



Some Facts about Monosodium Glutamate (MSG)

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Glutamate is everywhere in nature. It is naturally present in the organs and tissues of the human body, in our digestive system, brain, milk, and blood. It occurs naturally in ripe tomatoes, Parmesan cheese, mushrooms, peas, and corn. The glutamate from which the food additive monosodium glutamate (MSG) is produced is obtained from products such as molasses and corn.

We all consume glutamate in our daily diet, either as a naturally occurring part of the foods that are eaten or as a food ingredient. On average, the amount of MSG that is ingested as a food additive in a meal equals only about $\frac{1}{1000}$ of the total glutamate already present in our bodily tissues. The average person in the USA consumes about $\frac{1}{2}$ –1 gram (about $\frac{1}{30}$ – $\frac{1}{60}$ oz) of MSG in a day. This is comparable to MSG consumption in the United Kingdom, but much less than the 3 grams per day consumed in Taiwan. In comparison to our consumption of MSG, we consume daily about 20–40 times more naturally occurring glutamate in the food, particularly the protein, that we eat.

A recent report stated unequivocally that there is no difference between the MSG added to foods and the glutamate that occurs naturally in foods. Also, there is no evidence that glutamate, when taken orally, produces neurotoxic or lesioning effects in the human neurologic system (Federation of American Societies for Experimental Biology, August 31, 1995). Blood glutamate levels vary following consumption of MSG in the same way they vary following consumption of natural glutamate.

Some people may be at risk

There is a subgroup of the general population of otherwise healthy individuals who may develop short-term

reactions (called the MSG symptom complex) to large doses (3 or more grams of MSG or other source of free glutamate) in a simple solution, without food.

While research indicates that people differ widely in their perceived sensitivity to MSG, many of the symptoms also occur when people drink orange juice, coffee, or spiced tomato juice. People who are concerned that they may be sensitive to MSG should consult their physician for “challenge” tests under controlled conditions to determine if MSG is in fact the cause.

Most reports of adverse reactions to MSG in the medical and scientific literature are *case reports* and not *experimental studies*, with most symptoms being transient and not life-threatening.

MSG is generally safe

MSG has been declared *not* to represent a health hazard by organizations such as the UN Joint Expert Committee on Food Additives, the World Health Organization, the Select Committee on Food Additives of the Federation of American Societies for Experimental Biology, the American Medical Association, the Commission of the European Communities, and the Institute of Food Technologists.

MSG is one of the most extensively researched food additives in the world. Results of these scientific studies continue to support the finding that *at levels normally consumed as a flavor enhancer, MSG is safe for the general population.*

And one more fact:

For people who must watch their sodium uptake, MSG contains only 12% sodium, whereas table salt is 40% sodium.