

Healing Type 2 & 3 Diabetes

Claudia J. Bricks N.D.
Sheboygan Natural Health Series
October 21, 2013

Healing Type 2 Diabetes

- It is an Energy Deficiency Disorder
- Get Energy from Fat Metabolism not Glucose Metabolism
- Get a good Diet- Eat good food; Eliminate sugars
- Find a Proper Exercise Program and DO IT!
- Good Sleep is Crucial
- Learn to De-Stress
- Support the Liver
- Correct Hormone Imbalances
- Using high quality Supplements

The Scoop on This Deadly Disease

- Type 2 Diabetes- Body either can't make enough insulin or insulin doesn't work as it should
- Glucose (sugar) is main fuel for body and brain
- Insulin is needed to help glucose get from bloodstream to the body's cells
- When glucose can't get into cells it stays in blood stream & damages the body: eyes, mouth, cardiovascular system, kidneys, hands and feet, and nerves. Body can't have this.
- Poor glucose control leads to Heart Disease & Stroke and causes circulation problems in legs and feet

Costs of Diabetes

- 2002 Amer. Diabetes Assoc. Figures
- \$92 Billion in Med. Bills
- Doubled since 1997!
- Loss of productivity: up to \$132 billion!
- 10 years from now\$\$\$\$
- Diabetes kills 180,000 people every year
- Diabetes is the leading cause of blindness, kidney failure, limb amputation, and heart disease.
- Suffering. . . Huge costs

All this for a problem that is making the pharmacies and doctors wealthy, but could be prevented for pennies a day!

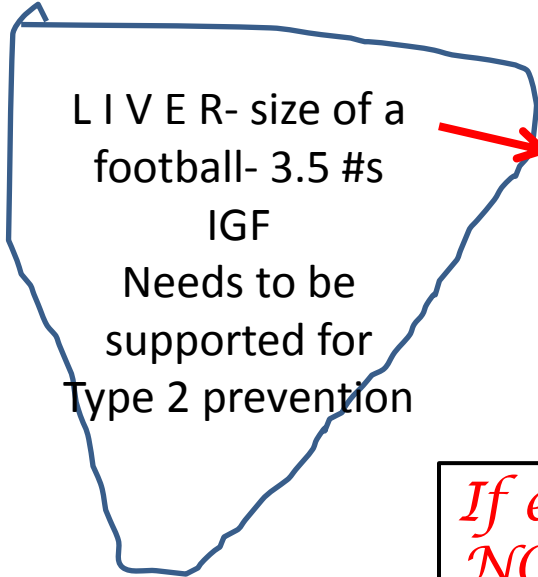
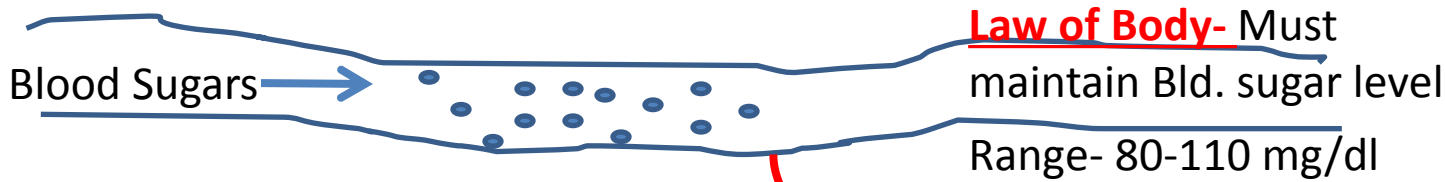
How to Tell If You Have Diabetes

- Check the symptoms list. Go to Doctor for tests:
- FPG (Fasting Plasma Glucose Test)
 - Impaired Fasting Glycemia aka pre-diabetes or Metabolic Syndrome. Found when blood sugar levels high during a fast, but not high enough for diabetes diagnosis. May leads to Type 2 Diabetes
- OGTT- Oral Glucose Tolerance Test
 - Impaired Glucose Tolerance-Found when blood glucose above normal levels but not high enough for diabetes diagnosis. Could lead to cardiovascular disease as well as diabetes

Law of the Body-

<http://www.youtube.com/watch?v=P7fHYSyvxU0> Dr. Eric Berg

- Maintain normal blood sugar- 100 mg/dl avg.
- Body does everything to maintain this avg. level, even breaking down muscle tissue. Even breaking down Protein and Fats
- Hyperglycemia= too much blood sugar- 110+
- Hypoglycemia= blood sugar too low- below 80



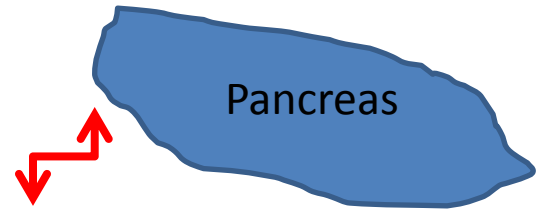
Controls BS **when NOT eating**- Uses stored sugar (glycogen) from itself and muscles

1. Energy
2. Stored Sugar
3. FAT



Liver and Pancreas coordinate to control blood sugars

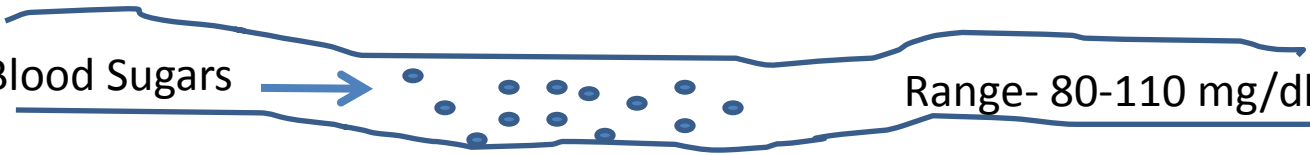
*If excess sugar is NOT used for energy or stored, and not enough Potassium- it becomes **FAT!***



Controls BS **when eating**
Creates Hormone- Insulin
Needs Potassium – 4700 mg/day.
7 cups of veggies/day

<http://www.youtube.com/watch?v=P7fHYSyvxU0>- Dr. Eric Berg

Blood Sugars



Range- 80-110 mg/dl

GH- growth hormone- protects proteins from breaking down into sugar. Decreases w/ age

LIVER-

- IGF- hormone
Is like GH- needs
- Sleep
 - Good food
 - Less stress
 - Interval Trng.

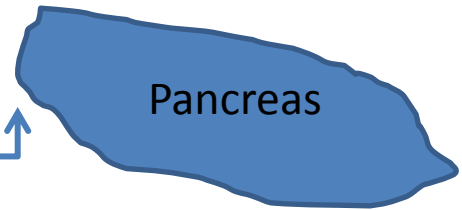
BS when NOT eating-

Receptors for Insulin
200,000/liver cell

Type 2 Diabetes=
Insulin Resistance=
Liver problem

Liver is 100x's more important than pancreas- needs to be supported-

KALE is best food for Liver & BS control!



Pancreas

Type 1 Diabetes-
Pancreas problem-
Islet cells exhausted

149#s sugar per Yr/person!

<http://www.youtube.com/watch?v=P7fHYSyvxU0>- Dr. Eric Berg- www.dr.berg.com

Insulin Resistance

- http://www.youtube.com/watch?v=ae_jC4FD0Uc Video that explains all of this
- http://www.youtube.com/watch?v=qgwiuYTzt_a4 Demonstration of Normal & High Blood Sugar

Most Ignored Piece of Diabetes Puzzle = Liver

- Liver supports blood sugar levels when you are not eating. Puts glycogen/sugar back into blood. Insulin Like Growth Factor- IGF hormone
- Pancreas controls blood sugars when you eat- Makes insulin to take sugar out of blood
- Body stores small amounts of sugar, called Glycogen, for 'emergencies', in muscles and liver
- Potassium (4700 mg) needed to store sugar. Low Potassium levels = sugar cravings. 7 cups veggies
- Too much sugar, low potassium, no exercise=FAT
- <http://www.youtube.com/watch?v=P7fHYSyvxU0> Dr. Eric Berg

DIABETES 101 by Dr. Frank Shallenberger, M.D.

- T or F– If you have the genes for Type 2 diabetes, you **WILL** get it.
- **FALSE**– **Genotype** is the genetic code of your body- won't change
- **Phenotype** is how your genetic code gets expressed in body due to lifestyle factors- things you **CAN** change such as your living conditions, hygiene, how you eat, play, sleep, exercise, deal with stress, etc.
- Family history of diabetes does **NOT** mean you will get it. Take care of your Phenotype situation

Glycemic Index

High Glycemic Carbohydrates

- **Bread**- white, whole grain, pastries, cookies, crackers, pretzels, pancakes- anything made from flour
- **Rice**- brwn & white, corn, millet, barley, chips, cereals
- Bananas, pineapple, raisins, melons, mango, papaya, pumpkin
- ALL sweets! Refined or Nat.
- All Root Veggies- carrots etc
- Beer, Wine & Liquor, except Vodka & Gin
- Per Dr. Frank Shallenberger

Medium Glycemic Carbs.

- Oranges, peaches, plums, pears, and apples
- Pasta, yams, Ezekial bread
- Peas, pinto & navy beans

Low Glycemic Carbs.

- **Beans**-Kidney & Lima, lentils, blk.eyed & chickpeas
- **Soy**- Tofu, tempeh, miso
- **Nuts**, milk, apricots, grapes, cherries, berries
- **Oatmeal** Slow-cooked, 100% whole wheat bread
- Fructose & Xylitol, Stevia

10 Glycemic Neutral Foods

<http://www.youtube.com/watch?v=0xgeG2gtl0A>

- Onions & Garlic
 - Leafy Greens
 - Fatty Seeds- Flaxseed, Pumpkin, Sunflower, Chia, & Alfalfa
 - Avocadoes
 - Coconut
 - Nuts- Walnuts, Hazelnuts, Peanuts, Almonds
 - Herbs- Basil, Cilantro, Oregano, Mint, Lemon Balm, etc. Fresh is best
 - Eggs- Organic & fresh*
 - Butter & Cheese*
 - Oils- Organic coconut, cold pressed extra virgin olive oil, hemp oils
- Fat** is good balance for Sugar
- * *These are Acidic- go easy*

www.diabetic-diet-guide.com

www.nutritiondata.self.com

Diabetes is an Energy Deficient Disorder

- Aging & Degenerative diseases are energy dependent. Every body function needs energy. As we age, energy production decreases
- **2 ways to make energy:**
 1. Aerobic metabolism (with O₂)- best
 2. Anaerobic (without O₂) metabolism
- **2 ways to make energy Aerobically**
 1. Use O₂ to burn fat for energy
 2. Use O₂to burn glucose for energy
- FAT is the body's preferred method for energy
- Aging= shift from Fat to G burning for energy ☹️

Energy Deficiency cont'd

- You can store a lot of FAT, but not much glucose. Sm. amnts. Glucose stored in liver and muscles as Glycogen
- Glucose can be turned into energy without O₂-anaerobic metabolism. Used for emergencies only- inefficient, but quicker
- Glucose Metabolism is more **acidic** than Fat- Burning O₂ produces energy **+ CO₂**, which acts as an acid in body affecting pH balance. Glucose also produces **Lactic Acid**. Too much acid damages tissues and the body reacts by pulling Calcium, Mg Potassium from joints. ☹️ (i.e. Osteoporosis)
- **Acid is poison to our bodies**. Glucose Met. is poor

Energy Deficiency cont'd

FAT metabolism is preferred because it:

- Doesn't produce lactic acid
- Requires O₂ & can be stored more efficiently
- Fits with our body's 'caveman' physiology
- Is most optimal form of energy production
- Anything that improves aerobic metabolism prevents disease and aging
- Anything that improves fat metabolism improves energy production, esp. @ cell level

Cell Energy: ATP is Vitally Important

- Cells store the energy gained from Fat or Glucose in a special molecule: **ATP**
- Body maintains tight control on levels of ATP
- **Very important**: ATP provides energy for interaction btwn Insulin and cell membrane. w/o ATP - NO interaction. ☹️
- Cells of body require insulin to take in glucose for energy. No insulin= No glucose
- As energy production decreases, cells have less ATP. Less ATP leads to poor insulin interaction causing insulin resistance. IR leads to Type 2 diabetes
- Health of Liver is critical. Liver needs lots of ATP to maintain normal Blood Sugar levels when not eating
- Also, Pancreas needs lots of ATP to produce insulin and protect Islet Beta cells from free radical damage!

Free Radicals- The Culprits

- Are a normal part of body funct./metabolism
- Can get overwhelming– chaotic- free radical cascade and cause much destruction of tissue, esp. Islet Beta cells of pancreas
- Insulin Resistance causes Islet cells to produce more insulin. FR are by-product of insulin production. More insulin= more free radicals= eventual destruction of Islet Beta cells=drop in insulin levels, increase in Bld. Sugar= Diabetes.
- Antioxidant Enzymes help but need ATP

On the Road to Diabetes

- Family history of diabetes?
- Over 40? Lots of Stress?
- Low energy levels?
- Trouble with weight?
- Less than 8 hrs. sleep?
- No Regular exercise?
- Carbs = 40 %+ of diet?
- Crave Carbs.?
- Out of shape?
- Low levels of stamina?

IF YES... GET THESE CHECKED:

- Cholesterol & Triglyceride
- Hemoglobin A1c (↓ 5.5)
- Fasting Insulin (5-10 mU/ml)
- If on insulin, get C-Peptide levels checked
- Two hour glucose tol. test
- **Also Do:** Thyroid, Adrenal, Sex, and Growth Hormone assays every 5 years.

What to Do About All of This?!

- Get psyched up to make some changes!
- Make a reasonable plan that is 'doable'
- Baby Steps at first! Take time to adapt
- Start with diet– get the sugar out ASAP. **There are NO essential carbohydrates**
- Look at taking better Supplements especially for the Liver
- Then work on more Exercise
- Get more & better sleep

Diet to Prevent Type 2 Diabetes per Dr. Frank

AVOIDS:

- **Worst carbs** are sugars- if it is sweet – avoid it. Refined carbs are worst of all
- **Grains**- wheat, corn, oats, barley, rye, rice, quinoa & their flours
- **Bread**, rolls, pasta, chips, hot/cold cereals
- **Root starches** or Tubers- potatoes, yams, carrots, sweet pots.
- **Legumes**- beans & peas
- **Fruits & Fruit juices**

Eat These

- 3 Types Fats- (cell membranes are made of & need fat)
 - Saturated- Solid, get from grass-fed animals
 - Unsaturated-Liquid, Omega 3 found in fish, shellfish, veggies , flaxseed- Essential
 - Omega 6 are also essential, found in grains and seeds
 - Monounsaturated- Olive & Coconut oil- non=essential

Supplements per Dr. Frank S.

For Oxygen Metabolism

- Iron- varies
- Enzyme 2,3 DPG
- Niacin- 100mg/day
- N-Acetylcysteine 50-100mg/day
- Magnesium- 600 mg/day
- Manganese- 10 mg/day
- Malic Acid and Alpha-Ketoglutaric Acid – 1,000 mg
- Lipoic Acid- 200mg- 1-3xs/day- good for Diabetic Neuropathy
- Thiamine- 100 mg/day
- CoQ10-100-200mg/day
- Vit E- 400 IU,
- Vit C- 2,000mg, L-Carnitine

To Increase Fat Metab.

- L-Carnitine- 1-3,000 mg/day
- Niacin- 100-1,500 mg/day
- Lipoic Acid- a major player in Diabetes prevention. Great Antioxidant. Combines with Vit. E, C & Co Enzyme Q10- 3-600 mg/day
- Pg. 89-98

Supplements per Dr. Shallenberger cont'd

Increased Insulin Sensitivity

- Fish Oil- Omega 3
- Chromium- 1,000mcg/day
- Vanadium- trace mineral
50mg- 2xs/day

Taken from the book: The Type 2 Diabetes Breakthrough by Dr. Frank Shallenberger

www.antiagingmedicine.com

<http://www.realcuresletter.com>

Increased Liver Func.

- Lots of B vitamins
 - Lots of Antioxidants
 - High levels of Magnesium, Zinc, Selenium, Manganese, Potassium, and Copper
- Dr. Shallenberger's Quick Start-DM has all of these in the right proportions

Supplements per Dr. Shallenberger cont'd

Increased Pancreatic Insulin Output

- GS4- Gymnema sylvestre
- May increase # of Islet cells
- Stimulates the pancreas to produce more insulin
- Also take plenty of antioxidants to prevent free radical damage to Islet beta cells

Increased Adrenal Function

- Adrenal hormone- Cortisol is vital to prevent diabetes
- Converts protein to Blood sugar= steady BS levels
- Pantothenic Acid- 2,000mg/day
- DHEA- steroid hormone produced in Adrenals- Don't take if breast or prostate cancer is a problem- 10 mg. women & 25mg. Men
- Licorice- Herb- 350mg/day. Take 300mg potassium, too. Watch blood pressure, too.

Supplements per Dr. Shallenberger cont'd

To Improve Sleep

- Niacinamide- 1,00 mg
- L-Theanine- 100mg
- 5-HTP- 100mg weren't
- Niacin- 10mg
- Magnesium- 16mg
- Melatonin-1.5mg

Take 20 mins. before bed

Pgs. 103-106

Use unproven Supplements or Proven Drugs?

- Dr. Frank tried to introduce a bill in Nevada to allow Drs. to use supplements, but was met with extreme resistance from MDs because they thought it better to use drugs with known side effects than natural supplements known to be safe & inexpensive!

Exercise

- **Exercise Smarter not Harder-** Mild Exercise
- Decreases death from heart disease, ulcers, depression, cancer, stroke, infections, and diabetes. Improves sex life & helps with sleep
- Shifts body from Glucose to Fat burning metab.- prevent high blood sugar which fuels Cancer & Diabetes

From www.realcuresletter.com

- Important to Exercise shoulders, chest, back abdomen and legs often

- **30 minutes every day.**
Need not be all at once
- **Interval training-** walk (swim, jog, rake leaves, push stroller, etc.) for 3-4 minutes, then go hard & fast for 30 seconds.

Go back to walking, etc. until breath comes back down, then go hard/fast for 30 secs.

- Repeat for 30 mins.
WOW! Start s-l-o-w-

STRESS

- We create our own stress & lots of it!
- Stress wears us down
- Major factor in diabetes
- Stress causes adrenals to produce hormone-cortisol which affects EVERY cell in body!
- Increased cortisol leads to increased insulin (counterbalances cort.)
- Leads to Adrenal Diabetes
- Cortisol from stress can rob our thighs of muscle mass and strength
- Insulin blocks fat burning metabolism
- Insulin wins out over cortisol causing adrenal exhaustion, causing decrease in stored sugars, causing carb cravings, less fat metab. less energy, more anaerobic energy production = more acid!
- Body gets weaker & weaker

DeStressing

DEEP BREATHING- Breath Air in, Breath Stress Out!

- Diaphragmatic vs. Chest-Wall breathing

Breathe from abdomen- in and out, NOT from chest- up and down. Gives organs room to expand

- To Practice- Lay on back, place hands on abdomen and breathe in and out as abdomen rises. Deep breathes in, slowly exhale.
- Now try it in chair. Then upright. Feel difference
- Breathing in Squares- Inhale, Hold, Exhale. All in equal counts. (Inhale1-2-3-Hold- 1-2-3-Exhale1-2-3Hold1-2-3)

2 books: Ms. Byron Katie- Loving What Is (also on CD) & Eckhart Tolle- The Power of NOW.

pH Miracle for Diabetes

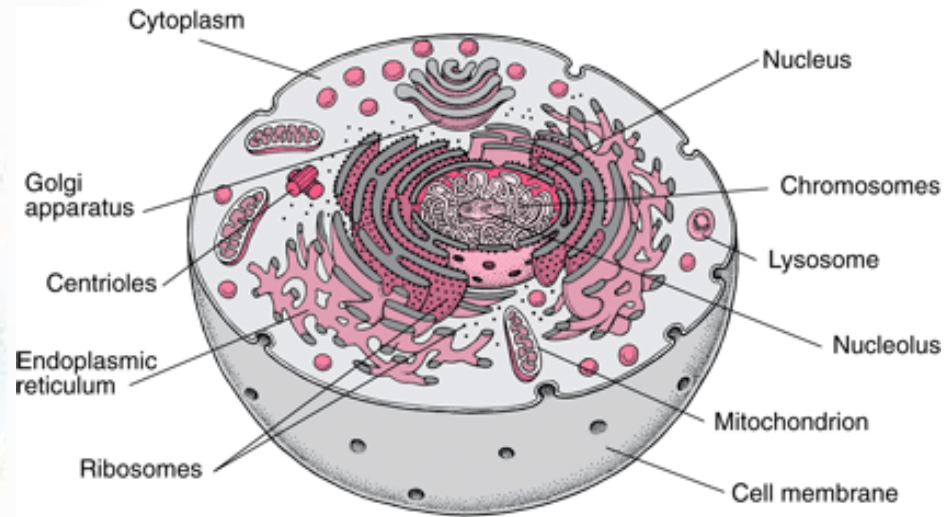
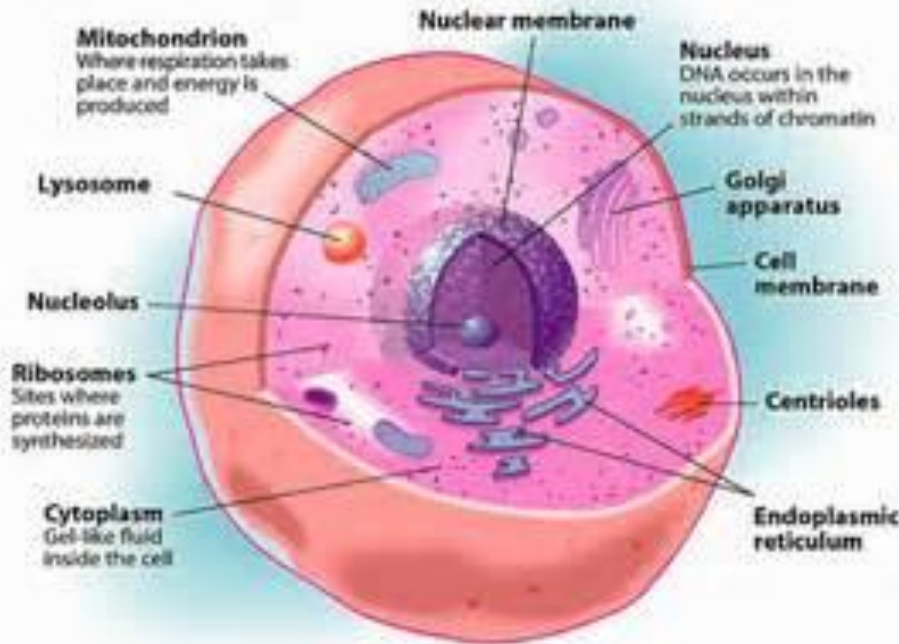
- Dr. Robert Young- author of The pH Miracle
- Diabetes is result of condition of the environment the cells live in- NOT a disease of the cells themselves. Key: balance body pH
- Do this with: Green foods, green drinks, good fats, low animal protein, exercise, wise use of supplements- including chromium, vanadium, adrenal and pancreas support
- To Reverse Diabetes, he has a 10 step program which suggests using a 14 day Liquid Feast of: 4 liters of green drink, 1 liter of H₂O, 4- 8oz. glasses of fresh green veggie juice, diluted with water for . Use Kale, cucumber, broccoli, celery, lettuce, barley grass, spinach, alfalfa sprouts, parsley, cabbage, okra, etc.
- This is a FEAST, not a fast and is part of an overall 14-21 day diet that includes the FEAST, Soups and Supplements explained in his book.

The New Biology

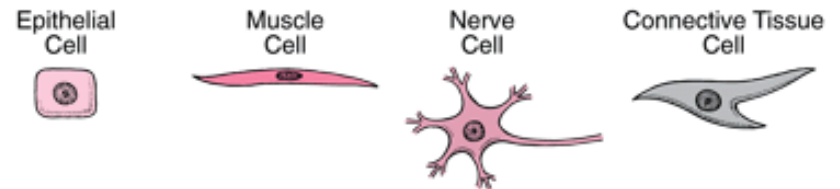
- pH of your blood- most critical health indicator
- pH of blood (7.365 narrow range like body temp.) and other body fluids and tissues affects every single cell in body. Must be alkaline (except stomach and colon)
- Over acidity is what keeps us fat and unhealthy
 - Creates cozy home for microforms- yeast, fungus, mold, bacteria and viruses.
 - Their overgrowth causes poison (more acid) from their excretions. This makes us very sick.

It All Starts Here: The CELL

Cell Diagram



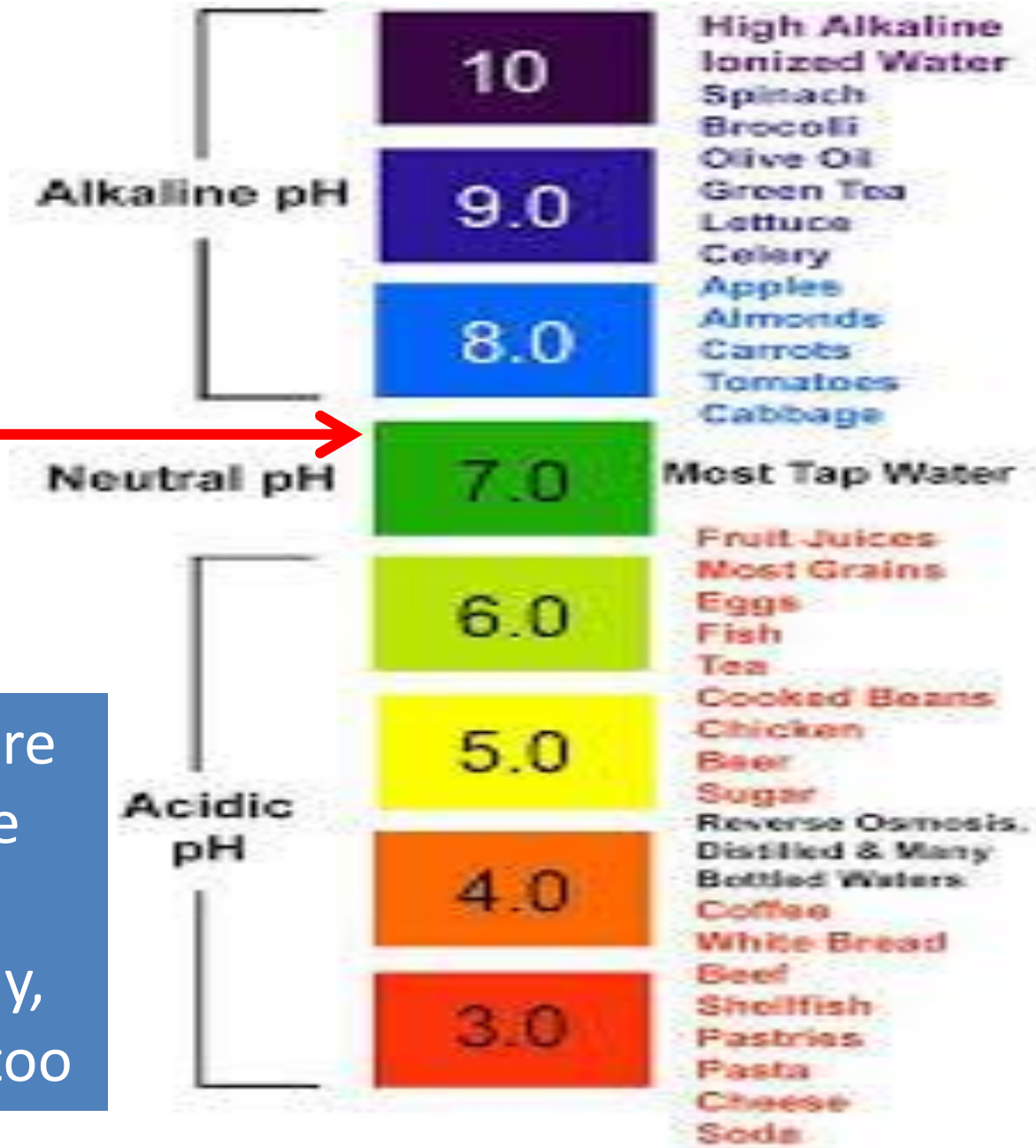
Examples of Different Cells



What's in your diet?

Blood pH →

80% of diabetics are too fat and ALL are over acidic. Pre-diabetics, sadly, are on that path, too



Acidic Foods

- **Acid Forming Foods** (feed bad microforms-Mycotoxins)
 - **Meats, Fish, Poultry, Eggs**
 - **Most Dairy** (Milk is fairly neutral in acid/alkaline but high in mucus-forming attributes such as fat.)
 - **Most Grains and Legumes** (Millet and roasted buckwheat are slightly alkalizing. Soy and lima beans are extremely alkalizing.)
 - **Refined Sugars-** Yeast & Microforms LOVE this! Mycotoxicity- not good!
 - **Drugs**
 - **Food Chemicals and Additives-** Aspartame, MSG, and Food Colorings.

Dr. Young's Supplement Program

- Green Drink w/pH drops
- Essent. Fatty Acids
- Minerals
- A good Multi-vitamin
- Chromium
- NADP Co-enzyme
- Vanadyl sulfate
- Vits E, B's, C, Iodine, Kelp
Calcium, Irish Moss, Red
Clover, Dandelion, Licorice
Root, Burdock, Potassium

- Magnesium- Balanced with
Manganese
 - Zinc
 - Gymnema Sylvestre
 - Fenugreek
 - Bitter Melon
 - Montmorillite Clay
 - Glandulars- thyroid, adrenal
and pancreas support
 - Hawthorn Berry, Cayenne
- See his book for the particulars**

Exercise per Dr. Young

- Anaerobic- w/o Oxygen- creates lactic acid, CO₂, increased acidity & blood sugar, stressing pancreas & adrenals & releasing liver's stored glycogen creating more acid & vicious cycle of Hi/Lo Blood sugar
- W/O Oxyg. Body= Self preservation mode-making Choles., holding Fat to bind acids= Obesity even when exercising!

Examples of Anaerobic Exercise:

- Weight Lifting
- Calisthenics- push-ups, chin-ups and sit-ups
- Running
- Uphill Cycling
- Using Stair climber

Most of these are over done, leading to O₂ debt

Other Ideas

The Fruitarian Diet

- Plant-based foods eaten without harming the plant
www.livestrong.com
- Eat mostly fruits- 80% carbs, 10% fat, 10% protein
- High in Fructose-nat. sugar
- Good for short-term cleanse and weight loss
- NOT enough CA, Vit D, Iron, B12. Loss of social eating, may lead to food cravings
- Steve Jobs was on it . . .
Pancreatic Cancer

www.foods4betterhealth.com.

Ketogenic Diet

- Dr. Otto Wartburg- 1924 for seizures in kids, now used for brain cancer prevention
- Similar to Atkins Diet- Low carbs/high fats, but restricts proteins
- Reqs. strict monitoring
- Uses ketone bodies instead of glucose for fuel.

www.nutridiary.com allows you to list & archive meals, track calories, set wt. loss goals & more

Other Ideas- Paleo Diet

- Paleo Diet- mismatch betwn our bodies & our diet causes diabetes, obesity, & heart disease
 - Consists of animal foods, wild vegetables, fruits in season, & nuts and seeds
 - Ag. Rev. brought maj. shift- Grains & Legumes. Human Hlth. took sharp downturn started w/ Roman Empire
 - Our GI tract hasn't changed- diet has!
 - <http://paleodietlifestyle.com/>
- Paleo Diet Guidelines:**
- Organ Meats, Leafy Veggies, Meat from grass-fed ruminants, Mollusks & other sea food, Egg Yolks, Bone Broth & Fermented Foods. Some Nuts & Seeds
 - **Avoid:** Grains, Legumes, Veg. seed oil, added sugar, & sources of dairy high in casein & sugar, but low in healthy butter fat. G
 - Get freq. sun or use Vit. D Reduce/manage stress. Get good sleep, & frq. exercise

Top 8 Veggies for Diabetes Prevention

<http://www.youtube.com/watch?v=jmQJU6NxaNo>

- Asparagus
 - Broccoli
 - Brussels Sprouts
 - Cabbage
 - Cauliflower
 - Cucumber
 - Spinach
 - Tomatoes
- Low calories, Vits. K & A
 - Vits. A, C, and D
 - Vit. A, C, Folic Acid, Fiber
 - Vit. K, C, B6, Manganese
 - Vit. C, Fiber, Calcium & Iron
 - Vit. K, C, & Potassium
 - Folate, Beta Carotene, Iron, Vit. K
 - Vits. A, C, Potassium, Fiber, Lycopene (anti-oxidant)
- www.diabetesmellituscure.org

Type 3 Diabetes= Alzheimer's

<http://www.diabetes.co.uk/type3-diabetes.html>

- Results from resistance to insulin in the brain
 - Discovery: Insulin is produced by the brain as well as the pancreas
 - Resistance to insulin & IGF (insulin-like growth factor) key to progression of Alzheimer's disease
 - Alzh. can develop w/o Hyperglycemia
 - Type 2- 50%-65% at risk for Alzheimer's
- Type 2 Diabetics have protein deposits- amyloid beta in Pancreas -similar to brain deposits in Alzh. sufferers.
 - Research continues to understand link betwn. Diabetes, insulin resist. And Alzheimer's
 - Diabetes Meds may be used as treatment

Type 3 Diabetes, contd.

- Regarded as "brain" specific diabetes---is a dangerous diabetes hybrid first discovered in 2005 by team from Brown Univ. Medical School, RI.
- Problems with Insulin production in brain may result in formation of protein "plaque" causing problems & loss of memory. Amyloid beta destroys brain's insulin receptors causing insulin resistance and memory loss/function
- Insulin- needed to make new brain cells. When Insul. Receptors don't work/aren't there, brain doesn't recv. energy it needs to form memories (at synapses)=sType 3
- ADA has no standard def. for Type 3- called "**double diabetes**" since it describes Type 1 diabetics who also have Insulin Resistance
- Much more research on cause & treatments needed.
<http://www.livestrong.com/article/22165-diabetes-type/#ixzz2iNkFKbei>

Alzheimer's Disease Is Type 3 Diabetes

www.ncbi.nlm.nih.gov/pmc/articles/PMC2769828/

- Evidence Reviewed in Journal of Diabetes Science & Technology- Nov. 2008, pgs. 1101-1113. New research. Post-Mortem brain studies followed with Experimental animal then human studies.
- **Dr. Suzanne M de la Monte**, Brown Medical School in Rhode Island
- Literature points toward insulin deficiency and insulin resistance as cause of Alzheimer's Disease (AD)
- **Study conclusions**: "Term 'type 3 diabetes' accurately reflects the fact that AD represents a form of diabetes that selectively involves the brain and has molecular and biochemical features that overlap with both type 1 diabetes mellitus and T2DM". **Type 3 Diabetes May Be Treatable, Preventable, or Curable with Anti-diabetes Drugs** such as peroxisome proliferator-activated receptor (PPAR) agonists.
- Brain Diabetes treatable with Type 2 D. drugs- insulin sensitizer agents or intranasal insulin
- Obesity and aging contribute to Alzheimer's and Type 2

References:

- Shallenberger, Frank, M.D., *The Type 2 Diabetes Breakthrough. A Revolutionary Approach to Treating Type 2 Diabetes.* California: Laguna Beach, Basic Health Pubs., 2006. www.antiagingmedicine.com
- Young, Robert O., Ph.D., *pH Miracle for Diabetes. The Revolutionary Plan for Type 1 & 2 Diabetes.* New York: Warner Brothers Printing, 2004. www.phmiracleliving.com