is derived from the mustard family and is considered a toxic and poisonous weed, which when processed, becomes rancid very quickly.
- It has been shown to cause lung cancer
- It is very inexpensive to grow and harvest. Insects won't eat it.
- Some typical and possible side effects include loss of vision, disruption of the central nervous system, respiratory illness, anemia, constipation, increased incidence of heart disease and cancer, low birth weights in infants and irritability.



DON'T YOU SELL ANYTHING WITHOUT THE DREADED TRANS FATTY ACIDS?

SURE... WE SELL CIGARETTES!

Kwickie MART

★ NEWS ★  
TRANS FAT LABELS NOW REQUIRED ON FOOD - FDA

R. J. F. ©2005 Pittsburgh Post-Gazette

# TOXINS

- Now that we have the utilities turned on, we are ready to start cleaning. Over time, several undesirable things are likely to be present.
- There are likely to be bacteria, fungus, roaches, spiders, ants, mice, termites, etc. present.
- These things must be removed for us to live happily in our remodeled home.

# We live in a toxic society

- We have been in the process of poisoning ourselves to death for years.
- We have been lead to believe that scientists know everything and that the government agencies would not allow companies to do anything that will harm us.
- The recent episodes of Vioxx, Bextra, NutraSweet and many others show us that isn't true.
- We used DDT as a pesticide for years until finally it killed most of our eagles by poisoning the fish they eat.
- Now we have a new syndrome where harmless amoebae in our lakes and rivers have turned into meat-eating pathogens that cause chronic fatigue because the apple, orange, and tobacco farmers are using pesticides that kill the algae that the amoebae used for a food supply.
- When aspartame (NutraSweet) was first tested, it was given to seven monkeys. One died and five had seizures. When given to mice, over 40% developed brain tumors. Still the government now allows it to be put into most of our food.
- MSG causes monkey to have holes in their brains. However, the government allows it to be put into children's vitamins, seasonings, crackers, potato chips, etc.
- You cannot depend on the government to protect you from things that aren't healthy.

# The body becomes **ADDICTED**

- One of the unsuspected problems with these various toxins is that the body becomes **ADDICTED** to them.
- Food manufactures know this. That is why they put known neurotoxins like aspartame and MSG in their products.
- Once you become addicted. That makes you want to use more of their product and have trouble when you try to stop using it. It is not likely that many of us would think about being addicted to Diet-sodas or corn chips!
- Because stopping addictions is difficult and uncomfortable, you will find giving up these toxic things difficult.
- Therefore I recommend you eliminate these toxic things one at a
- time. Check them off the list each time you can go for a couple of weeks without craving each item or being tempted to eat them when others are doing so.

# Deodorants vs. Antiperspirants

- Most people think that antiperspirants and deodorants are the same thing, but they aren't.
- Antiperspirants work by clogging, closing, or blocking the pores with powerful astringents such as aluminum salts so that they can't release sweat. (Note that aluminum can accumulate in the brain.)
- Deodorants work by neutralizing the smell of the sweat and by antiseptic action against bacteria.
- Deodorants are preferable because they don't interfere with sweating, a natural cooling and detoxifying process.

# Stop using all forms of artificial sweeteners

- To be healthy, you must stop eating anything that says, “Partially Hydrogenated” or Canola Oil.
- Stop eating fried foods and cheese in restaurants because these almost always are made of partially hydrogenated oils.
- In addition, you stop using all forms of artificial sweeteners such as Aspartame, Splenda, saccharine, xylitol and others ending in “-ol”.
- All of these are severe neurotoxins that the body doesn’t know how to get rid of.
- Stop MSG as it is also a neurotoxin.
- Stop smoking. Stop eating soy.
- And we know drinking coffee, tea & alcohol isn’t good for us..

# Minerals

- Minerals play an important role in the body. If you think about the battery in your car, you know that if you put distilled water in it, it won't hold a charge. So it is with your body.
- In addition, mineral acts as On-Off switches in the body. This is particularly true of calcium and magnesium.
- For example, to contract a muscle, calcium is necessary.
- To relax the muscle, magnesium is necessary.
- Calcium turns things on and magnesium turns things off.
- If you run out of one of them, you get stuck in either on or off.

# Minerals and vitamins are also important in manufacturing of things you need.



An example is neuro-chemicals.

To make **serotonin** from the protein L-tryptophan, you must have:

- 1. Folate
- 2. Calcium
- 3. Iron
- 4. Vitamin B3
- 5. Zinc
- 6. Vitamin B6
- 7. Magnesium
- 8. Vitamin C



- Serotonin is known to modulate mood, emotion, sleep and appetite and thus is implicated in the control of numerous behavioral and physiological functions.
- For foods high in boosting serotonin levels eat turkey, chicken, and fish. In order for your body to metabolize the foods high in serotonin boosting agents, it's important to eat a few healthy high-carbohydrate foods along with proteins. Eat protein with vegetables, nuts, milk, beans, peas, avocados or bananas.

# To heal, we must make new cells.

- Every cell in the body is designed to run at -20 to -25 Millivolts.
- To heal, we must make new cells. To make a new cell requires -50 Millivolts.
- Chronic disease occurs when voltage drops below -20 and/or you cannot achieve -50 Millivolts to make new cells.
- Thus chronic disease is always defined by having low voltage

# Healing with Freshman Medical School Physiology (How the Body is designed to Work)

**Jerry Tennant, MD**

**Tennant Institute for Integrative Medicine.**

