

CLINICAL INTERPRETATION OF DATA

When looking at any given set of numbers it is best to first look at the whole equation.

1.5 6.4/6.4 7C .04M 3/3

The above equation is “in balance”. All numbers are in Zone 1. Don’t try and balance it by using actual numerical values. Consider it “balanced” from a theoretical ratio form left to right across the equation. Get used to looking at the test data in this manner. Always look for the balance.

There are six fundamental patterns of the equation that denote certain physiologic changes specific to each pattern.

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| 1. | Unbalanced Left | (Carbohydrates, starches, sugars) |
| 2. | Unbalanced Right | (Urea’s, toxins, undigested proteins) |
| 3. | High Balance | (High waste build-up and high pH’s) |
| 4. | Low Balance | (Slow metabolism and low energy conversion) |
| 5. | High Broken | (Electrolyte imbalance) |
| 6. | Low Broken | (Low metabolic electrolytes, sodium retention) |

It is very important that you become familiar with mentally “positioning” the equation to the right, left, up, down or broken. When you can do this without pausing to think, you are leaning the first major step in analyzing the BIA. Always observe the “degree” to which the equation has shifted...is it very unbalanced or only moderately so? It is important that you do not put too much emphasis on any one particular reading. As you test the client over a given period of time watch for the general trend. Remember, the BIA does not diagnose diseases but does indicate when the normal physiological processes of the body are not working properly.

1. The High Balance Pattern

It is possible to have a balanced condition but, all the numbers are “high” or shifted upwards. (High waste build up and high pH’s).

Example: 4.0 6.9/7.0 12C 4M 6/6

Approximately 70% of clients will fall into this category. High balance patterns reflect an extremely catabolic reaction in the body chemistry where the tissues are breaking down faster than they are being replaced. The three main causes of high balanced patterns are: 1. Excessive food intake; 2. Lack of fluid consumption; 3. Excessive metabolic waste production usually associated with improper colon physiology.

2. Low Balance Pattern

When the average of the numbers in the equation is low but balanced we say that the equation is shifted downward. (Slow metabolism and low energy conversion).

Example: 1.0 5.6/6.4 3C 0.04M 2/2

This is the most rare pattern of the six. These people usually have a very slow metabolism and a low energy conversion. This is the client who can fast for one week and gain two pounds. Check for endocrine disorders of the adrenals, pituitary and thyroid. This pattern is occasionally in the terminal patient. The SpH will become very acid and the UpH may become very alkaline right before death. This is due to the slowing of the circulation and the accumulation of acid waste products. Low balance patterns will also occur during the final stages of kidney disease.

3. Unbalanced Left Pattern

In the example below the equation would be unbalanced to the left (in the direction of the carbohydrate reading)...in other words it would be “heavy” and unbalanced in that direction. (Carbohydrates, starches, sugars).

Example: 6.5 7.0/6.8 15C 4M 3/4

This pattern usually reflects either diabetic, pre-diabetic or dysinsulinism tendencies. These clients exhibit great mood swings. Refined carbohydrates should strictly be prohibited but “complex” carbohydrates are essential. Clients who consistently fall in the left unbalanced patterns should be referred to their doctor for a glucose tolerance test.

4. Unbalanced Right Pattern

In the example below the imbalanced is reversed to the right. It is possible to have high salts and ureas with normal sugars and pH's. (Urea's, toxins, undigested proteins).

Example: 2.5 5.6/6.7 20C 4M 13/8

This pattern is seen in clients with poor protein assimilation and various colon pathologies such as colitis, diverticulitis, regional enteritis, etc. The nitrate nitrogen reflects sluggish liver-gall bladder, small intestine and pancreatic coordination. These clients need extensive colon therapy and a diet of low stress foods. This pattern may at times reflect pre-malignant problems any where along the digestive tract; especially if the total energy level drops below 40%.

5. High Broken Pattern

When the test data indicate high salts while the remainder of the numbers are relatively stable the pattern is in a high broken pattern. (High salt retention).

Example: 2.0 5.9/6.4 25C 4M 3/3

This client has severe metabolic electrolyte imbalance which can be reflected by edema, hypertension and headaches. This pattern is the second least common pattern that will occur. Clients who have been receiving high doses of cortisone may show a high broken pattern. Also hyperaldosteronism, Cushing's syndrome, and cerebral tumor may cause metabolic electrolyte retention. These clients can show pyrexia, nausea, over breathing, vomiting and, in severe cases, disturbances of consciousness leading to coma.

6. Low Broken Pattern

When the test data indicates low salts with the remainder of the equation relatively stable the equation is in a low broken pattern. (Low metabolic electrolytes).

Example: 4.5 6.4/6.5 7C 4M 10/8

Low metabolic electrolytes can predispose these clients to bone and joint pathology. Osteoarthritis is common among individuals who are in a low broken pattern. These are also the typical clients who need salt tablets on hot days to prevent muscle cramping. Low metabolic electrolytes can cause some alteration in nerve transmission. These individuals will complain of muscle spasms, joint aches and generally have low blood pressure. Some of the more common causes of this type pattern are diarrhea, renal tubular damage, metabolic acidosis, excessive use of diuretics, adrenacortical insufficiency, severe burns and cerebral salt wasting. Salt should not be restricted in this pattern. A celery juice and kelp tonic is excellent for helping to restore depleted electrolytes.