

## **Is MSG Safe? It Depends Who You Ask**

**By Jodi Forschmiedt**

Concerns about the possible harmful effects of monosodium glutamate (MSG) prompt many grocery shoppers to read labels and avoid products that contain it. Yet few people know what MSG is, or what researchers have learned about its safety as a food additive. As it turns out, a battle rages among scientists and natural food advocates, and sorting out fact from rhetoric poses a daunting challenge for consumers.

### **What Is It?**

MSG is a flavor- enhancing chemical. Ingesting it stimulates receptors in the brain, and causes the diner to find the food more pleasurable. The Chinese have used certain seaweeds for this purpose for thousands of years. For the last 100 years, food chemists have extracted MSG from natural sources. Currently, most MSG used in food products is synthesized in the laboratory.

Western cultures generally recognize four primary flavors: sweet, bitter, sour, and salty. Asian cultures have a fifth, called "umami," which loosely translates to "meatiness." When added to food, MSG provides "umami." Blind taste tests have shown that many people prefer the flavor of chicken broth and other products when MSG has been added. Many of the processed, packaged, convenient food products that adorn the shelves of supermarkets contain MSG or other forms of glutamate.

### **What Are We Concerned About?**

The problem commonly associated with MSG is known as Chinese Restaurant Syndrome (CRS), because many people notice symptoms shortly after consuming MSG laden Chinese food. Heart palpitations, numbness, and general weakness occur in some sensitive individuals. Usually the symptoms fade quickly, but Dorothy Thompson, of Virginia says "I had eaten at this Chinese restaurant and about fifteen minutes later, we pulled into a convenience store. While my boyfriend was in there, I felt myself blacking out. What was really strange was I saw these three heads coming towards me." Thompson ended up in the emergency room, and spent a week in the hospital undergoing tests. "Finally (the doctor) said I had an allergic reaction to MSG." Such severe reactions are rare, and researchers estimate that only 1% of the population experience CRS symptoms with food consumption.

The Truth in Labeling Campaign (TLC) charges that MSG and other forms of glutamate used as food additives cause numerous adverse effects, including asthma, seizures, and migraines; and that ingestion of MSG could be related to severe neuro-endocrine disorders such as Alzheimer's disease, schizophrenia, epilepsy, and more. TLC contends that the industry giants who produce glutamate have suppressed research demonstrating the harmful effects of MSG. The Campaign also accuses the glutamate industry of sponsoring deliberately faulty studies designed to falsely demonstrate the safety of their products.

### **What the FDA Says About MSG**

In a 1995 consumer information sheet, the Food and Drug Administration (FDA) states "MSG and related substances are safe food ingredients for most people when eaten at customary levels." The FDA acknowledges that some percentage of the population will have a Chinese Restaurant Syndrome reaction to MSG. Food containing MSG may also exacerbate the symptoms of people with severe asthma. The agency denies that any evidence exists linking MSG with long-term chronic disorders such as Alzheimer's disease or Huntington's chorea. Food producers are required by the FDA to list MSG on the label of any product to which it has been added.

### **Who Is Right?**

Many studies indicate that free (not attached to a protein) glutamate causes a host of problems in laboratory animals, including blindness, obesity, and brain damage. Young, immature animals are particularly susceptible to the effects. However, the animals in the studies received far more glutamate than any food product contains. To date, no studies demonstrate that MSG causes any long-term effect in humans. To the FDA that means MSG is safe. To the Truth in Labeling Campaign it means more research needs to be done. For consumers it means weighing the conflicting opinions, and exercising their best judgement.

To further complicate the question, glutamate can be added to food products in other forms, the names of which consumers may not recognize. Sodium caseinate, hydrolyzed protein, and autolyzed yeast all contain free glutamate, the component of MSG that allegedly causes

harm. Even savvy shoppers who regularly read product labels may unwittingly buy food containing unwanted additives. Teresa Widemire, of Painesville, Ohio suffers from migraines and vomiting when she ingests MSG. She routinely searches labels for the ingredient, but was unaware of the other names for glutamate in food. She now plans to avoid those ingredients as well. "It may be the cause of some of my problems. My daughter also suffers from food related migraines which may well be linked to those ingredients."

Should the average consumer examine each label and put back every product that contains glutamate? Even if you did, you might still ingest MSG when eating in restaurants or at friends' houses. Yet common sense suggests that keeping one's consumption of chemical food additives low makes good nutritional sense. You can't go wrong eating fresh, whole foods whenever possible.