#### ACIDOSIS AND ALKALOSIS

When the body has too much acid the condition is called <u>"Acidosis"</u>. It is the more common of the two conditions. Acidosis creates an inappropriately low level of bicarbonate in the blood. The urine pH is below 6.5 and needs to be corrected. If acidosis exists in the body for long periods of time, the condition creates a chemical imbalance by storing too much sulfur, phosphorus and chlorine.

The body attempts to eliminate acid conditions by breathing fast and deep which helps to decrease the amount of carbon dioxide in the body.

The fast cycler will most likely test for acidosis. The mixed cycler can test either acid or alkaline.

## **Frequent Symptoms of Acidosis:**

Arthritis Constipation or diarrhea Headaches Indigestion Insomnia Sunken eyes Low blood pressure Water retention Yawning or signing frequently

### **Possible Causes of Acidosis:**

- Improper diet (malnutrition)
- Mental stress and tension
- Caffeine or sugar abuse
- Heat can make urine acidic. Hot weather and excessive hot showers can cause acidic urine. Taking warm or cool baths in the summer months can lower acid levels.
- Obesity
- Smoking causes too much carbon dioxide in the body. To eliminate excess carbon dioxide breath deeply and slowly in the outside air several times a day. (Might want to quit smoking.)

### **Major Medical Causes of Acidosis**

- A genetic weakness in the stomach can cause too much Stomach acid excretion.
- Adrenal or Thyroid Disorders
- Kidney and Liver Disorders
- Renal tubular acidosis (a form of kidney malformation)
- Diabetic Ketoacidosis
- Lactic Acidosis (build up of lactic acid)
- Loss of bicarbonate through the gastrointestinal tract.

(NOTE: Although you can manipulate acid levels with this test and improve your condition. It is vital to work with a physician to find and treat the underline cause of your "chemical imbalance".)

## FOODS TO CORRECT ACIDOSIS

**<u>Drinks:</u>** Drink distilled or boiled water frequently. Cranberry juice Grape juice Green tea Tomato juice

# **Fats Butter (in small amounts)**

<u>Fruits:</u> Apples Apricots Citrus fruit Dates Grapefruit Grapes Lemons Melons Oranges Pears Raisons

**Grains** Beans Millet Oatmeal Whole grain breads, cereals and products

Miscellaneous Small amounts of sea salt Honey Molasses Maple syrup

**Protein** Almonds Brazil nuts

<u>Vegetables Avocado Beets Cabbage Carrots Celery Corn Cucumber Green</u>
<u>vegetables Green leafy vegetables Mushrooms Potatoes Sea vegetables (seaweed)</u>
<u>Spinach Sprouts Sweet potato Radishes Tomatoes Turnips</u>

# **FORMING A HEALTHY EATING ROUTINE**

- Start the day with a glass of water, add the juice of « a lemon or two teaspoons of vinegar. Helpful to instill digestion.
- Fifteen minutes later eat a fruit from the available list. Wait 30 minutes and eat a grain cereal.
- Midmorning: Drink a glass of water
- Lunch eat vegetables, a salad raw vegetables or steamed vegetables
- Midafternoon: Drink water
- Dinner: salad, steamed vegetables or raw vegetables with a choice of beans, grains, fish, chicken. Limit protein to 4 ounces.

#### **ALKALOSIS**

When the body is too alkaline the condition is called <u>"Alkalosis".</u> It is less frequent than acidosis. The urine pH is 6.8 and above. If the digestive acids are too low the body can not breakdown food, especially proteins and fats, which take the longest to be mixed. If the body is too alkaline the minerals do not remain soluble enough to make the body's enzymes work.

Some of the body's cells create mucus, water and bicarbonate, which work together with the minerals to neutralize acid and help the enzymes to work.

The slow cycler will most likely test for alkalosis. The mixed cycler can test either too acid or alkaline

# **Frequent Symptoms of Alkalosis:**

- May be symptom free
- Allergies
- Bursitis
- Constipation
- Drowsiness
- Excess tissue fluid
- Anxiety Attacks
- Muscle twitching
- Muscle cramps
- Extreme nervous conditions
- High blood pressure
- Hyperventilation
- Indigestion
- Low temperature
- Protruding eyes
- Sore muscles
- Irritability

### **Possible Causes for Alkalosis:**

- Diarrhea
- Fear and anxiety create an alkaline urine reaction
- High cholesterol
- Low hydrochloric acid (stomach acid)
- Not enough histamine
- Physical illness
- Use of diuretics or corticosteroids
- Poor nutrition
- Too much soap which is alkaline
- Too much salt intake

# **Major Medical Causes of Alkalosis:**

- Thyroid imbalances
- Overactive adrenal gland
- Cushing's syndrome
- Hypercalcemia or Hypocalcemia
- A genetic weakness that prevents the stomach from creating enough acid
- Loss of acid from vomiting or drainage of the stomach

<u>Treatment:</u> Replace water and electrolytes. Severe conditions ammonium chloride intravenously.

## **Correcting Alkalosis**

The foods you eat influence acid or alkaline body conditions. As long as your urine is too alkaline you need to avoid most protein foods. Proteins need an acid condition to breakdown. In an alkaline solution proteins pass into the intestines undigested and can not be broken down by the intestines. The nutrients from the proteins are unavailable to the body. A person suffering from alkalosis needs protein foods but can not absorb them. During the correction phase protein needs to be limited according to the easiest absorbability.

## Foods to Avoid While on the Program;

- Alkaline forming fruits and vegetables
- Avoid salts (sodium causes alkaline reactions
- Baking soda (neutralizes the stomach acid)
- Fats and oils
- Meats and animal protein
- Processed foods
- Processed sugars
- Wheat products

# **Highest Alkaline Forming Foods (Avoid):**

Hijiki (seaweed) Wakame (seaweed) Green tea Cucumber Tomato Sweet potato Turnip

### **Moderate to Mild Alkaline Forming Foods (Limit):**

Oranges Carrots Salmon Grapes Potatoes Spinach Apricot Cabbage Radish Black tea Celery Watermelon Mushrooms

### FOODS TO CORRECT ALKALOSIS

**Fruits:** Cranberries Prunes Plums Tropical fruits

**Grains:** Flour products Noodles Pasta White bread

**<u>Drinks:</u>** Drink water frequently Cranberry juice Coffee or tea (limit to one cup)

Miscellaneous Cornstarch Ketchup Mustard Pepper

**Proteins** (limit to 4 ounces daily): Beans Beef (organic, hormone and antibiotic free) Eggs (organic) Fish Ham Legumes Lentils Rice Milk Organic Milk

## FORMING A HEALTHY EATING ROUTINE

• Start the day with a glass of water with two teaspoons of vinegar to aid digestion.

- Fifteen minutes later eat a fruit from the available list. Wait 30 minutes and eat a whole grain cereal or eggs and toast.
- Midmorning: Drink a glass of water
- Lunch: Have mostly grains with 20% fresh fruits, vegetables, fish, chicken (organic, antibiotic free)
- Midafternoon: Drink water

Dinner: 80% vegetables and grains 20% protein choices

# **STUDIES AND REFERENCES**

- " Natural Hygiene" by Dr. Shiro Kawashima Tokyo: Kodansha International, 1977
- " Water, electrolyte and acid-base syndromes." Goldberger E., Philadelphia: Lea & Febiger, 1959
- "Acidosis and Alkalosis" Graham S., M.D., Morris N., MD, Edinburgh E., Livington p.48 1933