

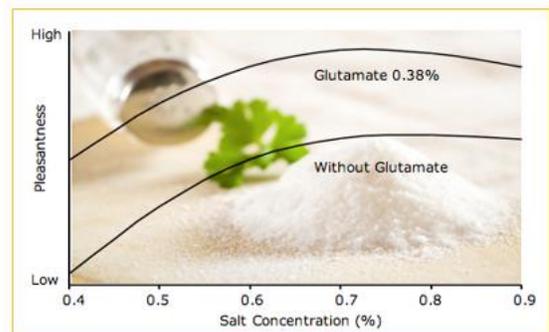


A Few Facts about Sodium in the Diet and the Advantages of Glutamate in Reducing Sodium Intake

- ❖ The reduction of sodium intake is a major health concern worldwide. Although specific recommendations and actual sodium intakes vary slightly from country to country, excessive sodium intake is prevalent worldwide. Reducing salt intake has been identified as one of the most cost-effective measures countries can take to improve population health outcomes.



- ❖ *A single teaspoon* of table salt has 2,325 mg of sodium — which is more than the daily amount recommended by the World Health Organization and other health authorities around the world.
- ❖ It has been a challenge for the food industry to develop sodium-reduced foods that have acceptable palatability, since salty taste is an important basic taste that significantly contributes to the palatability of food.
- ❖ The Institute of Medicine and the Academy of Nutrition and Dietetics in the United States have performed systematic reviews to evaluate the effect of umami compounds (such as MSG) or foods rich in umami (such as soy sauce, fish sauce, etc.) on the sodium content in foods and/or sodium intake. Based on the evidence reviewed, it was concluded that "the addition of umami compounds or foods rich in umami allows for reductions in sodium content of foods without sacrificing taste, liking and pleasantness. However, the resulting reduction in sodium may vary

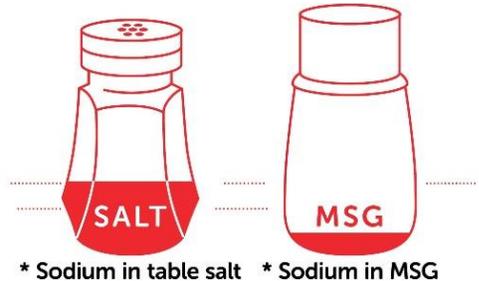


Yamaguchi and Takahashi: Palatability scores of clear soup at various concentrations of NaCl.

Conclusion: Foods with low sodium are more acceptable when a small amount of MSG is added.

depending on the type of food consumed as well as the amount and type of umami compounds present.”

- ❖ Numerous studies have shown that by increasing the level of monosodium glutamate (MSG) and decreasing the level of salt (sodium chloride), sodium content can be lowered by up to 30-50 percent, while still maintaining desired flavor. A recent study published in the *Journal of Food Science* indicates that MSG can be used to significantly reduce sodium while also promoting the enjoyment of better-for-you foods like grains and vegetables.



- ❖ Monosodium glutamate is mistakenly thought of as being high in sodium. However, MSG has two-thirds less sodium than table salt (MSG contains approximately 12 percent sodium while table salt contains 39 percent sodium).

More information is available on glutamate.org.