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THE IMPORTANCE OF COMMUNITY MARKETING PROGRAMS ABOUT REDUCING SALT

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ABSTRACT

Today the actual salt consumption in Europe is far more than 8-12 grams/person/day. The salt intake recommendation by WHO is 5g per day. According to the results of the National Food Consumption Study (2009, Hungary) the average sodium intake is 6.0g per day (15.0g per day salt). The quantity is so large not only because of food preparation but also because of food choice, as 75% of salt intake comes from food products, 10% from the original salt content of foods, and 15% from salting. Recognizing this, some leading countries (GB, Finland) have organized national programmes for the reduction of salt consumption in collaboration with the food industry, food producers, and retailers. The aim of food conversion and community marketing programmes is to raise public awareness. One of the goals for the industry is the gradual reduction (by 20-25%) of the quantity of salt in foods. By replacing high salt-content food we can also reduce the sodium intake from processed food. To some extent, regular table salt (sodium chloride) can be replaced with other mineral salts that do not contain sodium- or potassium-chloride. Most countries aim to reduce salt (sodium) intake with national initiatives. The results suggest that this is a time-consuming process; however, even a modest reduction can significantly reduce the incidence of cardiovascular diseases, thus improving public health. In Hungary we have a heart-healthy program, contributing to a balanced diet with a number of products with logo awarded through a strict set of criteria.
Keywords: salt intake, salt reduction, community marketing, processed food, heart disease

INTRODUCTION

Salt is the only mineral-originated flavour substance that is used not only for flavouring foods but also to conserve them. The popularity of salt is due to the fact that a small amount of it can improve and heighten the taste of spicy foods; at the same time, excessive use can mask the specific flavour of herbs. Table salt (NaCl) is about 40% sodium and 60% chloride, so 1g sodium is in every 2.5g salt.

According to the recommendations of the World Health Organization (WHO) adults are not to consume in excess of 5g salt per day. Yet the actual salt consumption in Europe today is far more than 8-12g/person/day. In our country the use of salt in everyday cooking exceeds the recommended amount. In the 3rd National Dietary Study (*OLEF*, 2003) the average sodium intake of women was 5.6g/day, the average intake of men was 7.3g/day. This was equal to 14.0-18.3g of salt intake.

This quantity is so large not only because of food preparation (kitchen technology) but also because of food choice, as 75% of salt intake comes from food products, 10% from the original salt content of foods, and 15% from salting. In our diet industrially processed food and restaurant food are play a major role, both of which use a lot of salt. Thus, the food industry must play an important role in any effort at reducing salt intake. Recognizing this, some leading countries (Britain, Finland) have organized national programmes in collaboration with the food industry for the reduction of salt. A number of food producers and retailers have also joined the "high salt consumption by product reformulation", which includes awareness campaigns and labelling initiatives (*EUFIC*, 2010).

SODIUM CONTENT OF FOODS AND ITS EFFECTS ON HEALTH

How to reduce the salt content of foods?

To preserve the taste and other quality characteristics of products, including food safety while reducing salt-content is a technological challenge for the industry. One effective approach is to reduce gradually the amount of salt in food products. A drastic drop in saltiness in foods we are accustomed to would be jarring and we would reject it. But if the salt content were reduced in small steps we might not necessarily notice the difference and gradually get used to a less salty flavour. Even with 20-25% sodium reduction is still possible that we would not taste the difference. Gradual sodium reduction might be the most effective method, if all manufacturers agree on a joint strategy that could be implemented at the same time.

To a certain extent salt (sodium-chloride) can be replaced by other mineral salts that do not contain sodium- or potassium-chloride. However, other mineral salts do not have the same intensity as salt and might have a bitter or metallic aftertaste. One way to solve the problem would be to mask the bitterness of the compounds by using compensating herbs, spices, and flavourings to enhance the taste of the food (e.g. lemon grass, parsley, tarragon, garlic, onion, lemon juice, fresh herbs). With a gradual reduction of salt and replacing some salt in high salt-content foods, we can reduce sodium intake from processed food.

The effects of sodium intake on health

High sodium intake is the most worrisome component of high salt consumption and represents a definite health risk. It can lead to hypertension, cardiovascular diseases, stroke, kidney disease, renal osteodistrophy, asthma, and the formation of peptic ulcers. The relationship between sodium consumption and blood pressure increases with age (*Feng and Graham*, 2010).

With the non-pharmacological treatment of hypertension by the proposed reduced intake of sodium, blood pressure decreases by 2-8 mmHg. By reducing sodium-intake to recommended levels we can achieve a reduction in mortality by coronary heart disease (ischemic heart disease) of 16% and of mortality by stroke of 22%. According to the resolution and recommendation of the Hungarian Society of Hypertension, the key factor in the treatment of hypertension is the application of non-pharmacological methods (achievement of ideal body weight, reduction of sodium intake, regular physical activity, the application of the principles of a Mediterranean diet, moderation in

alcohol consumption) in the development of appropriate lifestyle both with elevated-normal range blood pressure patients (130-139/80-89mmHg) and in patients who requiring medication therapy (*MHT-SZIB*, 2009).

According to István Barna MD, the general secretary of the Hungarian Society of Hypertension, patients may hope for the following improvements from the lifestyle therapy: "weight loss results in 5-10mmHg, decreasing sodium intake results in 2-8mmHg, healthy diet results in 8-10mmHg, regular physical activity results is 4-10mmHg, and decreased alcohol consumption results in 2-10mmHg reduction in blood pressure" (*Barna*, 2009). In this way reduced sodium content diet can decrease the development of hypertension by 10-14%.

There is a demonstrated relationship between the rate of salt intake and blood pressure in both sexes and all ages. This relationship can be detected in people with normal blood pressure and also in those with hypertension (*Feng and Graham*, 2010). According to a recent study from Zagreb, healthy salt-intake (5g/day/person) can be achieved if we change the patient's eating habits. However, for the implementation of a healthy diet, fresh fruits and vegetables have to be available in sufficient quantity as do a variety of other foods with lower sodium content. This imposes a great responsibility on the food industry (*Pavić et al.*, 2010).

The cost-effective aspects of managing hypertension

A meta-analysis by Oxford (*MacMahon et al.*, 1990) clearly demonstrates that higher blood pressure is directly proportional to increased morbidity and mortality in hypertensive patients. However, people with slightly elevated blood pressure represent the main problem in the terms of social burden because they are the most numerous (*Matos*, 1997). According to this analysis, in terms of cost-effectiveness it would be just as cheap to reduce the blood pressure of the whole population with a few mmHg (e.g. with low salt-content diets) as to prescribe effective medicines to any actual hypertensive patients (*Rose*, 1992). Within the costs of the treatment of hypertension the biggest proportion is the cost of medicines; different products have significantly different prices, making it difficult to calculate in advance the cost of the treatment. However, the total cost of treatment may be smaller in the end, if more expensive, more efficient medicine is prescribed. According to a study (*Skaer et al.*, 1993), despite the higher cost of medicines, the application of modern therapy over a year cost 185 USD less than conventional medicine. The patient's cooperation is decisive both in terms of costs and effectiveness. Modern and easy-to-use medicines are the fundamental tools in therapy for hypertension because they increase patients' compliance.

Information and labelling

The aim of food conversion and salt reduction programs is to raise public awareness of the need to eliminate the potentially harmful effects of excessive sodium-intake and to make recommendations about how to achieve a low-sodium diet.

Although in the European Union nutrition labelling is voluntary (except if nutrition content or health claims are made by the manufacturer of the food) there are some exceptions in national regulations. In Finland for example, the label must

present the salt content of foods that are produced using large amounts of salt such as meat products, breads, or canned food.

PROGRAMMES FOR SALT REDUCTION – ARE THEY EFFECTIVE?

Most countries try to reduce salt (sodium) intake with national initiatives, which are relatively new. The impact of these programs on salt-intake is often not clear yet. However, in Finland, where the salt reduction program has been working since 1975, adult Finns have been achieved a positive effect in relation to average salt-intake (9.3g/day instead of 12g/day for men and 6.8g/day instead of 12g/day for women). Another example is the United Kingdom, where the salt reduction programme was introduced in 2003. In that year the average salt-intake was 9.5g/day, while in 2008 it was 8.6g/day.

These results suggest that reduction of salt intake is a slow process. Nevertheless, according to estimations, even the modest reduction of salt-intake will significantly reduce the occurrence of cardiovascular diseases, improving public health.

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