

# Allergies

BACKGROUND: Researchers at The Biological Immunity Research Institute, Scottsdale, Arizona have developed a lab test using urine & saliva. The test is unique because it has its roots in soil chemistry rather than the traditional medical approach. The test is called the Biological Immunity Analysis® (BIA). The BIA is a method by which we are able to measure the process of Bio-equilibrium lonization. To ionize is simply to separate into ions. An ion is a charged particle. It may be either positively or negatively charged, depending on the excess or deficiency of electrons captured by the nucleus. Ionization, as it relates to nutrition, is the process of breaking down food into useable life energy by the body's metabolic action. The measurement of this activity is expressed in a balanced form derived from the testing of particular biological functions. These results are converted into terms of nutritional and dietary requirements.

METHODS: The evaluation consists of testing the urine and saliva for 7 parameters otherwise identified as factors. These factors include the following: Sugar Brix, Urine pH, Saliva pH, Conductivity, Cell Debris, Nitrate Nitrogen, and Ammonia Nitrogen.

**Phase 1** Determine if the various BIA factors are significantly related to a patient's health. If the BIA factors can be related to wellness, it may be possible to use this simple, non invasive 10-minute evaluation technique as a *pre-diagnostic* wellness modality to determine trends and tendencies of a patient long before the patient experiences symptoms, or before traditional medical testing is able to detect them.

**Phase 2** Discover what positive affects the dietary and lifestyle regime suggested by the BIA has on the various states of wellness. This regime is referred to as the Biological Immunity System® (BIS).

# FACTORS

Sugar Brix: (Goal: 1.5) A scale of 0-10 has been developed using a Sugar Brix refractometer.

Urine pH: (Goal: 6.4) A scale of 4.5-8.5 has been developed using a digital pH meter.

Saliva pH: (Goal: 6.4) A scale of 4.5-8.5 has been developed using a digital pH meter.

**Conductivity**: (Goal: 7) A scale of 0-60 C-units has been developed using a Conductivity meter reading a scale of 0-40,000 micromhos. One micromho equals 1.5 C-units.

**Cell Debris**: (Goal: 1) A scale of 1-4 has been developed using a visual measuring technique of the urine specimen.

**Nitrate Nitrogen**: (Goal: 3) A scale of 1-14 has been developed using a comparative color chart identifying various tones and patterns created by the chemical reaction of the urine specimen with the specified reagents.

**Ammonia Nitrogen**: (Goal: 3) A scale of 1-12 has been developed using a comparative color chart identifying various tones and patterns created by the chemical reaction of the urine specimen with the specified reagents.

### ENERGY CATEGORIES

**Metabolism Efficiency (EM) :** (Goal: 75%; Minimum Acceptable: 55%) A scale of 0-100 has been developed taking into account; 1) the value of each of the various factors and their respective scales and, 2) the position that each of the above factors have with regard to established acceptable ratios between the various factors.

In most cases, the higher the EM, the fewer symptoms and greater wellness the patient should exhibit, unless the number of Adverse Relationships (AR's) is excessive. In which case, it would indicate emotional stress, as opposed to physical or biochemistry stress, to be the cause of presenting symptoms. The EM may be used as a biofeedback tool to determine how well the patient is converting food into energy.

**Reserve Energy (ER) :** (Goal: 75%; Minimum Acceptable: 65%) A scale of 0-100 has been developed taking into account various factors identified as using the combined average of all previous EM's taking into account a Smoking Factor, Drug Factor and Surgery Factor. The Reserve Energy (ER) is designed to be a guide to the immunity and healing capacity of the patient. The EM can fluctuate much more rapidly than the ER, thus the ER gives an overview of progress made to date.

**Biological Age (BA) :** (Goal: Actual Age) A scale of 0-100 has been developed to furnish another biofeedback tool to measure the hypothetical effect of the present EM on the body. This serves as another measurement device to quickly assess the progress being made by the patient to restore balance and wellness to the body.

Adverse Relationships (AR) : (Goal: 0-4) A scale of 0-12 has been created by comparing the position of individual factors against each other. The greater the number of AR's, the more imbalanced and stressed the patient may be expected to be. The greater the AR's, the more emotional stress, as opposed to physical or biochemical stress, can be expected to be the cause of the presenting symptoms, unless the EM is also high, in which case emotional and toxin suppression may be expected. The greater the AR's, the deeper and more chronic the diagnosed problem is expected to be, and the longer it will take to bring balance and wellness to the body.

**Speed of Decline: (SD)** (Goal: 0-1) A scale of 0-4 has been developed by comparing the position of the Saliva pH on its scale relative to the position of the other factors. There are 4 relationships being observed. The Speed of Decline (SD) is determined by the number of Adverse Relationships involving the Saliva pH. The greater the SD, the greater the inertia behind the deterioration of the balance and wellness of the patient. It has been observed that a SD of 4 is very serious and almost impossible to treat. An SD of 3 is serious but seems to respond quite well to the proper regime.

**Balanced Numbers:** It has been observed that balance is related to wellness. The BIA is relative to each individual, as opposed to the usual method of comparing test results to accepted norms. This required a way of determining what each individual reading SHOULD BE relative to the remaining numbers. The discrepancy between what the actual reading is and what it should be becomes all-important in determining the nature of the imbalance and how it should be treated. This Balanced Numbers concept overcomes the difficulty presented by the urine becoming diluted or concentrated due to many factors occurring throughout the day.

**Balance Chart:** A Balance Chart was created to graph each BIA factor. Wellness may be depicted by a near horizontal line created by individual BIA components being plotted on the graph. It has been observed that the profiles exhibited by differing graphs can be associated with various presenting symptoms. It has also been observed that as the patient follows the proper regime resulting in the Balance Chart moving toward a horizontal line, the presenting symptoms disappear and the EM rises, ER rises, BA declines, AR's decrease and SD decreases.

ALLERGY GROUP Out of 1,569 subjects (Control Group) aged 10-80 years, 480 subjects (Test Group) indicated having ALLERGIES.

## FINDINGS

**Sugar Brix:** The Test Group (480) was 23% more likely to have a Sugar Brix reading of 0-1.5 and 16% more likely to have a Sugar Brix 21+ points lower than the Balanced Sugar Brix reading.

**Urine pH:** The Test Group (480) was 67% more likely to have a Urine pH (UpH) above 8.0 and 23% more likely to have a UpH between 7.0 and 7.9. The Test Group was 29% more likely to have a UpH 15-19 points higher than the Balanced UpH and 20% more likely to have a UpH higher or equal to the Saliva pH.

**Saliva pH:** The Test Group (480) was 38% more likely to have a Saliva pH (SpH) between 5.5-6.0 and 43% more likely to have a SpH above 7.9. The Test Group was 20% more likely to have a SpH less than the UpH.

**Both pH:** The Test Group (480) was 100% more likely to have a pH Total of 15.8-16 and 44% more likely to have the UpH be 9-11 points greater than the SpH.

**Conductivity:** The Test Group (480) was 100% more likely to have a Conductivity reading between 8-9, and 13% more likely to have a Conductivity Reading less than the Balanced Conductivity Reading.

**Salts/Protein Ratio:** The Test Group (480) was 20% more likely to have a Conductivity/Protein Ratio between 0-1.5.

**Salts/Sugar Ratio:** No great difference appeared between the Control Group (1,569) and the Test Group (480) for this ratio.

**Nitrate Nitrogen Range:** The Test Group (480) was 17% more likely to have a Nitrate Nitrogen above 10, 50% more likely to have a Nitrate Nitrogen of 14 and 25% more likely to have the Ammonia Nitrogen by more than 6 points.

Nitrate/Ammonia Ratio: The Test Group (480) was 33% more likely to have Nitrate/Ammonia Ratio above 2.

**Total Nitrogens:** The Test Group (480) was 33% more likely to have a Total Nitrogen reading between 20-21 and 12% LESS likely to have Total Nitrogen reading less than Balanced.

**Protein/Sugar Ratio:** The Test Group (480) was 20% more likely to have a Total Nitrogen/Sugar Brix Ratio between 0-3.2.

**EM:** The Test Group (480) was 17% more likely to have a Metabolism Efficiency (EM) reading of 5-24% and 7% more likely to be 45-55%.

**AR's:** The Test Group (480) was 33% more likely to have Adverse Relationships (AR's) between 0-1 and 7% more likely to have AR's between 6-7.

**SD:** The Test Group (480) was 14% more likely to have a Speed of Decline of 3.

Age: The Test Group (480) was 18% more likely to have an age of 41-50.

#### CONCLUSIONS

**BRIX Interpretation:** Because the Sugar Brix scale is sensitive to specific gravity it is likely that as the kidneys lose their ability to properly filter the blood of toxic, allergic substances the specific gravity of the urine will decrease.

It has been observed that hypoglycemic patients tend to have a low Sugar Brix, leading us to believe that there is a connection between low Adrenal function and an Under-Balanced Sugar Brix, if not a low-scale Sugar Brix.

A diet high in Protein, Pantothenic Acid, Vitamin C, Calcium, may reduce this Sugar reading. In addition, a lifestyle including lymphatic stimulation, exercise and adequate pure water will assist in lowering this High-Over-Balanced Sugar reading.

**Urine pH Interpretation:** Because the Urine pH is supposed to be acid, the fact that the Urine pH is more likely to be too alkaline in people with allergies may be because it is more difficult for the kidneys to filter the acids out of the blood as the blood becomes more concentrated and as adrenal and kidney function deteriorates.

Observation indicated that increasing Vitamin C, Calcium Lactate, lemon juice, Vitamin A and Trace Minerals as well as a diet high in Sulfur, Calcium, Sodium and alkaline minerals will restore the acid Urine pH and the ability of the kidneys to once again eliminate the acids.

The Test Group is more likely to have a Urine pH higher than the Saliva pH. This may indicate that the acids are not being eliminated (high UpH) and are building up in the system (SpH).

Further research is expected to show that as balance is once again restored to the Urine pH, allergy symptoms lessen.

**Saliva pH Interpretation:** The fact that the Saliva pH is more likely to be very alkaline as well as very acid in this Test Group may be due to the observation that the more stressed an individual is the high the Saliva ph can be expected to be.

The Saliva pH, relative to the rest of the BIA, is a measurement of the vitality level; the body's ability to respond, or resist the aggression in the patient's environment. This aggression produces an increased level of acid which needs to be neutralized. As the distress continues, whether caused by environmental factors or poor diet, the body loses the ability to effectively eliminate the acids.

It has been observed that increased enzymes and other protein digesting substances are helpful in restoring the pH balance. As the correct dietary and lifestyle regime is followed, the Urine pH and Saliva pH once again return to their correct positions. When this happens, the allergy symptoms tend to lessen, if not completely disappear.

**Conductivity Interpretation:** The Salts (Conductivity) reading being more likely to be low-scale in the Test Group, as well as being more likely to be Under-Balanced may be indicative of a low alkaline reserve. As the acids build up in the system it requires more alkaline minerals to bond and create acid salts, which then eliminated through the urine.

Since the Salts reading is correlated to the alkaline reserves of the body, as the patient gradually loses the vitality necessary to adequately respond to the stress, the Conductivity (Salts) reading has been observed to decrease or become Under-Balanced.

The more toxic a person becomes, the more the Urine Conductivity should rise, if the person is properly eliminating the toxins. The fact that allergy-prone people tend to have insufficient Conductivity is indicative of low electrolytes and of a low Metabolism efficiency resulting in internal toxicity, which is a precursor of allergy symptoms as the body attempts to protect itself from the antagonist.

As the Salts reading falls to Under-Balance, Trace Minerals, Electrolytes, Protein, Ascorbate C complexes with minerals will assist in bringing this reading back to balanced.

**Salts/Protein Ratio Interpretation:** The Conductivity/Protein Ratio should be approximately 1.5. The Allergy Test Group's tendency to have a low Conductivity/Protein Ratio is due to the preponderance of low Conductivity coupled with high Nitrate Nitrogen (Protein). It has been observed that as this ratio decrease, the person's metabolism and emotional pattern shifts into a defensive posture, meaning that a chronic situation likely exists.

The remedy lies in the items listed under Conductivity Interpretation as well as items to support the liver in its ability to properly metabolize the amino acids into cellular building blocks.

**Nitrate Nitrogen Interpretation:** The Allergy Test Group's tendency to have an elevated Nitrate Nitrogen is due to excessive undigested protein by-products existing in the blood and filtering out into the urine. It is the existence of this toxic substance that predisposes the person to allergy symptoms.

Because the Test Group is more likely to show a high Nitrate Nitrogen, poor protein digestion is expected, resulting in high undigested protein by-products being present in the blood and urine. These foreign particles are considered as allergens and make a person much more susceptible to environmental allergens because the body doesn't have as much reserve to deal with them when it is already waging a war within.

Increasing pure water intake, adding lipotrophic factors to the diet, enzymes, fasting and introducing liver support into the lifestyle regime of the patient will lower the excessive Nitrate Nitrogen, decrease the load on the kidneys and liver, resulting in reduction of allergy symptoms.

**Nitrate/Ammonia Ratio Interpretation:** The Nitrate/Ammonia Ratio being more likely to be high in the Test Group may be explained by the observation that as protein digestion becomes inefficient, the Nitrate Nitrogen (NN) increases.

It has also been observed that in patients with allergies, the NN climbs very rapidly. This may be due to the fact that valuable undigested protein is passing through the system unconverted by the digestive system, including the liver. It may also be due to a deficiency of Hydrochloric Acid and other digestive enzymes.

It has been observed that as the spread between the NN and Ammonia Nitrogen (AN) readings increases, to increase HCI and other digestive enzymes assists in bringing the readings back together and the patient's symptoms decrease.

**Total Nitrogens Interpretation:** The Test Group's high incidence of elevated Total Nitrogen, related to the previously discussed situation of excessive undigested and trapped blood protein making its way to the urine. The presence of this undigested, ultimately toxic material predisposes one to allergy symptoms.

As the proper lifestyle measures are enacted, this Total Protein reading will decrease. As it decreases, so will the allergy symptoms.

**Protein/Sugar Ratio Interpretation:** The Total Nitrogens/Sugar Brix Ratio should be approximately 3.2. The Allergy Group's high incidence of a low Protein/Sugar Ratio (0-3.2) is again indicative of the low specific gravity (poor clearing of the blood) coupled with the presence of the undigested protein, resulting in the increased allergy symptoms.

**EM Interpretation:** The Test Group's high incidence of low Metabolism Efficiency (EM) is expected because the lower the EM, the more undigested food-by products will be in the system, resulting in a higher incidence of allergy symptoms. The more stressed the patient becomes, or the more drugs are used to suppress the symptoms, the lower the EM travels, causing further allergy problems.

Observation indicates that as the proper dietary and lifestyle alterations are made, the EM increases to more desirable levels and the patient's symptoms decrease.

**AR Interpretation:** The Test Group's high occurrence of low Adverse Relationships (AR's) coupled with the high occurrence of low EM's is expected because the more chronic suppression occurs in the physical and emotional body of the patient, the lower the number of AR's appear with low EM's.

When there is proper balance between mind and body, there is an inverse proportional relationship between the EM/AR. When the EM decreases along with the AR it is usually a sign of suppression, both physically and emotionally. Our premise that allergy symptoms are tied to the improper clearing of the blood by the kidneys and liver once again explains why we see this profile in the BIA.

The explanation for the high incidence of low AR's relative to the EM reading may be explained once again by the observation that as chronic degeneration begins to slowly take over the body, the EM decreases and the AR's also decrease. This may indicate the body's immune system lacking the vitality to deal with the problem.

Our experience indicates that, as an Excess Right Pattern develops (Graph Balance Chart), the person has difficulty keeping up with the pace of lifestyle, the adrenals become more stressed and allergy symptoms increase.

**Speed of Decline Interpretation:** The Allergy Group's tendency to have a higher Speed of Decline (SD) indicates a chronic inability to rid the body of toxic protein by-products, thus contributing to allergy symptoms as the immune system loses its ability to purify the blood.

Age Interpretation: The fact that the Test Group is much more likely to be between the ages of 41-50 indicates that it is right at the time of middle age that the toxicity build-up becomes most noticeable in the form of allergy symptoms. It takes most patients many years of environmental and emotional stress to accumulate a high toxicity level. However, as environmental toxins and dietary deficiencies increase, we expect to see the age range become broader, as more individuals will develop allergies at younger years of age.

#### SUMMARY

It is our view that allergy symptoms are an EFFECT not a cause. Further research is expected to show the Biological Immunity Analysis<sup>®</sup> and the accompanying Biological Immunity System<sup>®</sup> is a pre-diagnostic modality capable of measuring the process of Bio-equilibrium Ionization and accurately identifying bio-chemical patterns. As a result the BIA<sup>®</sup> and BIS<sup>®</sup> lends itself as an effective indicator of what type of dietary and lifestyle regime a particular patient needs to adopt to decrease allergy symptoms and to prolong life.

# Information

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# **BALANCE CHART**

- Allergies -

Rang	je Sugars	UpH	SpH	Salts	Proteins
+10	9.5 - 10	4.5	8.4	61 - 80	26 - 30
+9	8.7 - 9.5	4.6	8.3	46 - 60	24 - 25
+8	7.7 - 8.6	4.8	8.1	38 - 45	22 🗩 23
+7	6.9 - 7.6	5.0	7.9	31 - 37	20 - 21
+6	6.0 - 6.8	5.2	7.7	26 - 30	18 - 19
+5	5.1 - 5.9	5.4	<b>M</b>	21 - 25	16 - 17
+4	4.6 - 5.0	5.6	7.3	17 - 20	14 - 15
+3	3.3 - 4.5	5.8	7.1	13 - 16	12 - 13
+2	2.5 - 3.2	6.0	6.9	0 - 1/2	10 - 11
+1	1.6 - 2.4	6.2	6.7	8 9	8 - 9
0	1.5	6.4	6.4	7	6 - 7
-1		6.7	6.2	6	_
-2	1.3	6.9	6.0		_
-3	1.2	7.	5.8	5	_
-4	1.1		5.6		_
-5	1.0	7.5	5.4	4	5
-6	.9	7.7	5.2	_	_
-7	.8	7.9	5.0	3	_
-8	.7	8.1	4.8		4
-9	.6	8.3	4.6	2	3
-10	05	8.4	4.5	1	2
	Excess Left	🗆 Hi	gh Balance		High Broken
	Excess Right	Lo	w Balance		Low Broken
	More Water	🗅 Sta	ress		Rest
	Carbos	🗅 Fa	ts		Protein
	Vitamins	🗅 Mi	nerals		Enzymes
	Fatty Acids		t Grams		Exercise (M)(L)