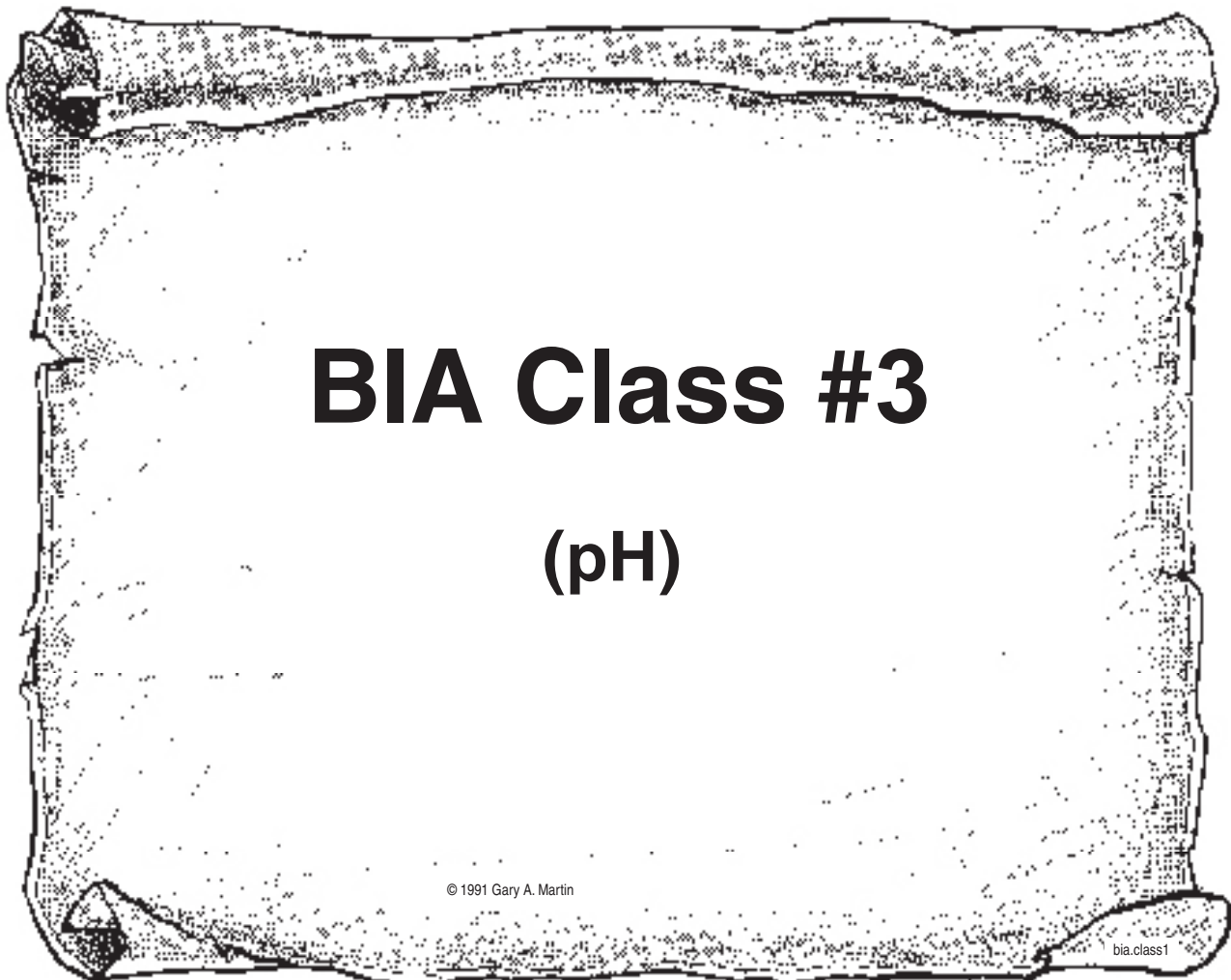




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BIA Class #3

(pH)

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bia.class1

Class #3: pH

(0 — 6.4 — 14)

1. pH scale is a scale of resistance.
0 = pure sulfuric acid = low resistance
14 = pure calcium = high resistance
2. As electric flow increases, magnetism also increases: low pH (acid)
As electric flow decreases, magnetism also decreases: high pH (alkaline)
3. All biologic life has best pH at 6.4. Best electrical flow is produced at 6.4, which results in best magnetism. High pH means too little magnetism for liver to pick up minerals and structure the enzymes. Low pH means magnetism is too strong to properly do it.
4. When liver does not have proper mineral energy the digestive enzymes are weakened. This results in wrong level of resistance against incoming food. This causes incorrect frequency in the released energy. This energy loss may be observed in urine/saliva pH. The farther pH's move from 6.4-6.8, the weaker the digestive enzymes. Main cause is a lack of CALCIUM.

SUPPLEMENTAL AIDS

The heavier (specific gravity) the mineral (metal) the more proper magnetism is needed to grab it and properly bond for use by the body. Therefore, Iron, Manganese and Iodine are among first minerals the Liver will be unable to properly handle as pH travels away from 6.4.

5. Calcium stabilizes protein. Less protein is required when adequate calcium exists. High protein diet can leech Calcium from bones, causing osteoporosis.

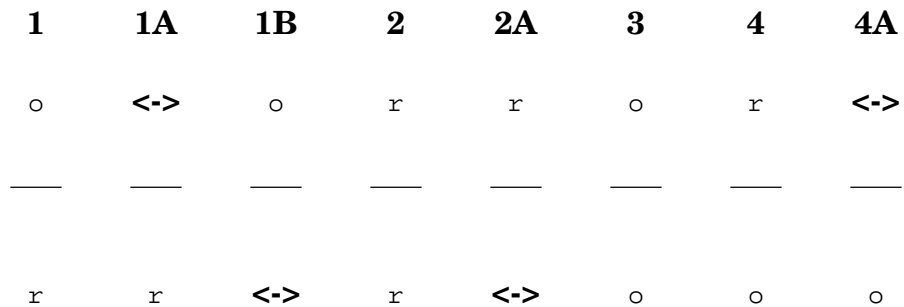
6. As calcium is lost, digestive enzymes lose their strength. This dilution forces oxygen and hydrogen loss, preventing proper utilization of calcium. This increases resistance to incoming energy which results in improper liver function.

7. Saliva pH (SpH) indicates what is happening as food enters and indicates the body's response to diet and the environment. Urine pH (UpH) tells us what happened as a result of the digestive process and indicates the status of the environment and its stress on the body. The blood and liver have to be totally coordinated for proper exchange to happen.

8. Calcium is used to adjust pH. The more alkaline pH moves, the more acid calciums (Cal-Lactate) are needed for less resistance. As pH moves acid it indicates a need for alkaline calcium (Cal-Formula) to increase resistance.

9. SpH has twice the value in calculating the speed and direction which the pH is moving. End of lymph system. Proportional to amount of CO₂ in bloodstream.

10. pH Degenerative Patterns



11. The more acid the SpH relative to UpH, the more serious the condition.

12. *Pattern #1:*

- Slow digestion
- Colitis
- Crohn's disease
- Hemorrhaging
- Losing Mn
- Osteoporosis
- Left side body weakness
- Joint aches; bone aches
- Lower body symptoms
- Skin problems, dry skin
- Yeast

Pattern #1A:

- Overweight
- Hyper-liver
- Needs Fe - Cu - Mo - A
- Adrenal
- Spleen
- Lymph

Pattern #1B:

- Eat constantly
- Leaching minerals
- Heavy meats
- Crave sweets
- Cell destruction
- Sluggish
- Lack O₂
- Tired, irritable
- Low back pain
- Ca o P r
- Eliminate lecithin

13. *Pattern #2:*

- Constipation (toxic overload)
- Parasites
- Disc degeneration
- Upper respiratory/upper body congestion
- Body odors of various kinds
- Distended abdomen with age
- Weight problems with age
- Skin pigmentation problems
- High blood pressure

- Tooth decay
- Hair, skin, nail problems
- Right side will be weak side
 - Scoliosis to right
 - Cross left over right leg
 - Left leg shorter
- Vitamin C deficiency
- Intellectual - philosophical - positive - aggressive

Pattern #2A:

- Attempting to build mineral reserve
- Heavy metals
- Weak enzymes
- Prostate
- Low sex drive
- Fatigue
- Backache
- Nervous/tense/excitable
- Losing Zn - Cu - I - Fe - Ge - Mg - Mo - Na
- CNS excitability
- WBC \circ RBC r
- Toxic liver
- Bladder stones
- Parasites

14. *Pattern #3:*

- Exact opposite to Pattern #1
- Fast digestion
- Colitis
- Crohn's disease
- Bone mineral loss excessive
- Weak left side
- Crosses right leg over left
- Scoliosis to left
- Right leg shorter than left
- Muscle symptoms below waist
- Joint and bone pains
- Skin rashes, dry skin
- Very nervous
- Fungus and yeast infections
- Menopause
- B-12 and iron deficiency if UpH > SpH
- Pale skin because it is reflecting more energy than absorbing

15. *Pattern #4:*

- Fungus
- Vitamin C, D deficiency
- Vitamin B-12 deficiency
- Lungs
- Lymph
- Dry membranes
- Thick saliva
- Vitamin A
- Pale skin color - skin reflecting more energy than it absorbs
- Stroke, especially if salts higher with high blood pressure
- Schizophrenic
- Emotional instability

Pattern #4A:

- Liver/pancreas speeding food movement
- Toxic liver
- Lymph congestion
- Poor fat digestion
- Junk food
- Sympathetic dominant
- Allergies
- Extreme stress
- Excess phosphorus
- Fear, worry
- Losing Ca
- Glaucoma

16. Women more susceptible to pH swings during childbearing years. They require much more mineralization (most is calcium).
17. The older the individual, the more difficult it is to achieve pH movement.
18. The larger the bone structure the more energy is attracted from the atmosphere. Like attracts like.
19. Overweight people harbor many acid toxins in fatty tissue.

20. The darker the skin color, the more energy is picked up from the sun. If high pH's, the need for acid reacting foods, calciums is high. If low pH, alcohol handling ability will be weak.
21. Physical exercise produces a higher level of metabolic acids.
22. High protein diet forces the body to dump minerals, most being calcium. If a high pH accompanies a high protein diet, we may suspect a low alkaline reserve. The urine's job is to dump acid. This requires alkaline buffers (salts). When minerals run low, UpH will go alkaline.
23. 3 buffering systems in body
 - A. Bicarbonate buffer system
First to respond to change in acid/alkaline balance
 - Important in regulation of blood & interstitial fluid pH
 - Operates outside cell wall
 - Reacts almost instantly to acid produced by digestion of a protein
 - Requires alkaline minerals such as sodium to combine with bicarbonate ions to form acid salts that accomplish the process and then the acid salts are removed through the urine
 - B. Phosphate buffer system
 - Starts where bicarbonate buffer system quits
 - Occurs within the cell wall
 - Uses potassium rather than sodium
 - Blood pH cannot be properly maintained without sufficient potassium
 - pK of the phosphate buffer system is 6.8
 - C. Protein buffer system
 - Final pH adjustment
 - pK is 7.4, same as ideal blood pH
 - 3/4 of buffering done within the cell is by protein buffer system but large amounts of protein can be harmful, requiring high levels of sodium and potassium to start the buffering process; if alkaline reserves are low, cells use intracellular protein to make up for lack of sufficient accomplishments by first two buffering systems; extra protein in the cells causes body to be more acid, requiring more protein to neutralize the acidity; more protein then admitted to cell, causing a severe congestion and deterioration.
 - Works only in narrow pH range of 6.8-7.4
 - Not effective without first two buffering processes occurring

24. Parasympathetic Dominance (pH's greater than balanced)

- Organs involved:
 - Pancreas
 - Adrenal Cortex
 - Parathyroid
 - Posterior Pituitary
 - Estrogen Gonads
- Viral infections
- Sedative
- Anabolic
- Slow metabolism
- Nonspecific symptoms
- Aches, pains
- Fatigue
- Depression
- Cold sensitive
- Chills
- Muscle soreness
- Eye pain
- Loss of taste/smell
- Runny nose/eyes
- Loss of appetite, but hungry
- Nausea
- Dry mouth, skin
- Abdominal cramps
- Dizzy
- Light sensitivity
- Body odor
- White spots on fingernails
- Low WBC
- High chlorides/globulin
- Low glucose
- Allergies (low histamine)
- AIDS
- Anorexia
- Fungus
- Hypertension
- Hypothyroid
- Hypoadrenia
- Viral infections
- Lupus
- PMS
- Yeast (Candida)
- Ca leaves cell
- Histamine leaves cell
- K increases
- Bone spurs

- Kidney stones
- Gallstones
- Breathing stress
- Digestive stress
- Pain sensitive
- Bruise easily
- Hoarse
- Short-windedness
- Sinus
- Slow pulse
- Perspire easily
- Muscle cramps
- Alternating between loose stools/constipation
- Watery eyes/nose after eating
- Gastric ulcers
- Adult diabetes
- Poor circulation
- Apathy
- Brittle, thin hair
- Puffy face, hands
- Weight gain
- Constipation
- Uremia
- Decreased immunity
- Needs:
 - Trace minerals
 - Iron
 - Antioxidants
 - Multi-vitamin
 - Enzymes w/HCl
 - Vitamin A
 - Potassium
 - Selenium
 - B6
 - Vitamin C (ascorbates)
 - Pancreas support

25. Sympathetic Dominant (pH's less than balanced)

- Organs involved:
 - Thyroid
 - Adrenal Medulla
 - Anterior Pituitary
 - Androgen Gonads
- Bacteria infections
- Stimulatory
- Catabolic
- Fast metals
- Localized symptoms
- High temp
- High appetite

- Fever
- Pain, swelling of affected area
- High WBC
- High urine protein
- Parkinson's Disease
- Manic depression
- High-strung
- Energetic
- Workaholic
- Mentally alert
- Reduced urine
- Rapid pulse after meals
- Dry mouth/nasal passages
- Gag easily
- Acid foods cause distress
- Light sensitive
- Strong heartbeat
- Small appetite
- Neuralgia pains
- Stare - infrequent blinking
- Good eye contact
- When sick - extremes
- Allergies (high histamine)
- Anxiety
- Rheumatoid arthritis
- ALS
- MS
- Myasthenia Gravis
- Hypertension
- Hyperthyroid
- Hyperadrenia
- Hodgkin's Disease
- Leukemia
- Peptic/duodenal ulcers
- Juvenile diabetes
- Needs:
 - Calcium
 - Multi-mineral
 - Trace minerals
 - Multi-vitamin
 - Magnesium
 - B-12
 - Folic Acid

26. *High UpH:*

- Allergies
- Anemia

- Anxiety
- Asthma
- Back pain
- Bladder infections
- Bloating
- Chronic illness
- Colds
- Constipation
- Fatigue
- Hypoglycemia
- Insufficient exercise
- Insufficient acid foods
- Infections
- Lymphatic congestion
- Osteoporosis
- Sinus
- Skin disorders
- Vitamin A
- Vitamin C
- Lung, kidney stress
- Thymus stress

Low UpH:

- Acute illness
- Addictions
- Allergies
- Arthritis
- Chronic pain
- Colitis
- Diverticulitis
- Excess Vitamin C
- Excess acid foods
- Exhaustion
- Hypoglycemia
- PMS
- Insufficient R/O water
- Polluted air
- Skin disorders
- Stress from past
- Tension
- Excess coffee, tea, cola
- Lacking alkaline foods
- Insufficient calcium
- Adrenal, kidney stress

- Skin, spleen stress
- Colon stress

High SpH:

- Asthma
- Back pain
- Bloating
- Constipation
- Digestive disorders
- Digestive enzymes
- Fatigue
- Insufficient acid foods
- Hemorrhoids
- Insufficient R/O water
- Yeast
- Strong effort to control and understand things
- Liver, colon stress
- Gallbladder stress

Low SpH:

- Addictions
- Anxiety
- Arthritis
- Chronic fatigue
- Chronic pain
- Colitis
- Diverticulitis
- Digestive disorders
- Excess acid foods
- Insufficient R/O water
- Immune disorders
- Exhaustion
- Excess mental control
- Polluted air
- Excess coffee, tea, cola
- Lacking alkaline foods
- Insufficient calcium
- Sex organ stress
- Muscle, bone stress
- Spleen, liver stress
- Pancreas stress
- Recreational drugs

27. pH's relative to other #'s indicate the status of:

Alkaline UpH

Lungs	- vaporization	- monotony/chronic
Lymph	- acceptance	- enthusiasm

Acid UpH

Kidneys	- filtration	- fear
Skin	- demarcation	- boredom

UpH > SpH

Spleen	- antagonism	- rejection
Pancreas	- location/self-esteem	- laughter
Post. Pitu.	- experience	- anger

Alkaline SpH

Endocrine	- equalization/force	- conservation
Hypothalamus	- evaluation	- attention

Acid SpH

Sex organs	- reproduction	- apathy
Bone/Muscles	- locomotion	- pain

SpH > UpH

Ant. Pituitary	- coordination	- observation
Lungs	- vaporization	- monotony/chronic
Thyroid	- metabolization/toxicity	- anxiety
Endocrine	- equalization/force	- conservation

BIA Class #3 Exam

(pH)

1. pH is a scale of what?
2. With *low pH*, what happens to electrical and magnetic flow?
3. With *high pH*, what happens to electrical and magnetic flow?
4. What 3 minerals may become unavailable as pH moves from 6.4?
5. High protein diet can cause _____.
6. SpH represents _____.
7. UpH represents _____.
8. Describe the 8 pH patterns and a few of their characteristics.
9. What period in a female's life requires more mineralization?
10. What does age have to do with pH movement?
11. What can fatty tissue harbor?
12. What may this cause during detox?
13. Physical exercise causes what change in pH?
14. What relationship to high UpH has a high-protein diet?
15. What are the 3 buffering systems the body uses to balance pH?

16. What organs may be hyper in a parasympathetic-dominant person?
17. List 10 symptoms that may represent parasympathic dominance.
18. List the formulas that may be appropriate for a parasympathic-dominant person.
19. What organs may be hyper in a sympathetic-dominant person?
20. List 10 symptoms that may represent sympathetic dominance.
21. List the formulas that may be appropriate for a sympathetic-dominant person.
22. List 10 high UpH symptoms that you or someone you know experiences.
23. List 10 low UpH symptoms that you or someone you know experiences.
24. List 10 high SpH symptoms that you or someone you know experiences.
25. List 10 low SpH symptoms that you or someone you know experiences.
26. List the organs an alkaline UpH may represent; also the conditions and emotions.
27. List the organs an acid UpH may represent; also the conditions and emotions.
28. List the organs an alkaline SpH may represent; also the conditions and emotions.
29. List the organs an acid SpH may represent; also the conditions and emotions.
30. List the organs an UpH greater than SpH may represent; also the conditions and emotions.
31. List the organs an SpH greater than UpH may represent; also the conditions and emotions.
32. List the formulas that affect the UpH and SpH. What effect do they have?

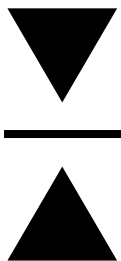
pH OPTIONS



- Cal-Lactate
- Zinc AC
- Lemon egg
- Zymazyme HCl
- Pancreas Support
- Exercise
- Apple cider vinegar
- Hot shower bath
- Vitamin A
- Vitamin E
- Pro-Amino
- Trace minerals
- B-Complex

- Hot mustard bath
- 1 cup desert herb, juniper berry, spearmint or hyssop tea
- 1/4 tsp. baking soda, 1/4 tsp. salt, 1 tsp. goldenseal powder in 1/2 glass water
- Reduce fear, anxiety, worry, extreme delight
- Apple juice or 1-9 tsps. apple cider vinegar in water
- Meat

- Fish
- Eggs
- Cottage cheese
- Seeds
- Nuts
- Walker briskly, long strides, letting whole foot touch the ground
- Soak in hot water with 2 cups apple cider vinegar



- T.A.D. juices
- Cal-Formula
- Food combining
- Multi-mineral
- Cold shower/bath
- Sea salt
- Pineapple
- Adrenal Support

- Thyroid Support
- Sprinkle
- Green Drink
- Grains
- 1 cup peppermint or chamomile tea
- 1/2 tsp. citro-carbonate or apple juice in water every 1/2 hour til corrected

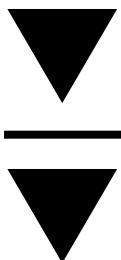
- 2 cups salt, 1-2 cups baking soda in tub of warm water 15-45 minutes
- Any exercise creating rapid breathing
- Reduce anger, frustration, hatred, jealousy



- T.A.D. juices
- Cal-Formula
- Cal-Lactate
- Multi-mineral
- Zinc AC
- Hot vinegar bath
- Hot bath/shower
- Hot mustard bath
- Watermelon, fruit juices
- B12 w/Folic Acid
- Pro-Amino
- Fats

- Oils
- Butter
- Milk
- Cheese
- Stress Pattern Remedies
- Enzymes w/HCl
- Pancreas Support
- Liver Support
- Food combining
- Exercise
- 1 cup desert herb, juniper berry, spearmint, hyssop tea

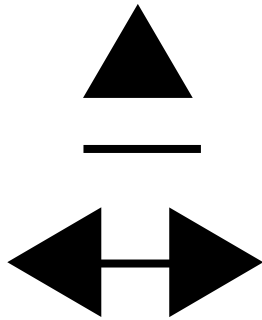
- 1/2 tsp. citro-carbonate or apple juice in water every 1/2 hour til corrected
- Apple juice or 1-0 tsps. apple cider vinegar in water
- Occasionally: 4 ozs. cranberry juice
- Walk briskly, long strides, letting whole foot touch the ground
- Reduce fear, anxiety, worry, extreme delight



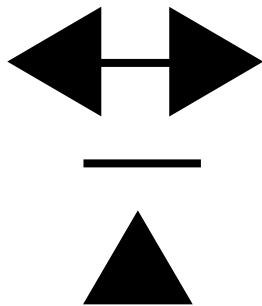
- T.A.D. juices
- Cal-Pho-D
- Hawaiian Sea Salt
- Cal-Formula
- Cal-Pho-D
- Multi-mineral
- Trace minerals
- Warm bath/shower; Hawaiian Sea Salt bath
- 1 cup peppermint or chamomile tea
- Vegetables (no tomatoes)

- Fruits (except plums, cranberries, prunes)
- 1/4 tsp. baking soda, 1/4 tsp. salt, 1 tsp. goldenseal powder in 1/2 glass water
- 1/2 tsp. citro-carbonate or apple juice in water every 1/2 hour til corrected
- Reduce anger, frustration, hatred, jealousy

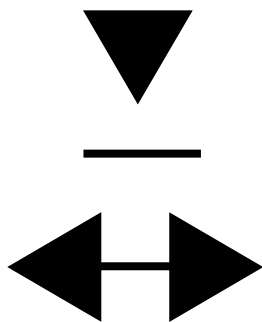
- Walk briskly, long strides, letting whole foot touch the ground
- 2 cups salt, 1-2 cups baking soda in tub of warm water 15-45 minutes
- Any exercise creating rapid breathing



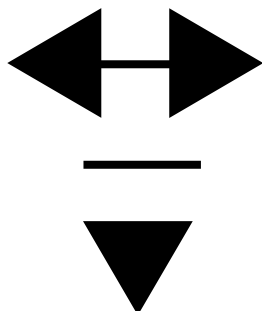
- Cornstarch
- Arrowroot
- Popcorn
- Walnuts
- Corn syrup



- Sauerkraut
- Asparagus
- Goat milk
- Onion powder



- Black cherry juice
- Apple juice
- Bananas
- Acerola powder



- Green peas
- Strawberry juice
- Guava juice
- Flaxseed oil