

## **Salt and other health conditions / CASH.**

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# Salt and Other Health Conditions

## Introduction

A small amount of salt is essential for the normal physiological functioning of the human body. However, adults need just 1 gram per day and children need even less but most adults currently consume between 7 and 10 grams/day, far more than needed.

Adults should consume less than 6grams of salt per day and children much less.

A high salt diet can contribute to high blood pressure, stroke, heart disease, osteoporosis, stomach cancer, kidney disease, renal stones, and obesity. There are individual fact sheets available to download for each of these. Other health conditions that can be effected by a high salt diet include asthma, Ménière's disease and diabetes.

## Ménière's Disease

Ménière's is a rare disease, with approximately 1 in 1000 people in the UK suffering from it. 1 in 10 of these people suffer from an inherited condition (NHS, 2007). Ménière's is a progressive disease which damages the ear. In early stages Ménière's causes attacks of giddiness with nausea and vomiting, lasting anything from a couple of minutes to several hours. As the disease progresses tinnitus (ringing in the ear) becomes more prominent. In the late stages loss of hearing is common, and 50% of people loose the hearing both ears (Ménière's Society, 2009). Ménière's can occur at any age but it mainly affects people between 20 and 60 (NHS, 2007).

Ménière's can be caused by metabolic imbalances of sodium in the inner ear fluid, which can be contributed to by a high salt diet (Ménière's society, 2009). Salt also increases fluid retention all over the body. When fluid is retained in the ear, the high pressure exerted can cause Ménière's disease and the associate symptoms. A lower salt diet is thought to be extremely effective in treating Ménière's, and one study has found that a strict diet of less than 50mmol sodium (2.9g salt) can be highly effective at reducing Ménière's disease symptoms (Beard, 2006).

## Asthma

Asthma is a common condition, 1.1 million children (1 in 11) and 4.3 million adults (1 in 12) are currently being treated for asthma in the UK. On average, 3 people per day die from asthma. In 2006, there were 1,200 deaths from asthma in the UK. Asthma costs the NHS over £996 million per year, and over 12.7 million working days are lost to asthma each year (Asthma UK, 2009).

The main symptoms include wheezing, coughing, shortness of breath and tightness in the chest (Asthma UK, 2009). Anyone can get asthma, but people with a family history of allergy, asthma or eczema are at greater risk. The environment, cigarette smoke and viral infections can also contribute to risk.

A high salt diet is not thought to be a cause of asthma, but some studies have shown that a high salt diet can aggravate symptoms of asthma (Burney, 1987, Mickelborough & Fogarty 2006, Carey et al, 1993, Mickelborough et al, 2005). Salt is thought to contribute to physiological deterioration and morbidity in asthmatic men (Mickelborough et al, 2005). Salt may also increase bronchial hyperactivity. A recent population-based study in children aged 6-7 years démonstrated that adding salt to foods was strongly associated with an increased risk of respiratory symptoms such as wheezing and asthma (Corbo et al, 2008). If your child suffers from asthma, reducing their salt intake may be beneficial in combination with the other treatments for asthma.

## Diabetes

There are currently over 2.5 million people with diabetes in the UK and it is predicted that there is a further half a million people who are aware they have the condition (Diabetes UK). The NHS is spending approximately 1million/day on the treatment of diabetes and its complications (10% of total budget) (*Guardian, 2008*). Symptoms of diabetes include loss of weight, frequent urination, increased thirst, fatigue. Particularly when untreated, diabetes can lead to cardiovascular disorders, kidney failure and blindness. Diabetes is thought to halve an individual's life expectancy (*Diabetes UK, 2008*).

People with hypertension are 2.5 times more likely to develop diabetes than those with normal blood pressure (*Gress et al, 2000*). People of African and Asian origin, overweight and inactive individuals are at the highest risk.

Salt increases the risk of developing diabetes by increasing blood pressure (*Ogihara et al, 2003*). One study also suggested that a higher salt intake was directly associated with an increased risk of diabetes (*Hu et al, 2005*). Salt reduction is recommended for people with diabetes because keeping blood pressure in the healthy range helps to reduce your risk of the long term complications of diabetes (*Foldstein, 2000*).

## Current Salt Intake & Dietary Advice

Almost everyone in the UK (and the rest of the Western world) eats too much salt. The daily recommended amount in the UK is no more than 6 grams a day but the current average salt intake is 8.6g salt a day although many people are eating more than this.

People with or considered at risk of the mentioned conditions you should take extra care to ensure that they keep their salt intake below the recommended maximum of 6g. This can be achieved by simple changes, such as consuming less processed foods and checking product labels before purchase.

For more information and advice on how to reduce your salt intake, please visit our website [www.actiononhealth.org.uk](http://www.actiononhealth.org.uk)

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