Salt and stomach cancer / CASH.

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Salt and Stomach Cancer

Introduction

In the UK there were 7,700 newly diagnosed cases, and more than 5200 deaths from stomach cancer in 2007. It has a poor prognosis, with the 5 year survival rate being just 15% (*Cancer Research UK, 2009*).

The bacterium *Helicobacter pylori* is the major risk factor for stomach cancer, as it can lead to inflammation and gastric ulcers which can progress into stomach cancer (*Wang et al, 2007*).

Symptoms of stomach cancer may include indigestion, lack of appetite, a feeling of fullness, bleeding, blood in the stools, blood clots, pain and/or sickness.

Who is at risk of Stomach Cancer?

Men are at a greater risk of stomach cancer than women. Stomach cancer is most common in the over 55's, less than 8% of cases are diagnosed before this point (*Cancer Research UK, 2009*). People in the most deprived social groups are also at a greater risk (*Quinn et al, 2001*). Not all cases are infected with H.pylori, however those who have the infection are at a greater risk of stomach cancer.

How does Salt Contribute?

Studies have shown that chronic H.pylori infection, which causes ulcers and can thereby lead to stomach cancer, is closely associated with salt intake (Fig 1. Tsugane, 2005, *Beevers et al, 2004, Froman et al, 1991*). Salt has been found to increase the growth and action of *H.pylori*, thus increasing the risk of cancer (*Beevers, 2004, Wang 2008*). Salt may also act as an irritant/inflammatory agent of the stomach lining, which can expose it to carcinogens (*Lambert & Hainaut, 2007, Shikata et al, 2006*).

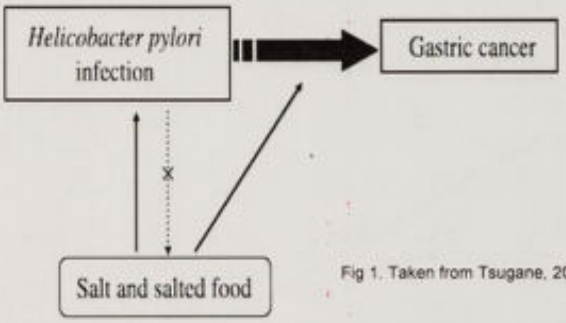

Fig 1. Taken from Tsugane, 2005

A study looking at deaths from stomach cancer among 39 populations from 24 countries found that there is a significant and direct association between salt intake and stomach cancer deaths (Fig 2. *Joosens et al, 1996*). Countries that have a high salt intake tend to have higher numbers of people dying from cancer of the stomach. In countries that have a higher salt intake, for example Northern China, Japan and Korea, this is a major public health problem. In Japan, where cancer of the stomach is the most common cancer, a positive correlation between salt intake and stomach cancer incidence in different geographical regions, has been found (*Tsugane, 2005*). A higher risk of stomach cancer has been found in people who have a preference for salty food, salt preserved meat and fish (*Strumylaite et al, 2006*). A reduction in salt intake may reduce H.pylori infection and therefore significantly reduce the risk of stomach cancer and the risk of death from stomach cancer (*Kurosawa et al, 2006*).

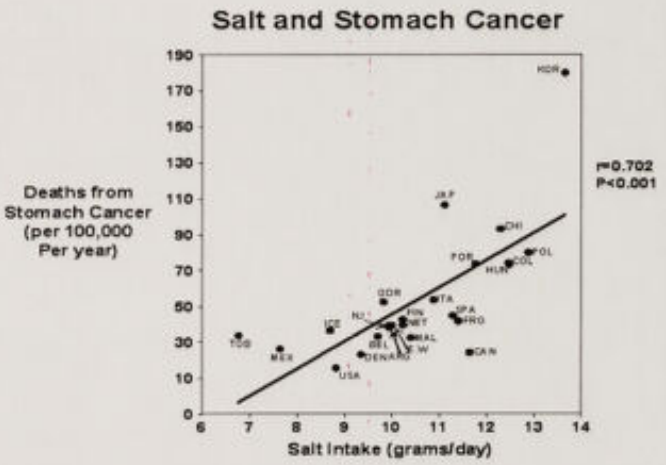

Fig 2. Taken from Joosens et al, 1996

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Current Salt Intake & Dietary Advice

Worldwide, almost everyone eats too much salt. In the UK, the daily recommended amount is no more than 6 grams a day, 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 stomach cancer should 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

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