

# GLOBAL INITIATIVE TO REDUCE SALT INTAKE

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**H**igh levels of dietary sodium intake are associated with raised blood pressure and cardiovascular disease. Furthermore, a high salt diet may have direct harmful effects independent of its effect on blood pressure, for example, by increasing the risk of stroke, left ventricular hypertrophy and renal disease. Increasing evidence also suggests that salt intake is related to obesity, associated with renal stones and osteoporosis and is probably a major cause of stomach cancer.

Sodium intakes of different populations around the world were first brought to the attention of the research community through Louis Dahl's famous graph published in 1960, showing a positive linear relationship between prevalence of hypertension and mean sodium intake across five populations.<sup>1</sup> The review of salt intakes showed that sodium intakes around the world are well in excess of physiological need both in children and adults. In a recent study, it has been found that in European and Northern American countries, sodium intake is dominated by sodium added in manufactured foods (75% of intake).<sup>2</sup> Cereals and baked goods were the single largest contributor to dietary sodium intake in UK and US adults. On the other hand, in Japan and China, salt added at home (in cooking and at the table) and soy sauce were the largest sources.<sup>2</sup>

The WHO recommends no more than 2 grams of sodium (5 grams of salt) per day. Approximately 95% of sodium is consumed in the form of salt. According to Member States data collected for the survey,<sup>2</sup> the current daily salt consumption in most European countries is estimated or measured to range between 8-12 grams per day, with few Member States above and few below this intake level.

In Malta there is very limited data. *In fact the current salt intake in Malta is not known.* However, the 1986 Intersalt Study<sup>3</sup> found that Maltese men consumed 11g per day and women consumed 9g per day. The 2002 Health Interview Survey<sup>4</sup> conducted in Malta, showed that 47% of the participants added salt to their meals while cooking, whereas 23% added salt upon eating. In the Health Interview Survey of 2008<sup>5</sup>, 22% of

the population aged above 18 years self-reported hypertension. However the burden is much higher, especially in patients above 40s. In fact, the 2010 European Health Examination Survey<sup>6</sup> reports that 46% of patients aged 41-60 years were classified as having possible hypertension while 85.5% of patients aged 60 years have been classified as possibly hypertensive.

The impact of increased salt consumption has been defined as a critical issue by the WHO<sup>7</sup> and by the European Commission. All member states are encouraged to tackle this issue immediately as the current salt consumption patterns are leading to 80% of all deaths. Strazzullo et al,<sup>8</sup> and Taylor et al,<sup>9</sup> showed that a difference of 5g a day in habitual salt intake would result in a 23% decrease in stroke cases and 17% decrease in cardiovascular disease cases. A small reduction in blood pressure of 1-4 mmHg showed a reduction of cardiovascular deaths by 5 -20%.

A common EU framework for salt reduction<sup>10</sup> has been developed, describing a common vision for a general European approach towards salt reduction for better health. Several cost-effective analyses have been carried out to assess the health effects and financial cost of reducing population salt intake. Murray et al,<sup>11</sup> showed that non-personal health interventions, including government action, to stimulate a reduction in the salt content of processed foods, were cost-effective ways to limit CVD and could avert over 21 million DALYs (disability-adjusted life years) per year worldwide.

As part of the WHO Global Strategy on Diet, Physical Activity and Health and the Action Plan for Prevention and Control of Noncommunicable Diseases, three objectives have been set, namely to create enabling environments which facilitate consumer behavioural change regarding certain food choices, support the evaluation and monitoring of dietary salt intake, and facilitate the review of salt as a vehicle for fortification to prevent iodine deficiency disorders.

The actions to reduce salt consumption include:

1. Combined policy with industry to reduce the amount of salt
2. Clear labelling on food products
3. Increasing public awareness on effects of salt on health

Malta has joined the EU initiative to reduce salt in order to reduce the burden of illness. Various initiatives have already been initiated, targeting the general public to increase awareness on the effects of salt on health and to enhance skills in using alternative products in cooking. Work has also been initiated with industry to encourage the reduction of salt. However an information gap exists whereby the actual salt consumption of the Maltese population is not known. Furthermore we lack information on what the public is actually eating. Hence the Health Promotion and Disease Prevention Directorate is planning a Food consumption survey to be carried out in 2015. The aim is to provide the basis for public health initiatives in food and nutrition areas. One of the objectives is to identify the food groups that are the major salt contributors of the national diet in order to take actions to reduce sodium intakes and hence decrease the related burden of cardiovascular and other diseases. ❄

