For the physically challenged and the elderly, whose gripping power is weak and who are unable to move their hands and shoulders as they wish, regular forks and spoons are difficult to use. For these people, simply eating a meal can be stressful and affect their quality of life.

A Japanese company has been tackling this problem. Located in Tsubame, Niigata Prefecture, Japan’s largest production area of Western tableware, AOYOSHI Co. manufactures innovative spoons, knives and forks for the physically challenged and the elderly.

AOYOSHI embarked on the development of spoons for welfare use in 1986.

“Before that, overseas contract manufacturing accounted for 90% of our products. The yen appreciated sharply due to the Plaza Accord in 1985, and the export industry in Japan as a whole was hit hard. The Western tableware industry in Tsubame was also stuck in a slump, and difficult times continued for our company,” says Kohei Akimoto, senior executive director of AOYOSHI.

To overcome the crisis caused by the sharp appreciation of the yen, AOYOSHI needed to develop its market in Japan rather than overseas. To that end, it worked on the development of “spoons for welfare use” as a new brand concept for the domestic market. AOYOSHI was inspired by Yoshiro Aoyagi, then-president (current chairman), who made utensils for his daughter, who had a disability in her hands due to polio. He devised spoons that were easy for her to use.

“I came up with the idea that if we make spoons for those who have difficulty using their hands, it will contribute to society,” says Akimoto, looking back on that time.

However, mass-produced products did not sell at all at the beginning. Individual needs can differ widely due to the degree of disability in terms of the size of a product and also depending on the dominant hand of the user, and it was difficult to meet these needs. In a desperate effort to create a variety of designs and find an ideal material, Akimoto came across a new material called “shape memory
polymer” developed by Mitsubishi Heavy Industries (later spun off, in 2008, and currently SMP Technologies Inc.), which can transform itself freely, as much as needed, with the application of heat.

Looking for a way to customize the products for the needs of the physically challenged, Akimoto thought, “This is it.” He asked Mitsubishi Heavy Industries to pursue joint development by visiting the company and saying, “I want to make products for welfare use.”

His passion moved the large company, and the “WiLL-1,” a spoon for welfare use, was created in 1991. The grip part of the WiLL-1 becomes easily malleable when soaked in hot water at 70°C or higher, softening like rubber according to the shape of the hand of the user. The grip then hardens in the new shape when soaked in cold water at 20°C or lower. This has enabled AOYOSHI to meet a variety of needs and create a grip that can be adapted to the hand of each individual user.

The WiLL-1 was a selected work at “Japanese Design: A Survey Since 1950,” sponsored by the Philadelphia Museum of Art in 1994, due to its highly valued functionality and design. AOYOSHI continued to improve the product and established a new brand in Japan, receiving many awards, including the Good Design Award (at that time, the Minister of International Trade and Industry Award) in 1996 and the First Kids Design Award (the Kids Design Association President’s Award and the Product Design Division Award) from the Ministry of Economy, Trade and Industry in 2007.

In addition, the “Light Universal Spoon,” launched in 2004, became a hot-selling product following the WiLL-1. The prevalent spoons in Japan are based on a Western size and are too heavy for the elderly. They are difficult to use and can even cause accidental swallowing because the quantity of food that they hold is too large.

For example, the quantity of food held by an average curry spoon is about 25 grams, which is too large for an elderly person whose swallowing strength has weakened. AOYOSHI has decreased the size to about 16 grams by flattening the shape of the bowl part that holds the food and lightening the weight by hollowing the grip. In addition, AOYOSHI has completed a “spoon that is easy to use for the elderly,” pursuing functionality and a beautiful design jointly with researchers on welfare and human engineering, for example, with a unique angle at the neck part.

If you sit in front of tableware with a brilliant and beautiful form, you will feel like picking it up and using it. AOYOSHI has received feedback from users such as, “I have regained the joy of eating” and “I have found a silver lining in my life.”

“We would like to continue to manufacture products for the elderly and the physically challenged so that they can enjoy eating. We would also like to make comprehensive proposals for products related to “food,” for use around the dining table to unit kitchens,” says Akimoto.

AOYOSHI continues to pursue the development of functions and designs that support the joy of living.