

January 26, 2026

## Oryza Oil & Fat Chemical Launches “Lactobacillus Fermented Water”

### – A Botanical Toner Base that Enhances Cosmetics Through the Power of Fermentation –

Oryza Oil & Fat Chemical Co., Ltd. (Head Office: Ichinomiya City, Aichi Prefecture; President & CEO: Hiromichi Murai, hereinafter referred to as “Oryza”) is pleased to announce the launch of “**Lactobacillus Fermented Water**” for cosmetics on January 26, 2026. We propose this new material as a high-performance botanical toner base that elevates both the emotional value and functional value of cosmetics.

#### ■ **Background: “Commitment to the Top of the Ingredient List”**

Most cosmetics are composed primarily of water, and it is common for “Water” to be listed first on the ingredient list.

Oryza began development to respond to the voices of cosmetic manufacturers who wanted to dispel the impression that “cosmetics are basically just water” and place an ingredient with emotional value and functional value at the beginning of the ingredient list. After more than 50 prototypes focused on perfecting the scent, color, and functionality, we created **Lactobacillus Fermented Water** to update the foundation of cosmetics using the power of fermentation.

This ingredient is suitable for various products, including lotions, shampoos, and conditioners.

- **Skin Care**: Ideal for products that address skin irritation caused by pollen, winter dryness, or summer heat.
- **Hair Care**: A great option for “moisture-focused formulations” that prevent frizz and dryness caused by moisture imbalance.

#### ■ **Features of Lactobacillus Fermented Water**

##### **① “Emotional Value” – Fermented with Lactobacillus from Cherry Blossoms**



**Lactobacillus Fermented Water** is fermented using “**さくら乳酸菌™ / SAKULORATM**”, which was discovered on the petals of Japanese “Shidare-zakura” (weeping cherry trees). This lactic acid bacterium is Oryza’s original strain, selected through rigorous screening from over 100 types of lactic acid bacteria collected from various cherry blossoms throughout Japan.

It imparts emotional images such as “Japanese beauty,” “spring,” and “the beauty of transience (the heart that finds beauty in things that fade)” to cosmetics.



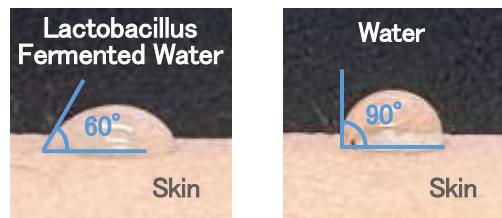
さくら乳酸菌™/SAKULORA™ was first launched as a food ingredient in 2023. Studies confirmed its benefits for gut health and femcare functions, including equol production (in vivo, clinical trials) and EMT inhibition (in vitro). Based on the idea that "what is good for the gut should also be good for the skin," we launched it as a cosmetic ingredient in 2025. The following beauty benefits have been confirmed through topical application:

- Moisturizing effect (in vivo)
- Promotes collagen production and hyaluronic acid production (in vitro)

## ② "Functional Value" – Beyond Water

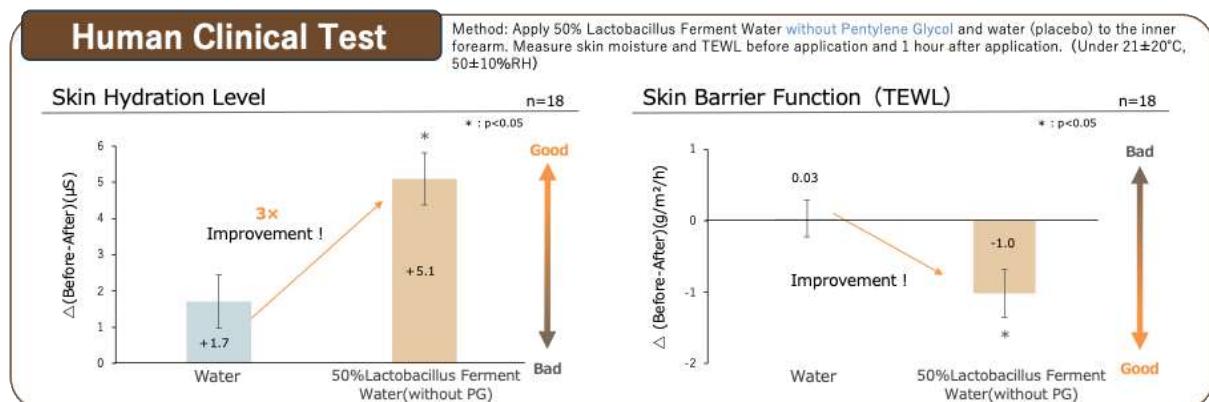
**Lactobacillus Fermented Water** contains over 1.5% solid content. This makes its surface tension lower than water. As a result, it spreads quickly on the skin and absorbs better.

(Figure on the right)



\* Immediately after dropping

Furthermore, in a human clinical test (n=18), the following effects were confirmed when using 50% **Lactobacillus Fermented Water** (without Pentylene Glycol) compared to water:



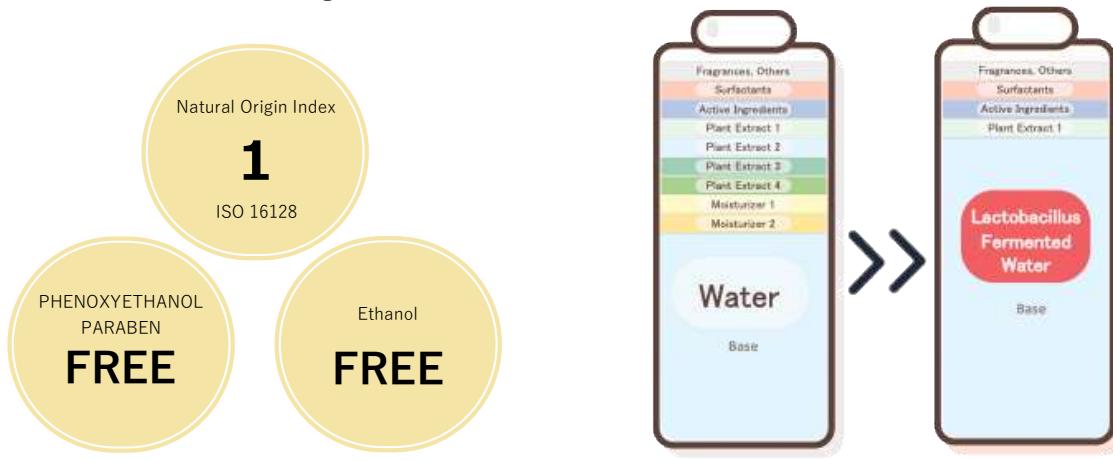
- Skin Hydration Level improved approximately 3 times (difference before and after application: Water +1.7, **Lactobacillus Fermented Water** +5.1,  $p<0.05$ )
- Skin Barrier Function (TEWL) improved (difference before and after application: Water +0.03, **Lactobacillus Fermented Water** -1.0,  $p<0.05$ )

**Lactobacillus Fermented Water** enhances skin moisture while strengthening barrier function.

## ③ Ideal for Minimalist Formulations

**Lactobacillus Fermented Water** is a botanical toner base created through traditional fermentation techniques, possessing both emotional value and functional value. As a functional value, it has moisturizing and barrier function properties, making it possible to reduce other ingredients with similar functions. As an emotional value, it can also reduce concept ingredients that evoke images of fermentation, Sakura and Japan. By using it as a water alternative, it provides minimalist design. Minimalist formulations offer benefits such as reduced skin irritation and risk (fewer ingredients mean lower risk of containing ingredients unsuitable for the skin) and improved formulation transparency (making it easier to know what's included and determine which ingredients suit one's skin). Therefore, they are favored by those with sensitive skin or allergies.

In addition, it has the following characteristics:



## ■ Product Information

Product Name	<b>Lactobacillus Fermented Water</b>
Appearance	Pale yellow liquid
Odor	Slightly characteristic odor
Recommended Dosage	Over 50%
Cosmetic Ingredient Name (Japan)	乳酸桿菌発酵液、ペンチレングリコール
INCI Name	Lactobacillus Ferment, Pentylene Glycol
Chinese INCI Name (IECIC 2021)	乳酸杆菌发酵产物、1,2-戊二醇
Safety	Primary Skin Irritation (EpiSkin): Negative Eye Irritation (EpiOcular): Negative Mutagenicity (Ames, 5strains): Negative

Sincerely,  
Oryza Oil & Fat Chemical Co., Ltd.