BUSINESS INSIDER

Why MSG Is Perfectly Safe

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Monosodium glutamate, more commonly known as MSG, gets a bad rap.

People claim that it's a toxin that causes headaches and sweating, and that it leaves you feeling lethargic and flushed. The thing is, most research shows that that's not true at normal dietary levels.

Despite its umami flavor boosting power, rumors have given MSG a reputation so bad that many Chinese restaurants frequently put up "No-MSG" signs to assuage customer's fear. Some customers then put soy sauce on their food, adding the missing MSG in after the fact. Because it's delicious.

The folks at the American Chemical Society decided to bust some MSG myths in their latest Reactions video.

What Is MSG And What Does It Do?

ACS/YouTube

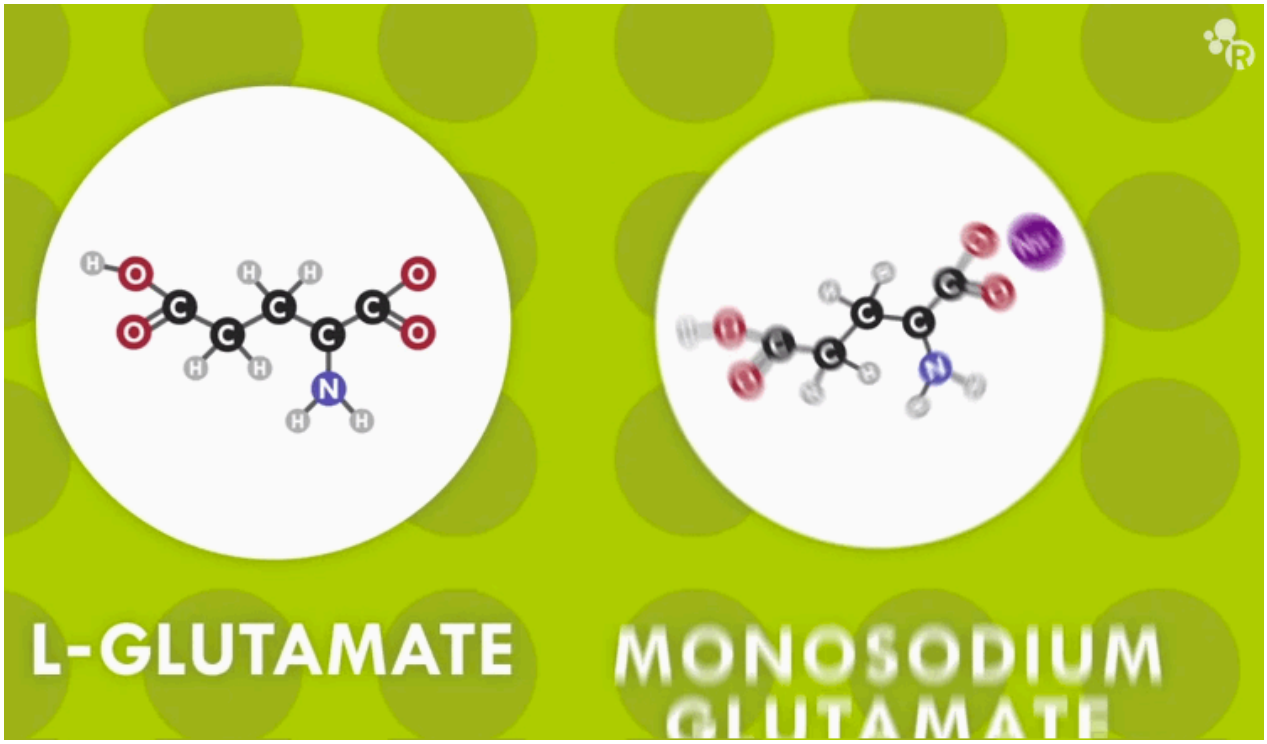
MSG's flavor enhancing properties were first discovered in 1908 by Japanese chemist Kikunae Ikeda, who wanted to understand how seaweed, which had been used by chefs for centuries, enhanced the flavor of foods.

Ikeda found that the key was a common amino acid — one of the building blocks for a protein — called L-Glutamate.

Glutamate is everywhere. It's found in many foods, including meat, dairy, and vegetables, and it's even produced in our own bodies naturally when we process food.

MSG's name tells us the key difference between glutamate and monosodium glutamate. MSG has a sodium atom that glutamate doesn't, which turns it into a salt form, making it easy to add to food. That's it.

Add it to food and it reacts with umami receptors on our tongue and allows us to better taste that savory flavor in whatever we're eating.



ACS/YouTube

The Source Of The Myth

In 1968, a scientist wrote to the New England Journal of Medicine saying that he'd experienced something he decided to call "Chinese Restaurant Syndrome" after chowing down on Chinese food. He claimed he'd experienced "a numbness at the back of the neck that radiates to the arms and back," along with "general weakness and palpitation."

At the time, they decided to place the blame on the flavor additive.

But research over the next few decades didn't support the claim that a normal dose of MSG could cause the mysterious "Chinese Restaurant Syndrome" effects.

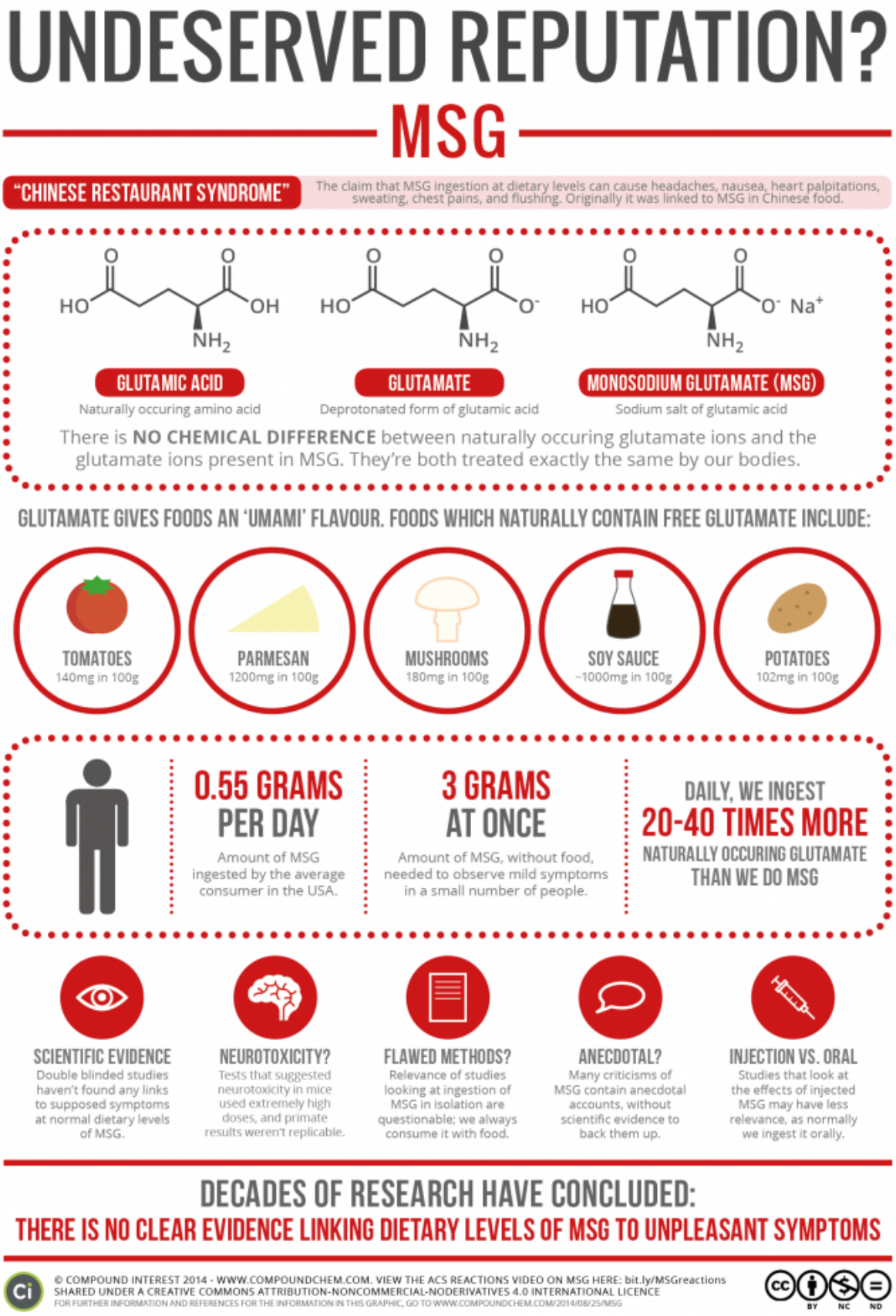
Instead, as the ACS says, the scientific consensus from that research is that "MSG can

temporarily affect a select few when consumed in huge quantities on an empty stomach, **but it's perfectly safe for the vast majority of people**."

So, a normal person may get temporary symptoms if they eat huge quantities of the stuff without any other other food. But no normal person would consume MSG in that way — it would make as much sense as eating tablespoons of salt, and cause the same reaction.

As for glutamate itself — as the ACS explains, it's one of the 20 amino acids that make up all naturally occurring proteins. Nothing to fear, here.

This graphic by Compound Interest breaks down all the research a little further:



Compound Interest

So if MSG really isn't bad for you, why do people claim they experience these unpleasant effects after they eat food that may contain it?

In a lot of cases, it's simply a placebo effect. If you think you'll feel something, you can make yourself feel that way. Some other people may experience similar reactions if they're eating something new and have some sort of allergic reaction to that food, but MSG doesn't create antibodies that could cause an allergic reaction on its own.

Other people just eat way too much when eating out, or they are sensitive to the sodium levels of the foods.

There is a key thing to learn from this food myth, as explained in the ACS video below.

"If someone tells you that something is bad for you and you can't get a definitive answer as to why, it's your job to dig in and find out for yourself. This is what science is all about, not accepting something as truth without proper evidence."

Here's the video: