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# “The Ajinomoto Group Works for Life”:

Humanity is now facing enormous challenges that include preventing environmental pollution, ensuring food safety, securing food resources, and fighting against global warming. The Ajinomoto Group is determined to help solve these issues. Over the past century, the group has cultivated new perspectives as well as new technologies and business models; in what way should it develop in the next 100 years? Norio Yamaguchi, president and CEO of Ajinomoto Co., Inc., and Peter D. Pedersen, president and CEO of E-Square Inc., talk about the future direction of the Ajinomoto Group.



## 100 Years since the Discovery of Umami

**Pedersen:** I understand that this year is the 100th year since the discovery of umami and the 99th year since the founding of the Ajinomoto Group. In light of the past 100 years, what do you see as an important frame of reference for developing the business of the group in the future?

**“I would like to build the foundation for the next 100 years on the pride that the group ‘Works for Life’—through its life, for a better life—and has been doing so for the past 100 years.”**

**Yamaguchi:** The Ajinomoto Group is a manufacturer and its mission is to develop and supply products that are useful for individuals and society. In

order to do so, a company needs more than new technology; its business models are just as important.

Exactly 100 years ago, Dr. Kikunae Ikeda discovered that glutamate was the chemical basis underlying the umami taste in kelp. Soon after this new discovery, the Ajinomoto Group created a technology that would lead to the mass production of a glutamate-based umami seasoning. The important point was positioning the new product as a seasoning for the table. I believe that expressing the essence of the discovery in the single term “AJI-NO-MOTO,” which is written with three characters in Japanese that literally mean the “source of flavor,” was a magnificent business model. The exclusive dealer system for marketing and spreading the new product, region by region, was another novel business model. The establishment of a new product only becomes possible with both new technology and new business models. The Ajinomoto Group has been able to carry on business for 99 years because its combination of these two elements was very effective.

**Pedersen:** Hopefully, this foundation of the group will not change in the future. I hear that applications based on amino acids are spreading to other areas beside food.

**Yamaguchi:** There are now huge markets for amino acids other than glutamate—such as lysine, threonine, and tryptophan—for use in livestock feeds. A good balance of essential amino acids is necessary for raising livestock. But feeds, which consist mainly of plant ingredients like corn and wheat, are often deficient in certain amino acids.

# A Business Development Slogan for the Next 100 Years

Peter David Pedersen

Born in Denmark in 1967, Mr. Pedersen graduated from the Department of Anthropology, University of Copenhagen. After setting up his career as an environmental consultant, Mr. Pedersen also worked as a newscaster. In 2000, he established E-Square Inc. and became its chief executive. He continues to be active in environmental and CSR consulting for businesses. Mr. Pedersen's published works include *People with Visions in a Country without a Vision* (written and edited by Pedersen in Japanese; published by Kaizosha), *Dictionary of Environmental Management and Strategy* (written by Pedersen in Japanese; published by the Industrial Research Center of Japan), and *Life in LOHAS* (written by Pedersen in Japanese; published by Business-sha).

As a result, animals are fed excessively in order to provide them with adequate amounts of these amino acids. An alternate solution would be to supplement feeds with the amino acids that are insufficient, and thereby decrease the amount of feed given to livestock. The livestock would absorb and utilize the amino acids according to their requirements, and excretion of wasted nutrients would be reduced because the livestock would no longer need to be fed in excess.

Pollution of soil and groundwater by livestock excretion has become a problem in some developed countries where large-scale and intensive livestock production thrives. The Ajinomoto Group has carried out studies and reached the conclusion that this type of pollution can be mitigated by using feed-use amino acids. From here on, the Ajinomoto Group will have to widely disseminate the fact that it is possible to raise livestock not only more efficiently but also in a manner that is friendlier to the environment.

## **Mission: Providing a Safe and Stable Supply of Food**

**Pedersen:** In recent news related to food safety in Japan, incidents of frozen *gyoza* (dumplings)—a familiar food in Japan—found to be contaminated with an agricultural chemical have brought food safety management under close scrutiny.

**Yamaguchi:** There are those who believe this kind of problem could be neatly solved merely by ensuring the thorough labeling of a product's origins. But that is not the answer. In my opinion, the key to a higher level of food safety is a traceability system. Consumers should not be making purchasing decisions based merely on impressions or hearsay regarding a country's supposed level of food safety. They need to learn how to trace a product, to examine its history and the various stages of processing it has undergone, so that they can make informed judgments. If people's choices were based solely on origin, there would be nothing left to eat in Japan, which has a food self-sufficiency ratio of only 20 percent, not considering rice.

**“I think that the most important evaluations of the CSR efforts carried out by the Ajinomoto Group will be those made 100 years from now.”**





It is important to communicate the real situation to consumers: The essence of the problem is that Japan, which is so dependent on other countries for its food supply, must develop its screening capacity so that safe food can be delivered to customers with peace of mind. It is important to establish a system that does not let unsafe food come through the screening filter. At the Ajinomoto Group, that filter is the Ajinomoto System of Quality Assurance (ASQUA). In order to meet the standards of ASQUA, production is managed right from the arrangement of raw materials through to the release of a product into the market. That is our basic practice. We follow this system at our own plants, as do our subcontractors. The important point is to assure quality in every single step along our supply chain.

Take the frozen foods we make in China as an example. The fields where vegetables are cultivated are managed under the same standards as Japan. Only the ingredients that have cleared these standards are processed in our plants.

**Pedersen:** I would like to move into the next topic. The price of food is skyrocketing nowadays, and there is unease about whether it will be actually possible to meet worldwide demand for food, which is going to continue increasing. How will the Ajinomoto Group respond to such macro-level changes?



**Yamaguchi:** There is no doubt that the balance of supply and demand for food is headed in a tight direction. In such circumstances, we need to demonstrate the significance of the existence of the Ajinomoto Group.

The core value of the group's business is its amino acid-producing technology. The Ajinomoto Group is taking current product specifications and setting them as

wide as possible. Our intention is to seek out new technologies that, for example, will make the most of a wide variety of raw materials to produce the same product, while allowing us to use the minimum amount of resources necessary. In doing so, we hope to make a contribution toward food sustainability and protect the earth's dwindling natural resources.

Ideally, with superior fermentation technology, it will be possible to increase the yield of amino acid currently being produced from the same amount of raw material. The fermentation technology of the Ajinomoto Group allows us to use food resources effectively, which leads to greater added value and, by extension, contributes to humanity.

What is more, after the amino acid-extraction process is complete, we do not dispose of the significant amount of active components left behind but, instead, convert the material into fertilizer. This is called a "bio-cycle," and starts with agricultural raw materials, from which we get glutamate and other amino acids; we then return any unused byproduct liquid, in the form of a nutrient-rich fertilizer, to the farmland instead of discarding it. Basically, the bio-cycle—a resource recycling-oriented production process—forms the foundation of the business operations of the Ajinomoto Group. The better this cycle runs and the more effectively agricultural produce is used, the greater the value of the group becomes and the less waste we generate. The group can contribute greatly to solving environmental problems and the shortage of food raw materials through this type of business practice.

### Two Approaches to Fight Global Warming

**Pedersen:** Group-wide, Ajinomoto emits almost 2.4 million tons of CO<sub>2</sub> per year, which corresponds to 0.01 percent of worldwide emissions. How is the group working to reduce CO<sub>2</sub>?

**Yamaguchi:** Our goal is to achieve zero emissions of CO<sub>2</sub> and other greenhouse gases, and minimize any adverse environmental impact generated by our business activities. We have established numeric targets that are higher or

stricter than the regulations set by the countries and regions where each of our business sites are located. While we have achieved our group-wide target for CO<sub>2</sub> reductions per unit of production, the volume of production is increasing. So, we need to continue making greater efforts.

I would like to approach the reduction of CO<sub>2</sub> from two angles. One is reducing the emission of CO<sub>2</sub> from the production process to the bare minimum, through the development of new technology. The other angle is reducing emissions from society through the environmental contribution characteristics of our business and products. The feed-use amino acids I mentioned are a good example. Reducing the amount of livestock excretion would lead to a reduction in N<sub>2</sub>O—a green house gas with 300 times the global warming effect of CO<sub>2</sub>—that is emitted from the excretion. We are demonstrating this with scientific data.

**Pedersen:** Soil ordinarily has the ability to fix CO<sub>2</sub>. When soil dies, this ability is lost. If the Ajinomoto Group were to leverage its business characteristics to push forward projects that improve the productivity and CO<sub>2</sub>-fixing capacity of soil, this would lead to a reduction of CO<sub>2</sub>. Attention has been zooming in on the problem of climate change, and stakeholders are asking companies to take more proactive action. I think that, in addition to specific countermeasures, how companies demonstrate leadership in dealing with climate change based on carbon management strategies will become important. The Ajinomoto Group has already built a good foundation, by expanding its business through various approaches, in order to contribute to society. I hope the group will put CSR and its core business on the same axle and take the lead in the area of CO<sub>2</sub> reductions.

### CSR through Business in the Ajinomoto Group

**Pedersen:** There are three broad principles to CSR. The first is to design a company growth strategy that is in accordance with ecological principles. The second is to develop, in each market, business models that do not abandon the weak. The third is to fulfill one's responsibility to the future. The current evaluators of business activities are customers and investors; but it is important to consider how one's actions will be evaluated by future generations. I think that the most important evaluations of the CSR efforts carried out by the Ajinomoto Group will be those made 100 years from now.

**Yamaguchi:** The 2008 – 2010 Medium-Term Management Plan, which we commenced in April 2008, is subtitled, "Building a Foundation for the Next 100 Years." It points exactly to what you are talking about. To begin with, I think that the reason the demand for glutamate, which is the origin of our business, has continued to grow over the past 100 years is because the three principles you mentioned hold true for our business model.

In developing countries, the glutamate-based umami seasoning *AJI-NO-MOTO*<sup>®</sup> can be used as an affordable and flavorful product, enhancing the culinary lives of the people while providing nutritional support. In a developed nation such as Japan, new uses for glutamate can be

explored by a healthcare food market targeted at an aging population. By making healthcare food taste good, thereby encouraging people to eat well, glutamate can help improve the physical and immune strength of the elderly. Umami, one of the basic tastes commonly produced by the amino acid glutamate, is already starting to show great potential in the sector of healthcare food.

Recently, our research group made a new discovery. It confirmed that glutamate is sensed not only by the tongue but also in the stomach, and has an important physiological role in the digestion of food. The presence of these glutamate receptors in the human body emphasizes the potential for new uses of glutamate. A related article regarding the function of glutamate has since appeared in *Forbes* magazine.

For some years now, interest in umami has been really growing, not only among researchers but also among chefs and other figures in the food industry, especially in the United States. Umami has been introduced in numerous newspapers and magazines, including the *Wall Street Journal* in December of last year, and the *New York Times* and *Chicago Tribune* this year.

**Pedersen:** So, the Ajinomoto Group has started to see new roles for glutamate.

**Yamaguchi:** Thus far, it has become widely accepted that umami is one of the elements that go into making something taste flavorful. However, we need to connect this to the fact that glutamate, the essence of umami, is also necessary for the body, and to educate people on the new uses



mentioned previously, as revealed by the presence of glutamate receptors in the stomach. If people realized foods with umami—which taste good—are in fact also good for you, they would inevitably enjoy a healthier life. Undertaking activities to communicate these two facts about umami and glutamate to stakeholders is part of the "Ajinomoto Renaissance" that will drive the next 100 years, which is neatly summed up in our business slogan, "The Ajinomoto Group Works for Life." I would like to build the foundation for the next 100 years on the pride that the group "Works for Life"—through its life, for a better life—and has been doing so for the past 100 years.

Amino acids are an essential nutrient for people and I believe that the 21st century will be the century of amino acids. I am confident that the Ajinomoto Group, which has honed its amino acid-producing technology, has irreplaceable value, especially in this world facing the huge issue of whether adequate food resources can be secured for the whole of humanity.

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