

Umami – More than Advertising

A question came to my office recently asking if all the recent advertising about certain products being good sources of ‘umami’ were just advertising, or was it an honest product claim. There are certainly more than enough ads that are just ads, with no valid product behind them. But in this case, it is an honest claim. Of course the next part of the question came back “Then what is umami?” This is harder to explain.

For decades we thought that there were just four basic flavors – sweet, sour, salty and bitter. But for hundreds of years people have noticed that certain foods make other foods taste better. The French use fish broth and mushrooms. The Italians learned to use tomatoes. The Japanese use seaweed. Then a Japanese food scientist isolated the compound that made the difference in flavor and called it aji-no-moto. Today we call it MSG.

At first we thought that MSG just made salt taste saltier. But research eventually showed that just like salt or sugar, we actually have taste buds on our tongues that respond directly to part of the MSG. So that makes it a taste of its own, the 5th flavor. The part we respond to is glutamate, the G of MSG. Glutamate is one form of amino acid, part of protein. Two similar compounds, inosinate (IMP) and guanylate (GMP), also cause the same taste reaction in our brains. All three of these give us umami.

Umami is hard to describe. It makes foods taste meatier, fuller, more savory, richer or heartier. The Japanese word translates as ‘savory delicious’. When careful testing is done, foods with MSG, IMP or GMP need less salt to taste salty. They make a little bit of meat or fish taste like there’s a lot more.

MSG or its 2 cousins are not the only ways to get umami flavor. Adding certain kinds of seaweed to soup, or using seaweed to wrap sushi, can add the flavor. Mushrooms are a good source of umami. A beef-mushroom soup tastes meatier than one with just beef. Have you ever wondered why we use tomatoes in so many kinds of foods? Tomatoes are good sources of umami flavors too. Some kinds of fish have it, especially bonito. Asian fermented fish sauces have a lot of

umami. Soy sauce is another common way we add umami to foods.

Other vegetables such as celery, Chinese cabbage, spinach and sugar beets are also good sources. Think of all the different foods we add celery to, from Waldorf salad to many Spanish *sofritos*. They're all ways of adding extra flavor to your dish. Some grains give umami flavors. And many aged cheeses add umami. What's the difference between macaroni and cheese compared to macaroni cooked with milk? There's a world of difference!

There are people who can have a reaction to foods when MSG is added. But most of these people can eat many foods that contain MSG, IMP or GMP naturally and have no reaction at all. Why this happens the doctors still have not figured out. If you react to added MSG, you don't need to eat flavorless food. Add spinach, mushrooms, cheese or any of the other natural sources of umami to perk up your plate.

If you have an elderly family member who complains that 'food has no taste', try using MSG or more of the natural sources in their foods. The umami can add a lot of flavor without needing more salt. Using MSG or the foods can help reduce the amount of salt needed for best flavor. That can be a help to them and anyone who's trying to cut back on salt to manage their blood pressure.

Here's an easy way to increase the veggies in your family's diet. The Parmesan cheese, celery and mushrooms all add umami to the pasta. You won't notice there's no meat. Eat to your health!

Veggie Spaghetti from the Oven

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| 8 oz package spaghetti | 1 28-oz jar meatless spaghetti sauce |
| 1 Tbsp vegetable oil | 1 ½ cups zucchini in ½ inch pieces |
| 1 cup sliced celery | 1 cup sliced carrots |
| 1 cup sliced fresh mushrooms | 1 onion, chopped |
| 2 cups fat-free cottage cheese | 2 Tbsp grated Parmesan cheese |
| 2 cups shredded part-skim mozzarella cheese | |

Preheat oven to 350°F. Cook pasta according to package directions. Drain and put in large bowl. Add 1 ½ cups of spaghetti sauce and mix well. Heat oil in large non-stick skillet. Add vegetables, cook and stir until tender. Spread ½ cup of spaghetti sauce in 9 x 13 inch baking pan. Layer half of each the pasta, cottage cheese, vegetables and mozzarella in pan. Repeat layers with rest of each. Spread last of spaghetti sauce over top, sprinkle with Parmesan. Cover pan with lid or foil. Bake for 30 minutes, remove cover and bake 15 minutes longer, until bubbly. Let stand 10 minutes before serving. Serves 9.

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