

A Strategy to Reduce Salt Intake: The Use of a Seasoning Obtained from Wine Pomace

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Abstract : One of the most preoccupant problems related to the diet of the occidental societies is the high salt intake. In Spain, salt intake is almost twice as recommended by the World Health Organization (WHO). A lot of negative health effects of high sodium intake have been described being the hypertension, cardiovascular and coronary diseases ones of the most important. Due to this fact, government and other institutions are working on the gradual reduction of this consumption. Intake of meat products have been described as the main processed products that bring salt to the diet, followed by snacks and savory crackers. However, fortunately, the food industry has also raised awareness of this problem and is working intensely, and in recent years attempts to reduce the salt content in processed products, and is developing special lines with low sodium content. It is important to consider that processed food are the main source of sodium in occidental countries. One of the possible strategies to reduce the salt content in food is to find substitutes that can emulate their taste properties without adding much sodium or products that mask or substitute salty sensations with other flavors and aromas. In this sense, multiple products have been proposed and used until now. Potassium salts produce similar salty sensations without bring sodium, however their intake should be also limited, by healthy reasons. Furthermore, some potassium salts shows some better notes. Other alternatives are the use of flavor enhancers, spices, aromatic herbs, sea-plant derivate products, etc. The wine pomace is rich in potassium salts, content organic acid and other flavored substances, therefore it could be an interesting raw material to obtain derived products that could be useful as alternative 'seasonings'. Considering previous comments, the main aim of this study was to evaluate the possible use of a natural seasoning, made from red wine pomace, in two different foods, crackers and burgers. The seasoning was made in the pilot plant of food technology of the University of Burgos, where the studied crackers and patties were also made. Different members of the University, students, docent and administrative personal, taste the products, and a trained panel evaluated salty intensity. The seasoning in addition to potassium contain significant levels of dietary fiber and phenolic compounds, which also makes it interesting as a functional ingredient. Both burgers and crackers made with the seasoning showed better taste that those without salt. Obviously, they showed lower sodium content than normal formulation, and were richer in potassium, antioxidant and fiber. Then, they showed lower values of the relation Na/K. All these facts are correlated with more 'healthy' products especially to that people with hypertension and other coronary dysfunctions.

Keywords : healthy foods, low salt, seasoning, wine pomace

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