

# Dr. William Shevin MD DHt

## Salt

In working with iodine deficiency since early 2006, I've also had cause to study the issue of dietary salt intake. Approximately 1/3rd of the patients I treat with Iodine begin to detoxify (with symptoms) from excessive levels of bromine in the body. Excreting bromine (with significant relief of symptoms) is much more rapid in the presence of salt (not from the sodium, but from the chloride anion).

I have learned much about salt that is contradictory to what I was taught in medical school. For the purposes of this paper, I have borrowed heavily from a book by David Brownstein, M.D., entitled Salt Your Way to Health, which is available at Medical Alternatives Press, 4173 Fieldbrook, West Bloomfield, Michigan, 48323 (tel 248 8513372) and also through at [www.drbrownstein.com](http://www.drbrownstein.com). This and his other excellent books (including one on Iodine), can also be ordered from [www.Amazon.com](http://www.Amazon.com). There is much more in this book than I will summarize below, and I would highly recommend that you obtain it and read it. He also has an article published which is available online, by clicking [here](#).

**Salt and Hypertension:** The most common belief is that increased dietary salt causes high blood pressure. It is true that for people who already have high blood pressure, there is a greater reduction in blood pressure with salt restriction than is seen in the normal population (those without blood pressure problems). The effect is modest, however, with reductions in blood pressure of approximately 5/2.5 (mm mercury, systolic/diastolic) (reference 1).

Not all hypertensive patients are salt sensitive (e.g. develop higher blood pressure with increased salt intake). Some, particularly the elderly, may be sensitive. A review of 56 clinical trials showed that a low-salt diet had a minimal effect on blood pressure in the vast majority of people studied (average decrease in blood pressure approximately 4/1) (reference 2).

In general, medical research does not indicate that low-salt diets lower blood pressure (reference 3,4,5). It is easy enough to monitor blood pressure, in any case, to see if any particular individual has a problem with increased salt intake.

**Adverse effects of Low salt diets:** In one study of nearly 3000 hypertensive patients, the group with the lowest salt intake had a 430% increase in heart attack compared to the group with the highest salt intake (reference 6). Low salt diets have also been shown to cause increases (over 10%) in both total cholesterol and in LDL cholesterol (reference 7).

Other issues:

Unrefined Sea Salt ("grey salt") is a good source of essential trace elements that have been removed from "table salt" through processing. In addition, ordinary "table salt" has aluminum and other impurities added to it.

The use of unrefined sea salt has also been used with positive effects in holistic medical practices (please see Dr. Brownstein's book for more details).

Dr. Brownstein recommends ¼ tsp unrefined sea salt daily for each quart of liquid consumed. Unrefined sea salt should have an "off" color, indicating that it has not been bleached, nor had all the trace minerals refined out of it. Brands that are known to have good levels of trace minerals (they have been independently tested) include Celtic salt and Himalayan salt.

Salt load procedure: If, while taking Iodine, we suspect bromine toxicity (bad taste in mouth, acne-like eruptions, fatigue, irritability, difficulty concentrating or with memory, emotional instability, or depression), follow the following procedure ("salt load"):

1. Drink ¼ tsp of unrefined sea salt in about ½ cup of warm water, or simply place it on your tongue, and chase it with 16 ounces of water.
2. Repeat this in 30-45 minutes, and then once again, in order to start urinating a good amount. The chloride in the salt flushes the bromine into the urine, and if this relieves the symptoms, then we are most probably dealing with bromine toxicity.
3. If I have you do this for more than one day, you do the 3 repetitions, as in 1. and 2. above, each day.
4. Report the results to me. I may adjust the iodine dose.

It is only fair to mention that even in Asian populations, who have otherwise much lower rates of heart disease and stroke, that higher salt intakes are associated with higher rates of those illnesses. I suspect that what has happened in this country over the past several decades is that a diet high in prepared, processed foods (canned soups, etc.) with high salt content has resulted in a diet which promotes high blood pressure, heart disease, and stroke.

But those of us who do not consume such foods, and who consider that salt intake should be limited may wind up with inadequate salt intake. This, in combination with excessive environmental bromine exposure and iodine deficiency, is a bad combination.

It is important to understand that I am not advocating a "high salt diet." I have the strong impression that people who do not eat much highly salted foods (bacon, ham, anchovies, seaweeds, salted cheeses (like feta), etc., and who also do not add salt in cooking and/or at the table, thinking that salt is "bad" for you, are actually getting less than the currently recognized "adequate" dose of salt.

The current medical guidelines for daily salt (sodium) intake are as follows:

1. Adequate intake (we should not eat less than this amount): 1500 milligrams for young and middle-aged adults, 1300 milligrams for those over 50, and 1200 milligrams for those over 70. Note that 1 tsp of salt

is 2400 milligrams of sodium, so that the equivalent of 1/2 tsp of salt is recommended for those over 70.

2. The upper recommended limit is 2300 milligrams (just under 1 tsp salt). Nutritional studies indicate that most Americans exceed this level. (this data from the Health and Nutrition Newsletter, Tufts University, April 2004)

A list of the sodium content of common foods can be found at <http://oto.wustl.edu/men/sodium.htm>.

**Potassium** — this is another very basic and vital mineral, which works in conjunction with Sodium in a large number of biochemical reactions. Most Americans eat too little potassium (found primarily in fruits and vegetables). Daily intake should be 4700 mg. A listing of potassium rich foods can be found at [http://www.pamf.org/patients/pdf/potassium\\_count.pdf](http://www.pamf.org/patients/pdf/potassium_count.pdf)

For those who need to do a salt load, but cannot tolerate the sodium load, Potassium chloride (chemically written as KCl) serves as well as salt (as it is the chloride that flushes bromine into the urine). KCl is commonly available in 99 mg tablets, with approximately 38 mg of chloride per tablet. To get the equivalent of 1/4 teaspoon of salt (sodium chloride), it would be necessary to take 8 KCL tablets (which would then also give almost 500 mg of potassium, well within the daily requirement.

On a weight-to-weight basis, there is less chloride in KCl than in sodium chloride (NaCl) as potassium is a heavier element than sodium.

Excessive intake of potassium is not a problem in healthy persons, who simply excrete it in the urine. In those who are type 1 diabetics, or who have chronic kidney disease, or who take certain “potassium sparing” diuretics, or take non-steroidal anti-inflammatory drugs, or blood pressure pills in the “ACE inhibitor” category, medical advice should be sought before dramatically increasing one’s intake of potassium.

#### References:

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