

## Re: "Salty food a taste to shake"

---

*Source:* <http://sci.tech-archive.net/Archive/sci.med.nutrition/2005-05/msg00253.html>

---

- *From:* "montygram" <nazztrader@xxxxxxxx>
  - *Date:* 11 May 2005 14:13:58 -0700
- 

Here's something worth a read:

### PHYSIOLOGICAL NEED FOR 5/10 GRAMS A DAY

It is common knowledge that the blood of animals is saline, that is it contains sodium chloride in solution, and in addition contains smaller quantities of ions of other elements. Of the non-electrolytes most are manufactured by the body and some can be stored, for example, fats. But electrolytes like sodium chloride cannot be stored nor can they be manufactured in the body. They must be taken in with food. Some of them are needed in such small quantities that they are obtainable from almost any diet; sodium and potassium salts, however, are needed in greater quantity.

Plants have much more potassium than sodium, so that potassium hunger is unknown except in extreme starvation. There remains the need for sodium as sodium chloride, or common salt. A complex hormone mechanism ensures that the proportion and concentration of salts in the blood remain constant. If a man eats too much salt he excretes what is not needed. If he takes in too little the mechanism makes the body excrete more water in order to keep the salinity constant. If this is taken to extremes the body is desiccated and death results. The same control mechanism operates when a man takes in too little water, for he excretes more salt and less water. Death from salt starvation or from thirst are both aspects of the same vital need for a stable saline environment inside the body.

Many experiments have been carried out to establish the minimum salt requirements for men and animals. The results of these suggest that the minimum amount of urinary sodium lost in twenty-four hours corresponds to between 4 and 6 grams of sodium chloride.

### Regular Infusion of sodium chloride in solution

This salt must be replaced.

A man therefore needs about 5-10 grams of salt per day or 2-3 kg per

Re: "Salty food a taste to shake"

year for mere survival. A community of 500 would need about 1 ton per year. Clearly, anyone who can control the salt supply of community has powers of life and death. The control of water, being more ubiquitous than salt, is not simple to put into effect.

2000 Neolithic man was a carnivore and not, as American scientists have claimed, a vegan, according to a new study led by a British researcher

In regions of the world where the population lives mainly on meat or fish, there is no difficulty in satisfying this physiological need as animal food provides enough salt. Salt-deprivation does however, become a hazard in vast areas where meat is scarce and many depend primarily on a vegetable diet.

Normal water losses in grams per day per person:  
g/day losses in:– Urine Sweat Excrements Skin Lung  
Common salt 2.08 0.1–0.3 . 0.1–0.3 – –  
Water 700–1500 – 150 500 400

We spend much of our physiological "effort" keeping the precise composition of this salt water constant ( "Homeostasis" )

The important discovery of pickling was made at the end of the last Ice Age. It coincided with the steep eustatic ocean rise that flooded the continental shelf, which was up to then a rich hunting and fishing ground for Neolithic man. This sudden sea level rise left very few flat areas where salt crusts could form naturally or even within artificial low lying dykes. In order to survive , Shelf man had to migrate inland and he succeeded in developing agriculture and animal herding. Previously, hunting and fishing societies had found salt in the tissues of their prey but under these new conditions, with and increased vegetable diet, more mineral salt was needed to supply what was missing from their diet. In addition, pickling to avoid the seasonal shortage demanded even more salt than the basic 5 g per day. An average of some 25 g were needed , calculated on a per capita basis , and this meant that survival and growth of civilizations were often limited by the availability of salt. Efficient and extended salt production became necessary .Jewish traditional KOSHER family processing hardly remembers the reasons for salting their meat protein and only recently the invention of refrigeration has replaced the need leaving us with quaint customs

The increased consumption of salt to ca. 30 grams,.. over and above the minimum physiological requirement, had a striking result which might be of some importance. This additional salt intake changed the bromine ratio in the diet because crystallized salt used for food preservation has a chlorine-to-bromine ration of over 2000:1, that is, it contains almost no bromine. As bromine has a sedative effect on the human nervous system one might speculate whether the new circumstances of bromine reduction stimulated greater activity and advance.

" It was not until mid-1988 that medical journals began to publish the

Re: "Salty food a taste to shake"

Re: "Salty food a taste to shake"

results of this massive effort, the Intersalt Study. These findings showed a scant relationship between sodium and blood pressure. "Salt has little importance in hypertension" headlined the accompanying editorial in the prestigious British Medical Journal. The Intersalt researchers measured urinary electrolytes and blood pressures in 10,079 individuals in 52 centres in 32 countries using standard methods and analysing the samples in a single laboratory. The head of the American Heart Association's Nutrition Committee and member of the U.S. Dietary Guidelines Advisory Committee summarised: "We're trying to back away from our salt recommendation without looking like fools."

Quote from..... Low urinary salt levels linked with higher risk in men with HBP June 7, 1995 NR

Respected professionals take sides:

<http://www.ajcn.org/cgi/content/abstract/71/5/1013> and  
<http://www.ajcn.org/cgi/content/abstract/71/5/1020>

THE SALT ARCHIVE SUGGESTS THE REAL FACTS: involve  
the BROMIDE / CHLORIDE ION RATIO

The results of an [MRBLOCH SALT Archive] investigation into the correlation of the Cl<sup>-</sup>/Br<sup>-</sup> ion ratio in the body shows the regulating mechanism in the kidney, counterbalancing the changes of salt diet, that retain bromides in preference to chlorides.

Conclusions:

Plants have a high Bromide content in their halogenides.

Any salt free diet has a relatively high bromide content

Salt (NaCl) used as a condiment has little bromine

The bromide content of urine halogenides is always lower than that of bloodserum [twice as low]

The kidney reabsorbs bromide in preference to chlorides

Sweat and saliva, have a higher bromide content, than blood and urine.

Sweating causes more bromide losses than chlorides, counteracting the reverse effect of the kidneys.

[from Bulletin of the Research council of Israel 1959 vol 8A no 4]

Bloch , Kaplan, Schnerb 1959

Comment:

It would seem that people who sweat profusely [as in hypertension] lose more bromides [perhaps we should forget about sodium squabbles for a moment], causing salt [chloride ions] to increase in influence. The delicate balance of Chloride ions to Bromide ions is regulated in the kidneys and compensates the losses in sweat and urine.

Conclusion – eat salt – but together with plenty of bromide containing foods.. Better still, eat Bromine rich Dead Sea salt.

Re: "Salty food a taste to shake"

Re: "Salty food a taste to shake"

NEWS "FLASH"– .....

Hyponatremia means a low concentration of sodium in the blood.

#### MARATHON RUNNERS MUST MAINTAIN SALT–WATER BALANCE

Drinking too much water while running a marathon can result in death, according to a new study conducted by UCSF researchers.

The scientists found that consuming excess amounts of water can cause the brain to swell or can cause fluid to leak into the lungs, both of which can be fatal.

But in their study, the researchers also offer a cure: administering salt water intravenously.

Although marathon runners need to keep hydrated, researchers have found that only drinking water can cause a condition known as hyponatremia.

In the past decade, scientists have observed that runners who died during a marathon had lost the delicate balance of water and salt normally maintained in the body.

Even though the runners had plenty of water, they were extremely deficient in salt.

The results were published in the May 2 edition of the Archives of Internal Medicine.

#### Drinking Too Much Water Can Kill You

By Alison McCook

07/03/2002 – NEW YORK (Reuters) – A new review of three deaths of US military recruits highlights the dangers of drinking too much water.

The military has traditionally focused on the dangers associated with heat illness, which has killed a number of healthy, young enrollees, Colonel John W. Gardner of the Office of the Armed Forces Medical Examiner in Rockville, Maryland told Reuters Health. However, pushing the need to drink water too far can also have deadly consequences, he said.

"The risk has always been not drinking enough," Gardner said. "And then people who aren't medically attuned get overzealous," inducing recruits to drink amounts of water that endanger their health, he added.

Re: "Salty food a taste to shake"

Re: "Salty food a taste to shake"

"That's why we published this paper: to make it clear to people that overzealousness can be dangerous," Gardner explained.

In September 1999, a 19-year-old Air Force recruit collapsed during a 5.8-mile walk, with a body temperature of 108 degrees Fahrenheit. Doctors concluded he had died of both heat stroke and low blood sodium levels as a result of overhydration.

During January 2000, a 20-year-old trainee in the Army drank around 12 quarts of water during a 2- to 4-hour period while trying to produce a urine specimen for a drug test. She then experienced fecal incontinence, lost consciousness and became confused, then died from swelling in the brain and lungs as a result of low blood sodium.

In March 2001, a 19-year-old Marine died from drinking too much water after a 26-mile march, during which he carried a pack and gear weighing more than 90 pounds. Although he appeared fine during the beginning stages of the 8-hour walk, towards the end he began vomiting and appeared overly tired. He was then sent to the hospital, where he fell into a coma, developed brain swelling and died the next day. It is unclear how much water he drank during the march, but Marines were given a "constant emphasis" on drinking water before and during the activity, Gardner writes in the latest issue of *Military Medicine*.

In an interview with Reuters Health, Gardner explained that drinking too much water is dangerous because the body cannot excrete that much fluid. Excess water then goes to the bowel, which pulls salt into it from the body, diluting the concentration of salt in the tissues.

Changing the concentration of salt, in turn, causes a shifting of fluids within the body, which can then induce a swelling in the brain. The swollen organ will then press against the bones of the skull, and become damaged.

The researcher added that previous cases of water toxicity have been noted in athletes who consume excessive amounts in order to avoid heat stroke. In addition, certain psychiatric patients may drink too much water in an attempt to wash away their sins, or flush out poisons they believe have entered their bodies.

In 1998, the Army released fluid replacement guidelines, which recommend a certain intake of water but limit it to 1 to 1-1/2 quarts per hour and 12 quarts per day.

It takes a while for these guidelines to get "permeated out" to everybody, Gardner admitted. In the meantime, he suggested that bases take notice of the mistakes of others, and "not wait for somebody to die from (water toxicity) again," he said.

"You can't prevent everything bad from happening," Gardner noted. "But when it does, you have to learn from it."

Re: "Salty food a taste to shake"

Re: "Salty food a taste to shake"

quote... University of California at Berkeley Wellness Letter July 1995  
The many reasons to cut back on salt

QUOTE: "The salt wars continue." The anti-salt forces say everybody should go easy on salt. The anti-anti salt contingent claims that sodium restriction as a preventive measure is "unnecessary and undesirable," and terms the salt-restriction policies of the American Heart Association and other groups "misguided"—a nuisance imposed on the American public by zealots and bureaucrats who don't really know what they're talking about. The anti-salt forces strongly disagree and point to new evidence that excess salt consumption is linked not only to hypertension but possibly to other conditions as well—including osteoporosis and some cancers. . . . . "unquote

95-4286-(Hypert/Alderman)\*\*

DALLAS, June 8 -- An unexpectedly high incidence of heart attacks was found in hypertensive men with low amounts of salt in their urine, New York researchers reported today. The study is the first to link different levels of sodium intake/excretion with different levels of heart attack risk, its authors say. The findings raise important questions about the low-salt diet that's widely recommended for hypertensive patients, says Michael H. Alderman, M.D., senior author of the study and chairman of epidemiology at Albert Einstein College of Medicine, Bronx, N.Y. No particular recommendation regarding salt intake is justified on the basis of this single study, however, Alderman says. "Further research is needed to support any new national dietary recommendations," he adds. Alderman and his colleagues at Albert Einstein and at Cornell University Medical College in New York City studied a group of 1,900 hypertensive men for an average of almost four years. More than four times as many heart attacks occurred in men with the lowest amounts of sodium in their urine, compared to men with the highest levels of urinary sodium, the scientists report in the June issue of Hypertension, an American Heart Association scientific journal. The AHA defines hypertension as a chronic elevation in blood pressure to a reading of 140 over 90 millimeters of mercury or higher.....

National Center of Heart... For more information, Email [annw@xxxxxxxxxx](mailto:annw@xxxxxxxxxx)  
<http://www.amhrt.org/news/4286.htm>

Source: [http://www.salt.org.il/frame\\_phys.html](http://www.salt.org.il/frame_phys.html)

---

• *References:*

Re: "Salty food a taste to shake"

Re: "Salty food a taste to shake"

◆ **"Salty food a taste to shake"**

◇ From: yared22311

◆ **Re: "Salty food a taste to shake"**

◇ From: montygram

◆ **Re: "Salty food a taste to shake"**

◇ From: montygram

• Prev by Date: **Re: New Fat Is Needed To Clear Old Fat From The System**

• Next by Date: **Re: Cholesterol and Magic Beans**

• Previous by thread: **Re: "Salty food a taste to shake"**

• Next by thread: **Cholesterol and Magic Beans**

• Index(es):

◆ **Date**

◆ **Thread**