

Cutting down on sodium, not taste

As countries strive to promote healthier diets and lessen the risk of chronic illnesses, **AN UMAMI-INDUCING FLAVOUR** enhancer could hold the key to reduce salt in food without compromising on taste.

Salt intake worldwide is currently between 9 and 12 grams a day, much higher than the 5 grams recommended by the World Health Organization (WHO). That poses a significant health risk, particularly as too much salt can lead to high blood pressure, heart disease, and stroke, contributors to one in five global deaths in 2017, according to a 2019 Global Burden of Disease study.

THE PARTIAL REPLACEMENT OF SALT BY MSG ENHANCES THE POSITIVE TRAITS OF LOW-SALT FOODS

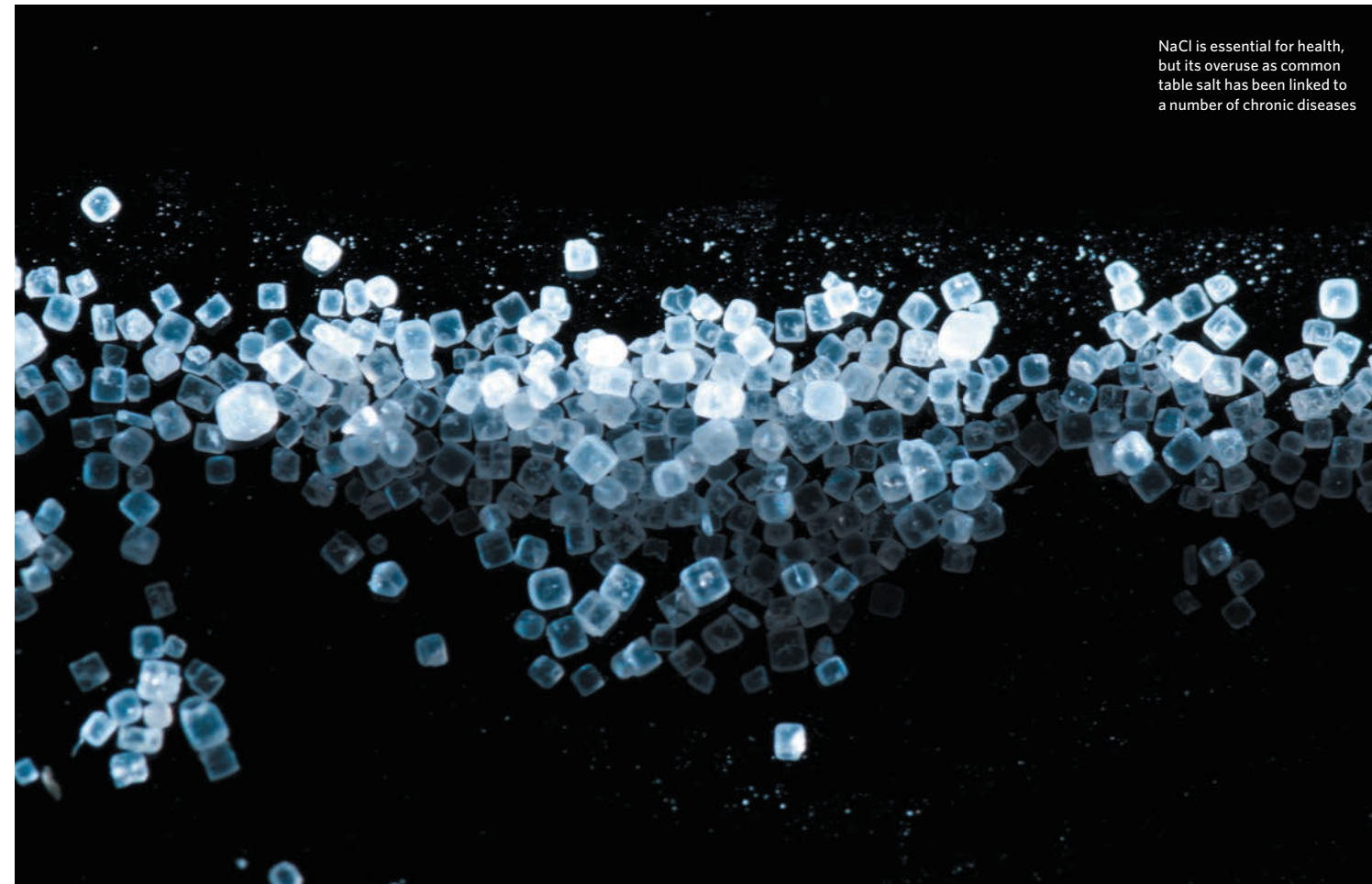
To tackle the issue, the United Nations has been collaborating with member states of the WHO since 2016 to eliminate malnutrition and reduce the global population's salt intake by 30% by 2025. And as governments address the urgent need to promote balanced diets, the Japanese food technology group of companies, Ajinomoto, is

leveraging more than a century of bioscience knowledge to help drive the global nutrition agenda.

"The Ajinomoto Group prioritizes salt reduction by providing deliciousness through umami or providing products with reduced salt," says Hiroyuki Kojima, a corporate senior vice president and general manager of the R&D Planning Department at Ajinomoto Co., Inc.

"This is part of our aspiration as a group, to help people 'Eat Well, Live Well,' and extend their healthy life expectancy by providing strategies to decrease salt intake without compromising taste," Kojima adds.

Umami, which roughly translates to 'savory' in Japanese, is known as the 'fifth taste' alongside sour, sweet, salty, and bitter. It was first discovered in 1908 when Japanese scientist Kikunae Ikeda identified glutamate as the amino acid that gives kombu — a type of kelp — its umami flavour. Glutamate is also an umami-inducing substance found in many foods such as cheese, meats, and tomatoes. Given that



NaCl is essential for health, but its overuse as common table salt has been linked to a number of chronic diseases

glutamate is one of the building blocks of protein and peptides, it keeps bodies functioning, and aids in the digestion of protein.

In the food industry, the most frequently used flavour enhancer is derived from glutamate and called monosodium glutamate or MSG. By weight, MSG contains two thirds less sodium than salt, and as there's no chemical difference between the glutamate found in foods and commercially manufactured MSG, the body processes them in the same way. Kojima says that this makes MSG a perfect candidate for enhancing the taste of low-salt dishes.

"Umami seasoning is such a good alternative because with less sodium than salt and without adding aroma, the partial replacement of salt by MSG enhances the positive traits of low-salt foods," says Kojima.

Today, Ajinomoto sells its products across 130 countries and territories, in everything from supermarkets to street stalls. Ajinomoto has also made its thinking around healthy eating readily accessible to consumers. For instance, in 2017, Ajinomoto was able to reduce the salt intake in Iwate, a prefecture in northern Japan. To improve people's diets, the company

collaborated with retailers and the Iwate prefectural government to promote low-sodium products and recipes using locally-sourced ingredients. It also raised awareness of the importance of reducing salt-intake through informative in-store displays at supermarkets. That programme has already spread to six prefectures across the Tohoku region in northern Japan, and Ajinomoto plans to expand it to a further 39 prefectures in the future.

Promoting the value of a healthy diet, reducing salt intake, and encouraging protein consumption is crucial in Japan, where more

than 28% of the population is aged 65 and older. The elderly are more vulnerable to chronic illnesses and protein is critical in maintaining muscles, mobility, and a strong immune system. Ajinomoto Co., Inc. produces amino acid supplements designed to help maintain and increase muscle mass. The company also has a database of recipes on its website that explores how MSG, itself an amino acid, can complement protein sources like beans and tofu, and other seasonal vegetables to produce delicious dishes.

On an international level, one of the most cost-effective measures countries can take

to improve people's health is reducing salt intake, according to the WHO. However, not all consumers are aware of the nutritional value of the foods they buy. Over the next few years, Ajinomoto Co., Inc. plans to roll out Japan's first nutrient profiling system (ANPS) based on the Australian government's Health Star Rating system. That initiative assigns health ratings to packaged foods and beverages. The ANPS will rate the nutritional value of 500 products from the Ajinomoto Group.

The accumulation of nutritious meals throughout the year and one's lifespan

makes up a healthy diet, according to Kojima. It's about bringing out the best in affordable, locally-sourced and sustainable ingredients, and forming bonds through sharing that knowledge. "We want consumers to enjoy flavourful low-salt products and simple but nutritious dishes that they prepare together with friends and family," says Kojima. ■

Eat Well, Live Well.

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Ajinomoto has been enhancing flavour for more than 100 years



Broth and mushrooms are natural sources of monosodium glutamate

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