### **Places where MSG is often hidden**

- Low fat and no fat milk products often contain milk solids that contain MSG and/or contain carrageenan, guar gum, and/or locust bean gum. Low fat and no fat versions of ice cream and cheese may not be as obvious as yogurt, milk, cream, cream cheese, cottage cheese, etc., but they are not exceptions.

- Protein powders and protein drinks contain glutamic acid, which, invariably, will be processed free glutamic acid (MSG). Individual amino acids are not always listed on labels of protein powders and drinks.

- At present, there is an FDA requirement to include the protein source when listing hydrolyzed protein products on labels of processed foods. Examples are hydrolyzed soy protein, hydrolyzed wheat protein, hydrolyzed pea protein, hydrolyzed whey protein, hydrolyzed, corn protein. If a tomato, for example, were whole, it would be identified as a tomato. Calling an ingredient tomato protein indicates that the tomato has been hydrolyzed, at least in part, and that processed free glutamic acid (MSG) is present.

- Disodium guanylate and disodium inosinate are relatively expensive food additives that work synergistically with inexpensive processed free glutamic acid (MSG).

- MSG will be found in some soaps, shampoos, hair conditioners, and cosmetics, where MSG is hidden in ingredients with names that include the words "hydrolyzed," "amino acids," and/or "protein." - Drinks, candy, and chewing gum are potential sources of hidden MSG and/or aspartame, Amino-Sweet (new name for aspartame), neotame, and canderel. Neotame is a relatively new ingredient that seems not to be in use in the US.

- Aspartame will be found in some medications, including children's medications.

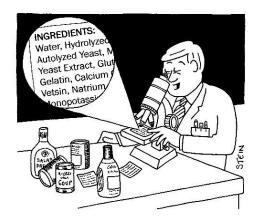
- Binders and fillers for medications, nutrients, and supplements, both prescription and non-prescription, enteral feeding materials, and some fluids administered intravenously in hospitals, may contain MSG.

- According to the manufacturer, Varivax– Merck chicken pox vaccine (Varicella Virus Live), contains L-monosodium glutamate and hydrolyzed gelatin, both of which contain processed free glutamic acid (MSG). It would appear that most, if not all, live virus vaccines contain some ingredient(s) that contains MSG.

- There are a number of ingredients identified as organic that contain processed free glutamic acid (MSG). Autolyzed yeast, yeast extract, textured soy protein, and anything hydrolyzed are examples.

Information provided by The Truth in Labeling Campaign www.truthinlabeling.org questionsaboutMSG@Gmail.com

## Sources of Processed Free Glutamic Acid (MSG)



"Eureka! I found the MSG!"

### Ingredients that Contain Processed Free Glutamic Acid (MSG)<sup>1</sup>

# Ingredients that *always* contain processed free glutamic acid:

- Glutamic acid (E 620)<sup>2</sup>
- Glutamate (E 620)
- Monosodium glutamate
- Monopotassium glutamate
- Monoammonium glutamate
- Magnesium glutamate (E621)(E622)(E624)&(E625)
- Calcium glutamate (E 623)
- Natrium glutamate
- Yeast extract
- Anything "hydrolyzed"
- Any "hydrolyzed protein"
- Calcium caseinate
- Sodium caseinate
- Yeast food, Yeast nutrient
- Brewers' yeast
- Autolyzed yeast
- Gelatin
- Textured protein
- Soy protein (also isolate or concentrate)
- Whey protein (also isolate or concentrate)
- Vetsin
- Ajinomoto

(1) Glutamic acid found **in unadulterated protein** does not cause adverse reactions. To cause adverse reactions, the glutamic acid must have been processed/manufactured or come from protein that has been fermented.

### Ingredients that *often* contain or produce processed free glutamic acid:

- Carrageenan (E 407)
- Bouillon and broth
- Stock
- Natural flavor
- Any "flavor" or "flavoring"
- Maltodextrin
- Citric acid (E 330)
- Anything "ultra-pasteurized"
- Barley malt, Malted barley
- Pectin (E 440)
- Protease
- Anything "enzyme modified"
- Anything containing "enzymes"
- Malt extract
- Soy milk
- Soy sauce
- Soy sauce extract
- Anything "protein fortified"
- Anything "fermented"
- Seasonings

(2) E numbers are use in Europe in place of food additive names

### These ingredients work with MSG to enhance flavor:

If these are present for flavoring purposes, so is MSG.

- Disodium 5'-guanylate (E 627)
- Disodium 5'-inosinate (E-631)
- Disodium 5'-ribonucleotides (E 635)

### Ingredients suspected of containing lesser amounts of MSG:

- Corn starch
- Corn syrup
- Modified food starch
- Lipolyzed butter fat
- Dextrose
- Rice syrup, brown rice syrup
- Milk powder
- Reduced fat milk (e.g., skim milk; 1% milk; 2% milk)
- Most things low fat or no fat
- Anything Enriched or Vitamin enriched