

Salt

For thousands of years prior to the industrial revolution salt was one of the most important traded commodities in the world. Valued as much as gold, whole economies were built upon its production and trade. In fact salt was so important that any inconsistency of supplies or lack of control of sources, were often detrimental to the communities' independence and liberty, therefore worth defending and fighting for. The influence of this substance can be seen in language and religion, from idioms such as "salt of the Earth" or "worth his salt" to references in religious text and considerable importance given to it in various rites and rituals. It also was highly revered in many ancient cultures for medicinal healing properties, for its ability to keep the mind clear and focused as well as for its grounding qualities, literally bringing one back to earth.

This once rare, though now, mass-produced and most often adulterated substance is available everywhere, ever undergoing some scientific form of appraisal, supporting its beneficial or detrimental effects on health. One thing is certain, salt is an essential part of our diet and lives; without it life wouldn't be possible and we wouldn't be here now. Depending on what side of the salt cellar you stand you can't ignore the role salt plays in our lives to our detriment or betterment.

Salt, the Preserver

Salt first started to be used in any quantity around 6000~8000 years ago, when civilisation went from hunting and gathering to cultivating crops and raising animals. Being settled in one place brought the need to preserve and store food through the long winter months to survive. Salt became the most natural and commonly used preservative favoured over drying, as apart from cutting bacterial growth it added flavour and heightened the existing flavours of the food being preserved and shortened the cooking time of the food being cooked.

Sea Salt & Refined Salts nutritional value

Natural sea salt has a mineral content of over 80 macro and trace elements. Sodium and chlorine account for 84%, sulphur, magnesium, calcium and potassium for 14% and the final 2% is a collection of essential trace elements. 24 being vital compared to industrial refined salt that retains just 2 elements, sodium and chlorine. Most salt in use today is 99% sodium and chlorine with the remaining 1% coming from chemical additives and a few trace minerals.

Industrial Salt Processing

70% of processed salt comes from commercially mined fossilised salt deposits of ancient dried-up inland seas and dead salt lakes. The mined salt is subjected to highly mechanised chemical processing to strip it of its minerals, which are sold independently being worth more in profits than the salt itself. Bearing in mind a fair amount of the mineral content has already leached out over the millenniums it has been buried beneath the Earth's surface. It is then artificial dried that destroys any of the remaining nutrients, and a number of additives are added such as anti-caking agents ferrocyanide and tricalcium phosphate to

prevent it from reabsorbing moisture. Finally, synthetic iodine is added, a requirement of the FDA and of many governments, to compensate for the poor in-land levels of it and the total lack of iodine in white table salt, but found in sea salt, to counter goitre (enlargement of the thyroid gland). In order to stabilise the volatile iodine, dextrose is added which turns the salt purple and to counter this, the salt is bleached. This quick fix method of adding inorganic iodine can not adequately supply the bodily needs due to the fact iodised salt can pass out of the body in the urine in as little as 20 minutes.

The additives that prevent salt from absorbing moisture to keep it a free flowing also prevent it from being of any benefit to the body, as it loses its ability to be absorbed naturally and be of use to the body. This all the more worrying when you consider how salt functions in the body. Salt is the main component of the body's extracellular fluid that helps carry nutrients to the cells. It also helps regulate the blood pressure and fluid volume, keeps the pressure balance normal in the lining of blood vessels and is needed for the absorption and digestion of food.

Traditional Salt Harvesting

Traditional methods of harvesting salt from the sea still continue today in small pockets around the world. Basin and pools are built to collect seawater that is allowed to evaporate leaving behind the salt, which is then sun-dried naturally. The sea salt, because of its natural make up will always retain a small amount of moisture that actually holds the micronutrients in its crystalline structure. These nutrients are unlocked from the salt crystals and released when used in cooking, fortifying the food and us by being much easier to assimilate by our bodies as well as help to breakdown the complex carbohydrates of the foods consumed. Interesting to note, sea salt in solution bears an amazing similarity to our blood and body fluids in chemical composition and ionic balance. It is fact our internal sea that carries and supplies important micronutrients to many vital organs, keeping our bodies in harmony and balance on a physical level as well as a mental level.

Legislation

When the Codex Alimentarius (a branch of the UN that determines international food standards) was drawing up legislation for world salt standards, it asked the salt industry to advise. Their answer was "salt should be pure" 99% sodium chloride with absolutely no trace elements. It's no coincidence that this is the type of salt most favoured by the chemical industry for the use in explosives, fertilisers, bleaching etc., and accounts for 93% of all salt production with only a meagre 7% going to food industry. The legislation decided upon was, salt shall contain no more than 2% of trace and extra minerals other than sodium chloride.

What we have is a whiter than white free flowing-salt that can be found on any kitchen table and in almost any processed food from Beijing to Barnstable that contributes basically nothing to our well being, in fact the opposite as it can undermine our health and bring about any number of complications; calcium depletion, endema, high blood pressure, to name but a few.

Salt in Japan

The production of salt in Japan was more or less been forbidden under state law, with the majority of Japans salt coming from Mexican salt mines that is shipped here and then

refined. The refining and sale of salt is a government monopoly monitored by the Japan Salt and Tobacco Bureau. However, over the last few years there has been a relaxing of this law and now a few small natural sea salt companies are harvesting sea salt on islands around Japan again.

Salt & A Healthy Diet

It was once said (Can't remember by who) "all in moderation nothing in excess", wise words indeed. 75% of the salt most people eat comes from eating processed foods, 10% from vegetables and the remaining 15% from being added during cooking and other sources. The average person consumes up to 6000 milligrams a day when 500-2000 milligrams a day is recommended. Highly processed foods contain large amounts of highly processed salts and many people consume a fair portion of these foods. Naturally, it is no real surprise when a health report comes out salt has the accusing finger pointed at it, with no real discrimination to the type of salt involved or how it was used and not enough attention given to the diet or lifestyles of the people involved. All salt is seen in the same negative light as escalators of blood pressure, depleters of calcium and the cause of edema and heart attacks.

Dr. John H. Largh MD. and Mark S. Pecker MDs' research at the Hypertension Centre of Cornell Medical Centre has shown high blood pressure problem lies not solely in salt intake but in an overactive hormone system. When this system is overactive, rennin (a protein-digesting enzyme released by the kidneys, acting to raise blood pressure) levels are excessively high indicating a physiological need for salt. Salt starvation can occur if the person involved is put on a low salt diet. On the other hand, the research indicated low rennin levels occur in about a third of hypertensive people and revealed a salt excess.

The need to discriminate to the quality, type and amount the salt used in our foods is clearly of importance. To take into account our diets, for example a person eating a diet of highly refined, processed foods is going to suffer any number of the ailments associated with such a diet and naturally will have salt related problems as well as a host of others. On the other hand, a person on a balanced whole food plant based diet will be spared any number dietary illnesses in life that plague so many. Also it is important to bear in mind a diet lacking in salt can be as detrimental to one's health as over consumption, basically we are saline beings. What is called for is balance, sensible eating with generous quantities of seasonal whole foods, grains, legumes, green leafy vegetables and fruits, seasoned to the right proportion with herbs & spices and natural sea salt, of course in moderation. Bon appetite.

References: A pinch of controversy shakes up salt by A. Greeley ~/- The sea around us by R. Carson ~/- Sea salt's hidden powers by J. de Langre, Ph.D. ~/- Healing with whole foods by P. Pitchford ~/- Giving salt a fair shake by J.H. Laragh MD. Cornell Hypertensive Centre
