

Innovation Management

Product Development

Our Basic Approach and Strategy

Unicharm's basic development policy declares that we must continue to create new value through technology innovation. Based on this policy, Unicharm constantly carries out research on nonwoven fabrics, super absorbent polymers, and pulp and paper, and develops and upgrades processing technologies for these materials, always engaging in activities with innovation in mind. We are also strengthening our measures to shorten the lead time from the start of product development to product release.

Unicharm's product development consists mainly of the development of personal care products and partner animal (pet) care products. When developing personal care products, we uncover new product ideas by considering all stages of life and evolve them into actual products based on our mission of bringing ideas to life by turning unpleasant experiences into comfortable ones. In terms of our partner animal (pet) care products, we strive to cater our development to specific breeds and age groups with the goal of helping ensure the well-being of dogs and cats and enabling them to live in harmony with their families and society at large. In both areas of development, we value the importance of on-site interaction and, therefore, Unicharm's team of developers visit our customers' homes around the world to identify needs and turn ideas into products by repeatedly developing and verifying hypotheses. Once product specifications are determined, we work together with a number of relevant departments, including production equipment and material procurement, to ensure quality for mass production.

In recent years, we have had to refrain from visiting customers in person and conducting interviews due to the effects of COVID-19. However, we are taking new initiatives to continue our global R&D activities even under such circumstances.

An example of such an initiative is the development of the Digital Scrum System. Using this system, we can make virtual visits to customers' homes through an online platform that offers vivid sounds and images to help identify their lifestyles and usage patterns. Also, the ability to remotely observe changes in daily living environments, including those of partner animals (pets), at any time of the day helps us gain new insight into our customers. Moreover, the Digital Scrum System has facilitated product improvements and facility upgrades at our manufacturing sites overseas through the provision of technical guidance and instructions. We will continue to thoroughly monitor our customers' lifestyles and usage patterns, discover the true needs behind them, and continue to take on new challenges in a timely manner without fearing failure or being content with the status quo.

Management Structure

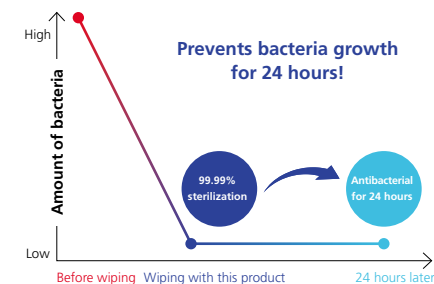
At Unicharm, we have been developing new products and revamping existing ones through R&D&E (research, development, and engineering), an R&D structure that spans our five product categories (wellness care, feminine care, baby care, *Kirei* care, and partner animal (pet) care) and closely coordinates research into products that provide new value to customers, the development of materials and technology necessary for proposing new value, and the engineering of equipment to produce these. Furthermore, for Unicharm, which continues to expand business on a global scale, it is essential that we roll out products based on the characteristics of each country and region. Accordingly, we have established satellite offices of the R&D Division at major overseas subsidiaries and created a structure that facilitates the local development of products tailored to the needs of each country and region.

Initiatives and Results

Silcot 99.99% Sterilization Antibacterial Plus Wet Wipes (Japan)

In response to the growing emphasis on maintaining cleanliness, in October 2022 Unicharm released its *Silcot 99.99% Sterilization Antibacterial Plus* wet wipes, containing a plant-derived antibacterial agent that inhibits the growth of bacteria for 24 hours by simply wiping surfaces. The antibacterial agent consists of glyceryl caprylate, glyceryl undecylenate, and glyceryl ricinoleate, and these wet wipes can be used safely even on dining tables.

Sterilization*1 and antibacterial*2 effects



*1 Does not eliminate all bacteria

*2 Inhibits the growth of bacteria on surfaces wiped with wet wipes.

BabyJoy Olive and SOFY Olive (Saudi Arabia)

In Arab regions, many believe that olive oil can be gentle on the skin. Based on this belief, in 2021 we released *BabyJoy Olive*, a disposable baby diaper coated with olive oil, which moisturizes the top sheet, an area of the diaper that directly contacts the skin. In addition, we conducted interviews with women in Saudi Arabia and found that olive oil, which is also mentioned in the Quran, is used to deal with skin problems in delicate areas. In view of this, in May 2022 we released *SOFY Olive*, a sanitary pad that comes with olive oil on the top sheet, by drawing on the knowledge accumulated to date through our development of disposable baby diapers.



Silcot Vitamin C PLUS+ Moisturizing Cotton (Japan)

Skincare has been gaining increased attention in recent years due to the rising number of skin-related concerns arising from wearing masks during the COVID-19 era. In light of this, in October 2022 Unicharm released its *Silcot Vitamin C PLUS+ Moisturizing Cotton*, a cotton sponge coated with ascorbyl glucoside and trisodium ascorbyl palmitate phosphate, vitamin C derivatives used in many skin care products, and niacinamide (vitamin B3). Also, this product has been designed to leave very little lotion on the cotton sponge.



Moony and Moonyman Diapers Featuring Additive-Free* and Mildly Acidic Sheets (Japan)

In October 2022, Unicharm released *Moony* and *Moonyman* diapers (excluding *Super Big* types) with additive-free, mildly acidic top sheets, which come into contact with babies' skin. In addition, all *Moony* products were tested for allergens and certified with the OEKO-TEX® STANDARD 100, the world's leading standard for safety. Also, to prevent leakage of soft stools during a baby's early stages of life, the loose stool stoppers attached to the back area of the diaper are now also attached to the leg areas for newborn (birth to 5,000 grams), small, and medium sizes.



* Free of petroleum-derived oil, fragrance, latex, and synthetic coloring

P025 Provision of Safe, Reliable Products

AllWell Brand of Healthy Cat Foods (Japan)

In 2020, Unicharm addressed the increasing health-related concerns over cats with the release of its *AllWell* brand of healthy cat food, helping maintain the health of cats by offering seven functions that center on reducing regurgitating. We also found that cat owners who prefer dry cat food feel that their cats eat too quickly and are highly concerned about their cats' immune systems and kidneys. Accordingly, in September 2022, Unicharm introduced three new types of *AllWell* cat food: for cat owners who are concerned about their cats eating too quickly, for the support of healthy immune systems,* and for the maintenance of healthy kidneys in adult cats.

* Contains antioxidants to help maintain physical health and a healthy immune system



Cat Food That Addresses Growing Needs for Peace of Mind (Japan)

There is a growing demand for cat foods that are made of quality ingredients and offer peace of mind. With wet foods in particular, cat owners are placing more emphasis on additive-free products. With this in mind, in 2022 Unicharm released its additive-free series of *Silver Spoon Pouch* and *Silver Spoon Three-Star Gourmet Pouch* cat food, containing no seasonings or coloring. Meanwhile, in response to the increasing focus on products containing domestically produced ingredients, we released *Silver Spoon Three-Star Gourmet Snacks Nippon Select*, which contains carefully selected ingredients from all across Japan, and *Silver Spoon Three-Star Gourmet Pouch 100% Domestic Bonito Flakes*, a product developed in tandem with Hagoromo Foods Corporation consisting entirely of domestically produced bonito flakes. Furthermore, in 2022 we released *Silver Spoon Domestic Tuna in*, containing fine raw bonito generated from the processing of tuna caught in Japan.



Additive-free series



Products containing domestically produced ingredients