**Common Misconceptions Associated With Salt**

**Introduction**

Salt has played an important role in human history. It is considered by many as an essential part of the human diet. Our word salary is derived from the same root as the word salt. Recently, many people have become concerned about excessive salt intake and its link to high blood pressure. Supermarket shelves are overflowing with new food products which contain less salt or no salt. The question is, how important is salt restriction? Are there times when salt is acceptable and in what quantity? Finally, is all salt the same? Current advertising and health articles would lead us to believe that salt is harmful for everyone. However, our experience at Analytical Research Laboratories, Inc. differs.

Common salt is composed mainly of sodium and chlorine. Sodium chloride is critical for the maintenance of osmotic balance and many other functions. It is true that salt can be dangerous for some people and it is true that sodium chloride can be obtained from other foods. However, our research indicates that approximately 80% of the population will actually benefit from consumption of natural sea salt. Sea Salt is less refined than common table salt and does not contain added aluminum compounds.

**Sea Salt Versus Common Table Salt**

Many people think that all salt is alike. This is not true. Common table salt is a cheaper, refined product composed of approximately 98% sodium chloride. Essential trace minerals have been refined out of the salt. Also, aluminum is usually added as a drying agent to keep the salt from clumping. A deficiency of trace minerals and the addition of aluminum are both detrimental to one's health. Aluminum is a toxic metal which is considered by some researchers to be linked with Alzheimer's disease.

Sea salt, which is obtainable at health food stores, is less refined and does not contain added aluminum compounds. It is a more natural product that is much more healthful than common table salt. We don't often include salt in the list of common refined, processed food items, as we rightly should. Several brands of natural salt are available at health food stores. Some brands are probably superior to others, but all of them are probably superior to refined table salt.

Unfortunately, refined salt is the product most often used in prepared foods such as cheeses, pickles, soy sauce, French fries and countless other products. Refined salt is used because it is less expensive. It is possible that the benefits from avoiding all salt are due not to the damaging effects of salt. The harm may be due to ingesting the refined product used in most food items.

**Why Eat Salt?**

Have you ever been aware of a strong craving for salt? It is most commonly observed when people are under stress. We have observed that a craving for salt is often due to an adrenal insufficiency, as indicated by low levels of sodium and potassium levels as indicated on a hair analysis. One of the important hormones produced by the adrenal glands is aldosterone; a steroid hormone that helps regulate osmotic balance by causing sodium retention in the body. When adrenal activity is low, less aldosterone is produced. This results in an excessive loss of sodium through the kidneys.

Eating dietary salt will not correct the problem of sodium loss caused by low aldosterone levels. It will, however, temporarily replace some of the sodium that is being excreted due to low aldosterone levels. The judicious use of sea salt can avoid an excessive slowing of one's rate of metabolism by helping to maintain sodium levels. Once the adrenal glands are strengthened through a nutritional program, aldosterone levels rise and the craving for salt diminishes.

Common symptoms associated with a slow rate of metabolism may be helped by eating natural sea salt. An individual with adrenal insufficiency is usually fatigued and frequently suffers from low blood pressure. Restriction of one's dietary sodium intake can aggravate these symptoms causing more fatigue. Eating salt also helps increase the blood volume which can assist in normalizing a low blood pressure.

When an individual suffers from adrenal insufficiency, it is also helpful to limit foods high in fat and to be certain to eat low-fat protein foods two or three times per day.

Supplemental nutrients can also help retain salt in the body. Manganese is an essential nutrient for enhancing low sodium levels. Often, a craving for table salt is due to a manganese deficiency. Other specific nutrients which assist adrenal activity and sodium retention are potassium, vitamin B-1, vitamin B-5, vitamin C and vitamin E.

**Salt And High Blood Pressure**

Salt-eating can, in certain cases, favor higher blood pressure by causing increased adrenal activity and by increasing blood volume. This frequently occurs when the tissue calcium, magnesium and zinc levels are low. Excessive sodium lowers the magnesium level which then results in higher blood pressure. However, this does not mean that everyone needs to avoid salt. A sizable number of people have low blood pressure readings (less than 120/80) and would benefit from higher blood pressure.

**Salt-eating And Oxidation Types**

We divide body chemistries into slow and fast oxidizers, depending on the ratios of calcium to potassium and sodium to magnesium. A rule of thumb is those slow oxidizers, who tend toward low blood pressure; can safely eat sea salt. A slow oxidizer with high blood pressure may need to avoid salt. This is especially true if the individual's sodium/potassium ratio is greater than 5/1 or if an inflammatory process is present.

Fast oxidizers who normally have excessively high sodium levels, especially those with a tendency to high blood pressure, should reduce salt and foods high in salt content.

**Other Causes Of High Blood Pressure**

It is important to remember that excessive salt-eating is only one of several factors that can cause high blood pressure. Other important causes are:

* *Calcium and magnesium deficiency.* It has been conclusively shown that a deficiency of calcium, magnesium, or zinc can result in high blood pressure. This is confirmed by hair analysis research. Deficiencies of calcium, magnesium and zinc result in excessive aldosterone secretion, which, in turn, results in excessive salt retention *even if the individual adds no salt to his food whatsoever*. Calcium, magnesium and zinc deficiencies also cause excessive arterial muscle tone, which can raise blood pressure.
* *Toxic metals.* Medical research has also revealed that high levels of toxic metals such as cadmium and lead can cause high blood pressure. These metals frequently accumulate in the kidneys, causing congestion that raises blood pressure. Toxic metals can also result in hardening of the arteries by displacing zinc and other essential minerals in the arterial walls. The arteries become brittle and inflamed. This can cause calcium deposition in the arteries and hardening of the arteries, which in turn can raise blood pressure.
* *Excessive stress.* Excessive stress, by causing a magnesium and zinc deficiency, is a major cause of high blood pressure. Stress causes an increase in adrenal gland activity. The resulting rise in adrenal hormones, including aldosterone, results in excessive tissue sodium retention. Excessive stress also causes an increase in the muscle tone of the arteries, which results in increased blood pressure.
* *Obesity.* Carrying excessive body weight often aggravates high blood pressure. Every pound of excess weight adds several miles of extra capillaries that must be supplied with blood from the heart. The added volume of capillaries increases the force with which the heart must pump. This can raise blood pressure.

**Why Do Some People Retain Fluid When They Eat Salt?**

Certain individuals cannot eat salt without becoming puffy or edematous. Their tissues retain excessive water when table salt is added to their food. These individuals do not necessarily have high blood pressure.

This phenomenon is a symptom of excessive sensitivity to salt, often due to a stress-induced kidney dysfunction. These individuals usually must avoid salt. However, after a number of months on a specifically designed nutrition program, they may lose their salt sensitivity and may once again eat salt.

We have also found that individuals who retain fluid when eating table salt may be able to eat natural sea salt without fluid retention.

**Why Do Some Individuals Have A High Hair Sodium Level Even If They Do Not Eat Salt?**

A person with a high tissue sodium level may eat relatively little salt or no salt. Why, then, is the sodium level high? How can their high sodium level be lowered?

Those with high tissue sodium levels are usually fast oxidizers (indicated on a tissue mineral analysis by low calcium and magnesium levels). Their high sodium level is due mainly to excessive adrenal gland activity, usually due to stress or to toxic metals which affect the kidneys, thus causing sodium retention. Such individuals have an absolute, or a relative calcium and magnesium deficiency. A calcium, magnesium, or zinc deficiency permits sodium to accumulate in the body tissues. This is due to the antagonism which exists between sodium and calcium and magnesium.

Such individuals also frequently suffer from a zinc deficiency. Zinc is another essential nutrient that helps lower excessively high sodium levels.

A proper diet and supplements that are specific for one's body chemistry can help reduce excessive sodium retention. The minerals calcium, magnesium and zinc all guard against excessive adrenal activity and sodium retention. These nutrients are considered anti-stress minerals and are also beneficial in slowing down an excessively fast rate of metabolism. A diet low in carbohydrates, moderate in high-purine protein (organ meats, sardines, etc.) and adequate in fats and oils (salad oils, nuts, butter, etc.) is beneficial. This general dietary program helps to slow down an excessively fast rate of metabolism. Such a diet helps prevent the loss of calcium, magnesium and zinc, as well as lowering excessively high sodium and potassium levels in the body.

**Why Do Some Fast Oxidizers Crave Salt?**

Slow oxidizers may crave salt because they are losing excessive salt due to low adrenal gland activity. Why do some fast oxidizers crave salt? Possible reasons include:

* *The salt habit.* Due to childhood conditioning, one may be accustomed to adding salt to all food. Salt is used as a preservative in cheeses and meats. Individuals who grew up eating salty foods may continue to enjoy salt out of habit.
* *Zinc deficiency.* The majority of fast oxidizers are seriously deficient in zinc. Zinc is needed for the sense of taste and smell. Zinc-deficient individuals may not adequately taste their food. They may salt their food to add flavor.
* *Salt keeps sodium levels up.* Eating salt will help keep a person in fast oxidation. Some fast oxidizers unconsciously use this method to maintain themselves in fast oxidation. This is an *addictive* use of salt to maintain a particular state of body chemistry.
* *Low sodium/potassium ratio.* We have observed among fast oxidizers that when their sodium/potassium ratio is above 2.5:1, they seldom crave salt. However, when their sodium/potassium ratio falls below 2.5:1, often a craving for salt develops. This craving may be due, in part, to: 1) an attempt to raise sodium to reestablish the normal sodium/potassium ratio, or 2) reduced consumption of meat. Meat is a salt-containing food. When the sodium/potassium ratio drops below normal, many fast oxidizers lose their desire for meat protein and thereby lose a source of salt.
* *Avoidance of meat.* Fast oxidizers normally crave and require meat in their diet. If, for some reason, a fast oxidizer does not eat sufficient animal protein, his craving for salt may increase.

**Why Do Some Individuals Who Eat Salt
Have Low Hair Sodium Levels?**

The prime regulator of sodium levels in the tissues is aldosterone secreted by the adrenal cortex. If the adrenal glands are underactive, the tissue sodium level will generally remain low in spite of any increase in dietary salt consumption.

**Conclusion**

Salt-eating is not the clear-cut issue that some health authorities would have us believe. It is true that many common foods such as French fries, pickles and fast foods contain excessive amounts of salt. However, in our experience, it is not true that all salt consumption is harmful for everyone.

While the following guidelines do not apply in every case, most of the time slow oxidizers who crave salt and whose blood pressure is normal may add natural sea salt when cooking their food.

Fast oxidizers often need to reduce their salt intake. If their blood pressure is high, reducing salt can be helpful. However, salt-eating is not the only cause of elevated blood pressure. Stress, obesity, toxic metals and calcium, magnesium and zinc deficiency can also cause high blood pressure. By addressing these causes, blood pressure will often normalize, thus allowing salt to be eaten in moderation.

It is also important to remember that common table salt is a refined food. Part of the harm blamed on salt may be due to the processed salt that most people consume.

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