

The facts about...the production of glutamate

More than 1,200 years ago, oriental cooks discovered that some foods tasted better when prepared with a soup stock made from the seaweed, *Laminaria Japonica*. However, it was not until 1908 that Professor Kikunae Ikeda of the University of Tokyo isolated glutamate from the seaweed and unlocked the secret of its flavour-enhancing properties - umami. Since then, glutamate has been used throughout the world as an effective means of making good food taste better.

Today, glutamate is produced by fermentation – a process similar to that used in making beer, soy sauce, vinegar and yoghurt. The process uses natural products such as molasses, sugar cane or sugar beet, and food starch from tapioca or cereals.

In a typical glutamate fermentation process, bacteria are grown under controlled conditions in large, stainless steel tanks. Oxygen, vitamins, nutrients and a source of glucose, such as syrup derived from sugar cane, are fed to the bacteria to enable them to grow and multiply. During this process, glutamic acid is excreted from the bacteria into the fermented broth. The broth is filtered and the glutamic acid precipitated as monosodium glutamate crystals, which are dried before packing for use in the food industry and as seasoning.

For more information about glutamate please visit www.glutamate.org

