# Umami

### Introduction

Have you ever eaten something so delectable that the taste lingers in your mouth all day? Maybe you ate a pizza, cheese sandwich, succulent meat or even drank a soup and just imagining it made you taste the flavour all over again. Well, if you have, you have experienced a flavour called ‘Umami’. The word itself is Japanese and has no direct translation; it is a compound word, where ‘umai’ means delicious and ‘mi’ means taste. Although there is no English equivalent, we can understand it to mean ‘delicious taste’, or alternatively, other descriptors could be ‘meaty’ or ‘savoury’.

### Background

There are five separate tastes that exist and can be recognised by our tongue: sweetness, sourness, saltiness, bitterness and savouriness (which we have just learned is umami). Scientists have shown how the thousands of taste buds on our tongues, which contain 50 to 100 taste receptors, react uniquely to each taste. As we evolved, our taste receptors have also developed to help us. For instance, detecting sweet tastes signals that foods might be energy-rich, whereas bitterness could be a warning sign of poisons. For this reason, we mainly find ourselves drawn to things like sweets. Umami is believed to indicate foods rich in proteins.

### History

During a dinner with his family in 1907, a chemist from Japan named Kikunae Ikeda, paused because his dashi broth soup was unusually delicious. There were only four recognised taste modes at that time, but from that moment onwards, the captivated chemist was convinced there was a fifth. That evening, his wife had added some new ingredients, Kombu and fish flakes, which he decided needed further inspection. After some scientific experiments, he discovered something named ‘glutamic acid’ which was responsible for the umami flavour that night.

### Uses of Umami

By itself, umami is unpleasant, but when matched with other foods it mixes to deliver a lasting excellent taste. The amount of salt present is crucial to get the peak flavour of umami. There must be sufficient salt levels, but not too much. Studies conducted on the taste of umami have found that soups with low levels of salt can benefit from the introduction of umami. Additionally, other studies have shown that using modern forms of umami such as fish sauce can reduce the need for salt by 10-25% in foods such as curries, broths and tomato sauce.

### Sources of Umami

There are a variety of foods naturally rich in umami. Glutamate, the key part of umami, can be found in meats like sardines, anchovies, and vegetables, such as Chinese cabbage, spinach and celery. However, that does not mean we can simply cook these ingredients and hope to add umami. There are conventional cooking methods used to extract the taste in order to enhance meals. Moreover, thanks to Ikeda, he came up with a way to mass-produce the chemical monosodium glutamate (MSG) that can conveniently be added to meals during the cooking stage to boost flavour. Alternatively, food pastes, cheeses, soy sauce and fish sauce are other helpful ways to add umami to your food.

C, A, D, B

A, A, B, B

A, C, D, B

A, A, D, B

B, C, A, D

A, A

| 1 | What word would best replace ‘delectable’ on line 1?   1. Decent 2. Deserving 3. **Delicious** 4. Detailed |  |
| --- | --- | --- |
| 2 | What word would best replace ‘lingers’ on line 1?   1. **Remains** 2. Talks 3. Leaves 4. Flows |  |
| 3 | What summary best describes what ‘Umami’ is?   1. Umami is the feeling when taste food all day, good or bad 2. Umami is the feeling when you remember the taste of food 3. Umami is a Japanese flavour food has 4. **Umami is the flavour that makes food taste so nice** |  |
| 4 | According to the text, Umami has no direct translation. What does this mean?   1. The meaning has not yet been translated 2. **There are no words in English that mean ‘Umami’** 3. Japanese compound words cannot be translated into other languages 4. Japanese words are difficult to translate into English |  |
| 5 | The writer has written parts of this article in second person, what is the effect of this?   1. **It helps the writer to relate with the reader by speaking directly to them** 2. It is more formal than if it was written in the first or second person 3. The writer is trying to come across as funny 4. It makes it informal and easier to read |  |
| 6 | Which one of these facts about tongues is not true?   1. **Tongues have roughly 50,000 to 100,00 taste buds on our tongues** 2. The tongue is able to detect a variety of separate flavours 3. Taste receptors will react differently when they sense bitterness to tasting saltiness 4. Tongues helped us survive by finding energy-rich food | Tongues have thousands of taste buds that contain 50-100 receptors each. |
| 7 | What does the writer mean when they say ‘Scientists have shown’?   1. They put on a show 2. **Scientists did an experiment** 3. Scientists made a display at a fair 4. They have experienced it themselves |  |
| 8 | Which one of these statements is false?   1. Foods filled with plentiful amounts of protein will have lots of umami 2. **Our brain identifies bitter foods as being poisonous** 3. If our tongues did not develop it is unlikely we would have survived for so long 4. Tongues are complex and are continually learning about it and our history |  |
| 9 | Which one of these words will best replace the word ‘separate’ on line \_\_\_\_\_?   1. **Individual** 2. Independent 3. Variable 4. Disconnected |  |
| 10 | What type of clause is ‘which contain 50 to 100 taste receptors’ on line \_\_\_\_?   1. Main clause 2. Subordinate clause 3. **Relative clause** 4. Adverbial phrase |  |
| 11 | What is the main purpose of the second paragraph?   1. It gives the reader a lot of scientific facts so they can properly judge umami 2. It helps describe the background of the discovery of umami 3. It is mainly about how important the tongue is 4. **It highlights how important flavour and the tongue is for us** |  |
| 12 | Which one of these statements best reflects Kikunae Ikeda?   1. Ikeda invented Umami during a family dinner 2. **Ikeda realised Umami was an additional flavour** 3. Ikeda lived a very long time ago 4. Ikeda loved his family and it inspired his discovery |  |
| 13 | What writing technique is ‘captivated chemist was convinced’?   1. **Alliteration** 2. Simile 3. Metaphor 4. Hyperbole |  |
| 14 | Why does the author describe Ikeda as being ‘captivated’?   1. **It suggests the idea of umami caught his focus intensely** 2. It suggests umami has the power to put someone in a spell 3. Ikeda was mesmerised by the flavour of his wife’s soup 4. Ikeda was captured and forced to become a chemist |  |
| 15 | Which one of these statements must be true?   1. Ikeda became a chemist in 1907 2. Ikeda became a chemist after discovering umami 3. His wife had added glutamic acid into the soup 4. **Kombu and fish flakes contain umami** |  |
| 16 | Which section would give us helpful information about umami during cooking?   1. Sources of Umami 2. **Uses of Umami** 3. History 4. Introduction |  |
| 17 | To avoid unpleasant umami taste you should …?   1. Add as much salt as you like 2. **Add adequate salt** 3. Not add salt 4. Use fish sauce |  |
| 18 | Having read about umami, which taste is it most similar to?   1. Bitterness 2. Sweetness 3. **Saltiness** 4. Sourness |  |
| 19 | MSG is an example of   1. **An acronym** 2. A homophone 3. A contraction 4. A chemical |  |
| 20 | According to the passage, it says ‘conventional cooking methods used to extract the taste’. What does this suggest?   1. To get umami in your food, just use ingredients such as spinach or sardines 2. It is really simple to add umami flavours into your dish 3. It is near impossible to add umami flavours into your meal 4. **Ingredients like celery or anchovies must be prepared properly to get its umami flavour** |  |
| 21 | What does the compound word ‘mass-produce’ mean?   1. **Made in large quantities** 2. Made by a big machine 3. Made large 4. Made so its mass increases |  |
| 22 | Where would you find a text like this?   1. **A magazine** 2. A textbook 3. A cookbook 4. An encyclopaedia |  |