

Umami: The Savory Fifth Taste

VOCABULARY WORDS

1. umami (noun) /u:'mɑ:mi/ - A savory or meaty taste, considered the fifth basic taste.
Example: The umami in the soup made it exceptionally delicious.
2. glutamate (noun) /'glu:.tə.meɪ/ - An amino acid that contributes to the umami taste.
Example: Glutamate is naturally present in many foods, such as tomatoes and cheese.
3. monosodium glutamate (noun) /,mɒn.ə.səʊ.di.əm 'glu:.tə.meɪ/ - A sodium salt of glutamic acid used to enhance flavor.
Example: Many savory snacks contain monosodium glutamate to improve their taste.
4. synergy (noun) /'sɪn.ə.dʒi/ - The interaction of two or more substances that results in a greater effect than when they are separate.
Example: The synergy between the herbs and spices made the dish incredibly flavorful.
5. fermented (adjective) /fə'men.tɪd/ - Having undergone fermentation, a process where microorganisms break down substances.
Example: Fermented foods like kimchi have a distinct taste and many health benefits.
6. inosinate (noun) /ɪ'nɒsɪneɪt/ - A substance that contributes to the umami taste, found in various meats.
Example: Inosinate enhances the savory flavor of the meat in the stew.
7. guanylate (noun) /'gwɑ:nɪleɪt/ - A compound that contributes to the umami taste, found in dried mushrooms.
Example: Guanylate is one reason why dried mushrooms add a rich depth of flavor to soups.



How would you describe the taste of a mushroom? Is it sweet? Sour? Salty? Maybe bitter? Or maybe it's something else — umami. Umami has been called the "fifth taste," a savory or meaty flavor that is not sweet, sour, salty, or bitter. It was first identified by Kikunae Ikeda, a chemistry professor at Tokyo Imperial University — now the University of Tokyo. He noticed that seaweed broth — a common part of Japanese cuisine — didn't really have a flavor that could be described using the four known types of taste.

Ikeda began analyzing the composition of this broth, and in 1908 identified the amino acid glutamate as the compound responsible for its flavor. At first, he produced glutamate crystals, and then, by combining glutamate with sodium, he developed a way to mass-produce the flavor as monosodium glutamate, or MSG. In 1909, a company called Ajinomoto was created to produce and sell MSG as a new seasoning. Ikeda called his newly identified flavor "umami" — which Ajinomoto translates as "essence of deliciousness" — until he could think of a better name. But it seems he never did.

The existence of a fifth taste was not really accepted at first — in part because umami is a mild taste, and often accompanied by salty or sour flavors, such as in steak or tomatoes. In fact, it took almost a century for Ikeda's discovery to be validated. In 2000, umami receptors were found in the brain, and in 2002, they were found on the tongue.

Umami is also generated by a substance called inosinate, which can be found in various types of meat, and guanylate, which can be found in dried mushrooms. There's even a synergy between the different sources of umami — which is why the combination of seaweed and dried bonito — dried, smoked, and fermented fish flakes — helps make so much Japanese cuisine taste so good, or why carrots and onions help bring out the flavor of beef.

So the next time you enjoy an aged cheese, you'll know its great taste is all about umami! Understanding umami not only enhances our appreciation for various foods but also explains why certain flavor combinations work so well together.

DISCUSSION

1. Have you ever experienced the umami flavor? If so, in what foods?
2. How do you think the discovery of umami has influenced modern cuisine?
3. What are some other examples of foods that contain umami besides those mentioned in the article?
4. How do you feel about the use of MSG in cooking?
5. How can understanding the concept of umami help chefs create better-tasting dishes?
6. What are some traditional dishes from your culture that might have an umami flavor?
7. How do you think flavor combinations work together to enhance the overall taste of a dish?