

**Think about the skin, pursue the ingredients,
and be knowledgeable of fermentation—**

There are merits that can only be provided by TOYO HAKKO

When a high volume of fermented raw materials and extracts are blended, the product may have stability and safety related issues, such as smells unique to the raw materials, discoloration, or skin irritation. TOYO HAKKO is both a raw material manufacturer that has been working on fermentation for many years and a cosmetic OEM manufacturer with a lot of experience. We can provide one-stop services from manufacturing raw materials to planning, development, and manufacturing. Based on the customer's requested ingredients and concept, TOYO HAKKO fully supports the creation of competitive and original cosmetic items.

Turn the customer's image into a cosmetic product

<Concept examples>

100% naturally-derived formula

Please inquire about cosmetic items with a focus on natural ingredients.



Microbiome promoting cosmetic products

We develop cosmetic items based on the concept of increasing beautiful-skin microbiome.



Development of products other than skincare items

Please inquire about cosmetic items with a focus on natural ingredients.



We respond to the customer's focus and requests of not blending certain ingredients

Paraben free, petroleum surfactant agent free, preservative free, cruelty free, natural concept, clinic cosmetic, quasi-pharmaceutical product, men's cosmetic, cosmetic items with a high volume of effective ingredients, vegan cosmetic, etc.



Eco-friendly



Products that do not contain certain ingredients



Makeup items



Plant-based ingredients



Blend a high volume of fermented ingredients

Interested in making cosmetic products
with HADAKOUJISUI™?



Reference for
in-house education

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Raw material for the new era that
will change the concept of cosmetics

肌 麹 水®

HADAKOJISUI™

an undiluted solution extracted
from *Aspergillus sp.* that
conditions skin metabolism

TOYO HAKKO

肌 麹 水[®]

HADAKOJISUI™

From ancient times, microorganisms have been a part of daily life. In particular, *Aspergillus sp.* has been used for many fermented foods such as miso, soy sauce, and sake. *Aspergillus sp.* is certified as a “ National Microorganisms ” of Japan that is essential in Japanese food culture. Koji, which is made by using *Aspergillus sp.*, contains many nutritious ingredients and is also effective for maintaining beauty and health.

We focused the enzyme activity and substance productivity possessed by *Aspergillus sp.* by selecting six types of *Aspergillus sp.* that have particular beauty effects from among 3,000 types to develop HADAKOJISUI™.

HADAKOJISUI™, which contains a special composition of compounds, supports skin turnover and creates new added value. This miraculous benefit given by *Aspergillus sp.* will transform the skincare industry.

White koji – S

White koji fungus(*Aspergillus luchuensis*) for making distilled liquor. It produces various organic acids that are effective for softening the skin. It is particularly good at producing citric acid.

Yellow koji – M

Yellow koji fungus(*A. oryzae*) for making miso. It has a good balance of amylase activity and protease activity, as well as excellent vitamin B group productivity.

Yellow koji – SE

Yellow koji fungus(*A. oryzae*) for making sake. It has particularly strong amylase (amylolytic enzyme) activity and produces a large volume of glycose that contributes to keeping the skin moist.

Yellow koji – SY

Yellow koji fungus(*A. oryzae*) for making soy sauce. It has a strong protease (proteolytic enzyme) activity and extremely high productivity of amino acids, a type of NMF.

Yellow koji – MS

Yellow koji fungus(*A. oryzae*) for making miso. Similar to yellow koji – M, it produces a good balance of compounds that benefit the skin.

Black koji – K

Black koji fungus(*A. luchuensis*) for making awamori distilled spirit. Similar to white koji – S, it produces organic acids and contributes to normalizing the skin turnover.

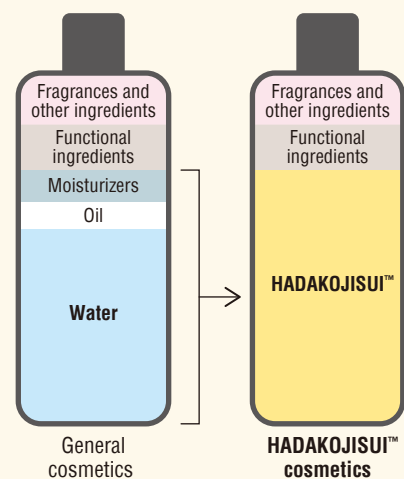
Blessings from fungus that exceed water.

Not just a “replacement for water”

HADAKOJISUI™ contains an ample amount of beauty ingredients



When making cosmetic products, water is an essential ingredient. In particular, skin toners are mostly made of water. Some customers even said that there is no point of applying a skin toner because it is mostly made of water. In response to this, TOYO HAKKO decided to develop a new base ingredient by pursuing ingredients that not only can be used as a replacement for water but also can maximize the value added to cosmetic products. This is how HADAKOJISUI™ was created.



Contains over 200 types of ingredients

HADAKOJISUI™ contains over 200 types of ingredients including B vitamins.

Beauty ingredients	Metabolism accelerators	Moisturizing ingredients
Water-soluble vitamins	Organic acids	Amino acids
Vitamin B1 Vitamin B3 Vitamin B5 Vitamin C (Ascorbic acid 2G)	Citric acid Malic acid Succinic acid Fumaric acid	Leucine Arginine Alanine Valine

Excellent moist feel <experiment>

In order to confirm the moisturizing ability, agar gel was made by using purified water and HADAKOJISUI™, respectively. The gels were then compared after a specified amount of time. It was found that the agar gel made with HADAKOJISUI™ **remained moist** without becoming dry. By using HADAKOJISUI™, which contains an ample amount of moisturizing ingredients and beauty ingredients, it is possible to develop cosmetic products with even higher quality.

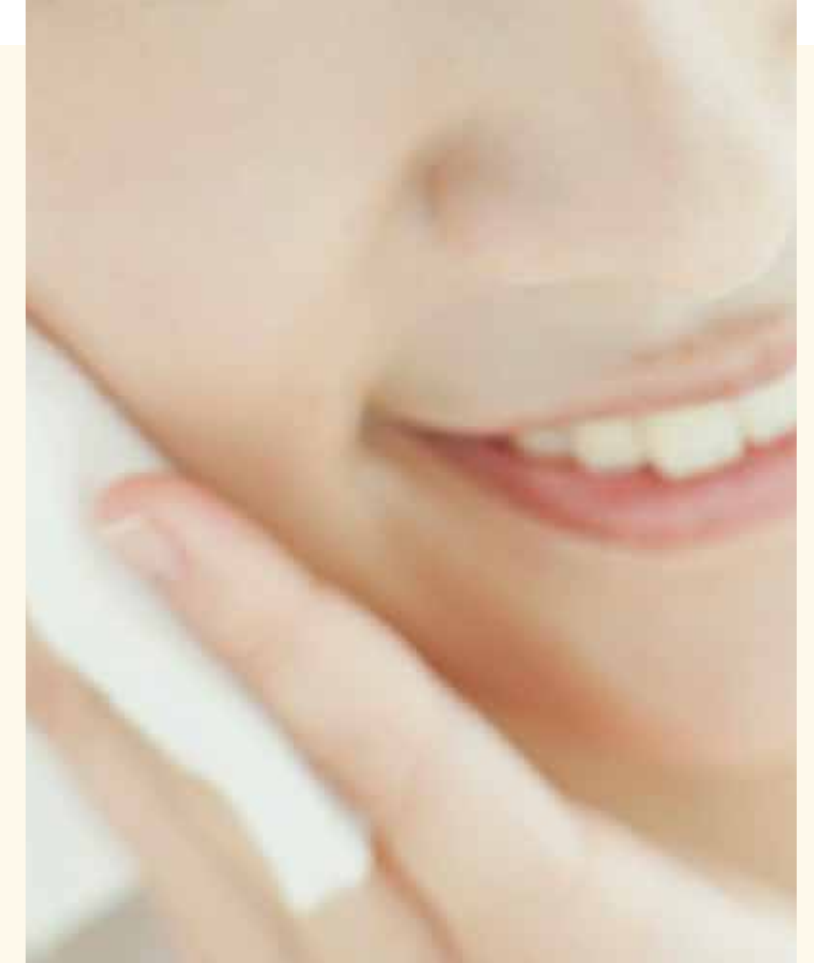


Supports skin rebirth

Generally, human skin is said to be reborn in a cycle of about every 28 days. This cycle is called skin turnover. As we become older, delays in skin turnover cause spots and pigmentation, as well as dry and tough skin.

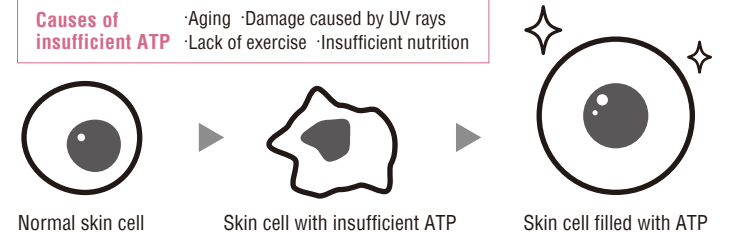
HADAKOJISUI™ normalizes the skin turnover and thereby brings out the skin's inherent repair ability.

* Skin metabolism indicates skin turnover.



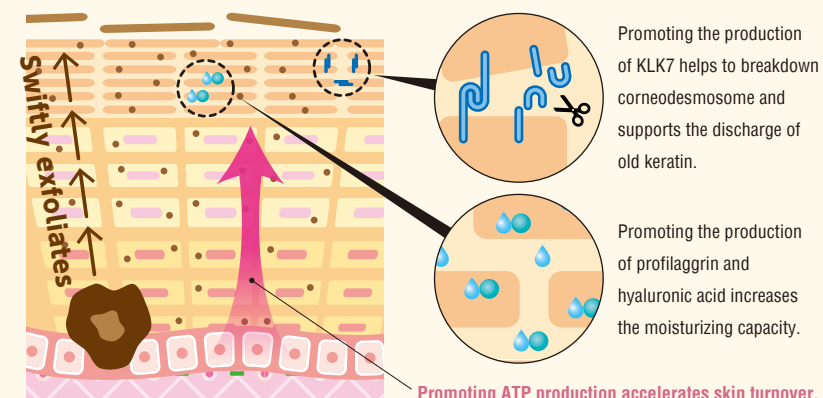
Skin turnover and ATP

Skin turnover **requires energy called ATP**, which brings nutrition into the skin cells and discharges waste. Insufficient ATP in the skin cells is thought to cause the disruption of skin turnover.



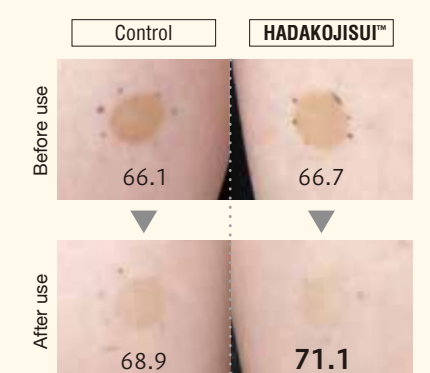
Promote skin turnover with HADAKOJISUI™

The various functions of HADAKOJISUI™ have been confirmed to promote skin turnover. It is expected to **improve the treatment of troubling pigmentation and spots**.



Reduces spots and pigmentation

The color of **chloasma** became lighter, which demonstrates **the promotion of skin turnover**.



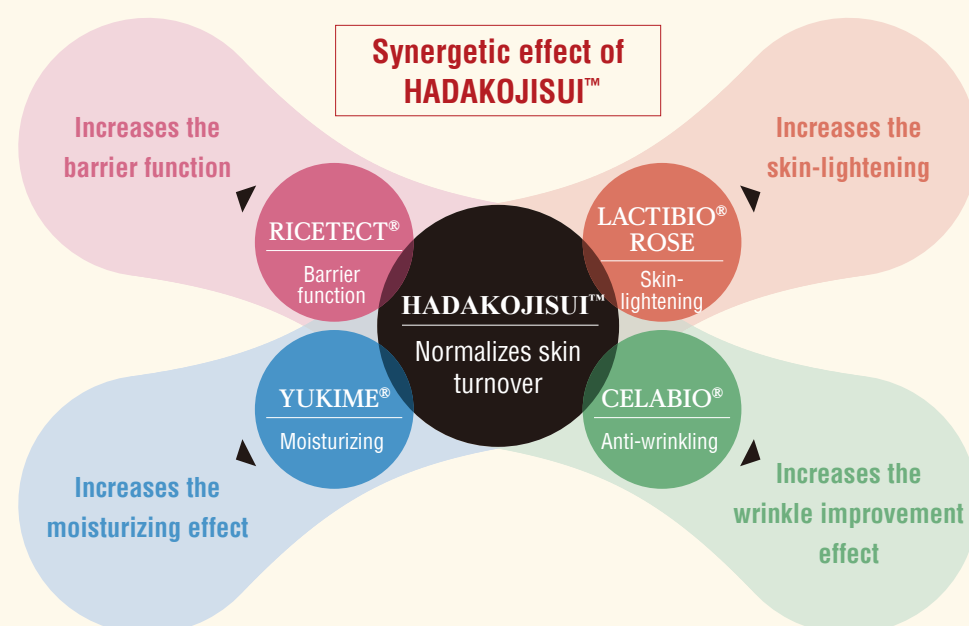
The numerical figures indicate the luminosity L*; the higher the value, the lighter the color.

Feasible concept by blending HADAKOJISUI™

HADAKOJISUI™ will fulfill your desire to have a skincare product that is filled with a luxurious amount of select ingredients.

Synergetic formula that can only be achieved with the experience as a fermented raw material manufacturer and a cosmetic product OEM manufacturer

- ✓ Possible to develop cosmetic products that address the skin metabolism
- ✓ Possible to propose cosmetics by using undiluted extract from select *Aspergillus sp.*
- ✓ Possible to propose as a 100% naturally-derived formula
- ✓ Possible to propose as a formula that is gentle to the skin and the environment with a focus on blending no unnecessary ingredients
- ✓ Can be blended in products targeting China (NMPA registered).
- ✓ Can be blended in many types of products, including basic skin care items, hair care products, and makeup items.
- ✓ Texture and fragrance can be customized based on the customer's request.
- ✓ **Synergetic effect** can be added **by the fermented raw material**.



Our proprietary fermented raw materials

Patented **RICETECT®**
Black rice fermented with *Monascus purpureus*
Anti-inflammatory / Antioxidant / Moisturizing / Barrier function / Anti-wrinkling / Resilience / Metabolism

Patented **LACTIBIO® ROSE**
Rose petal extract fermented with lactic acid bacteria
Skin-lightening / Prevents the yellowish dullness of the skin / Prevents photoaging / Anti-wrinkling / Antioxidant/Antiglycation

Patented **YUKIME®**
Substance made by fermenting germinated brown rice with *Lachancea kluyveri*
Barrier function / Moisture retention / Metabolism / Anti-wrinkling / Resilience / Prevents the yellowish dullness of the skin

Patented **CELABIO®**
Fermenting soybean extract and rice bran with *Bacillus subtilis var. natto*
Anti-wrinkling / Resilience / Barrier function / Moisture retention

Items containing HADAKOJISUI™



Wipe-off beauty essence

A wipe-off beauty essence that gently polishes the skin after a facewash. It softens the skin and removes old keratin and dirt in the pores that cause rough texture and dull skin, helping to prepare the next skincare item to better blend with the skin.



Skin toner

A high moisturizing skin toner that keeps the skin moist for a long time as if the toner has just been applied. With a texture that feels as if the palm of the hand sticks to your face, the skin toner will improve rough skin and make it soft.



Beauty essence

Stably blended with fine oil, this essence blends well with the skin and can be expected to have a high emollient effect. It can also be used as a booster essence, helping to prepare the next skincare item to better blend with the skin. The unique thick texture creates very moist and plump skin while promoting skin turnover, leading to a translucent skin.



Body milk

Having a thick consistency, the body milk blends well with the skin without becoming sticky, and the skin will feel as if it is covered with a veil of moisture. This item will supply and maintain the moisture and oil in the skin, and the thick moisture will create resilient skin.



All-in-one gel

When applied on the skin, this gel breaks down and the moisturizing ingredients quickly permeate deep into the skin's surface and horny layers. In addition, the plant-derived emollient ingredients coat the skin's surface to prevent the moisturizing ingredients from escaping, thereby creating moist, resilient skin.



Cream

This cream was developed based on the second skin concept. It contains emollient ingredients that have a similar structure as intercellular lipid. Acting like a second skin, this easy-to-spread cream covers and protects the skin.

Additive free list

Ingredient-free items	Wipe-off beauty essence	Skin toner	Beauty essence	Body milk	All-in-one gel	Cream
No dilution water	●	●	●	●	●	●
Paraben free	●	●	●	●	●	●
Mineral oil free	●	●	●	●	●	●
Silicon free	●	●	●	●	●	●
Petroleum surfactant free	—	●	●	●	●	●
Synthetic fragrance free	●	●	●	●	●	●
Synthetic colorant free	●	●	●	●	●	●
Ultraviolet absorbent free	●	●	●	●	●	●
Ethanol free	—	●	●	●	●	●