

Shiseido confirms the skin improvement effects through mind and body by the use of Wakan ingredients, in the joint research with Tsumura

– Innovative new findings in the Inner Beauty category, brought by the fusion of 100 years of research history and assets in the two companies –

Through our joint research with TSUMURA & CO. (Head Office: Minato-ku, Tokyo; President, Representative Director CEO: Terukazu Kato; hereinafter referred to as “Tsumura”), and with the inspiration from the concept of Eastern medicine, Shiseido and Tsumura have identified the five physical/mental causes underlying skin problems and discovered a combination of Wakan ingredients (ingredients of traditional Japanese and Kampo medicines) with a promising prospects to improve them. We have confirmed that the intake of these Wakan ingredients, in accordance with the mental and physical conditions of each individual, has improved the condition of the skin, as well as that of the body and mind, thus, we have identified the skin improving effects of Wakan ingredients. Furthermore, we have confirmed that combining these with our unique formulation of fruit-derived ingredients (lingonberry fruit juice and Amla fruit) *1 with proven effects of collagen production promotion provides additional skin improvements.

Through the collaboration between Shiseido, where we have accumulated knowledge on the connection of skin to the body and mind, and Tsumura as a top Kampo medicine manufacturer, as well as the fusion of both company’s assets established during the past 100 years, we will further develop the research of inner beauty to draw out beauty from inside of the body. We will also apply the results of this research to inner beauty care, including food products. We presented a part of this research jointly with Tsumura at the 69th Annual Conference of The Japanese Society for Pharmacognosy in September 2023.

*1: Patented Beauty ingredients / Japanese Patent No. 4917180: Patent concerning the combination of ingredients, such as lingonberry and Amla fruit

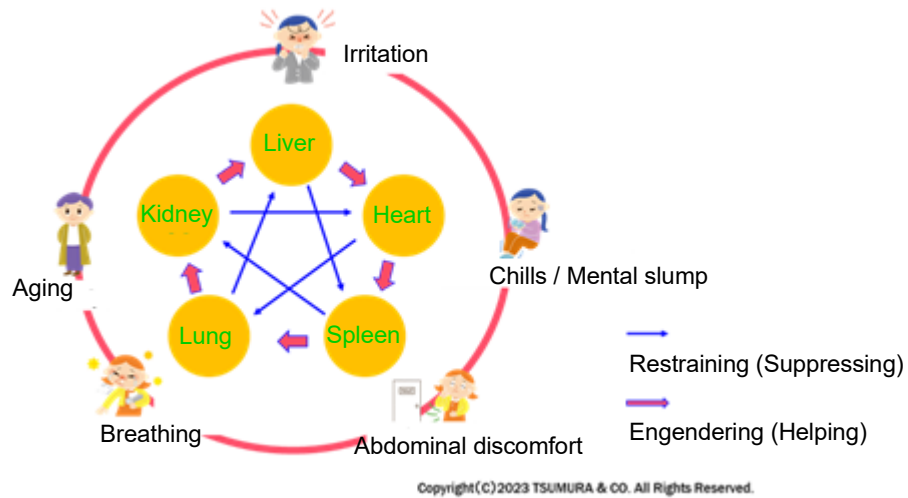
Research background

Amid the recent changes in global environment and social issues, more and more people have been pursuing “well-being of both body and mind” and become conscious about inner beauty to draw out beauty from inside the body, which leads to further promotion in the fusion of beauty and wellness. We have focused on the connection of skin with body and mind earlier and actively implemented researches in the field of inner beauty including supplements and foods.

Although Wakan ingredients are known to be effective to balance the disordered mental/physical conditions, the influence on skin and the functional mechanism have not been explicitly elucidated. To develop the innovative technology to improve skin through the body-mind connection, we have conducted a joint research with Tsumura, a top Kampo producer with 130 years of history. This research has been developed from a broad and comprehensive perspective of the skin-body-mind connection, through the fusion of Shiseido’s knowledge and technology concerning the connection of skin to body and mind and Tsumura’s knowledge on the connection of crude drugs with body and mind.

Investigation of combinations of Wakan ingredients inspired by Eastern medicine

In this research, the five mental/physical causes underlying skin problems, which may vary depending on each person’s constitution, have been assumed based on the concept of Eastern medicine. Also, several combinations of Wakan ingredients with promising effects have been invented for each cause. For example, concerning “blood flow / neuroinflammation” which are assumed to be underlying causes of skin problems, we have come up with a combination of Wakan ingredients mainly composed of “Processed Ginger and Jujube”, which are conventionally known to be effective for the chills and mental slump.



“An Eastern medicine concept showing the body-mind relationship” *2

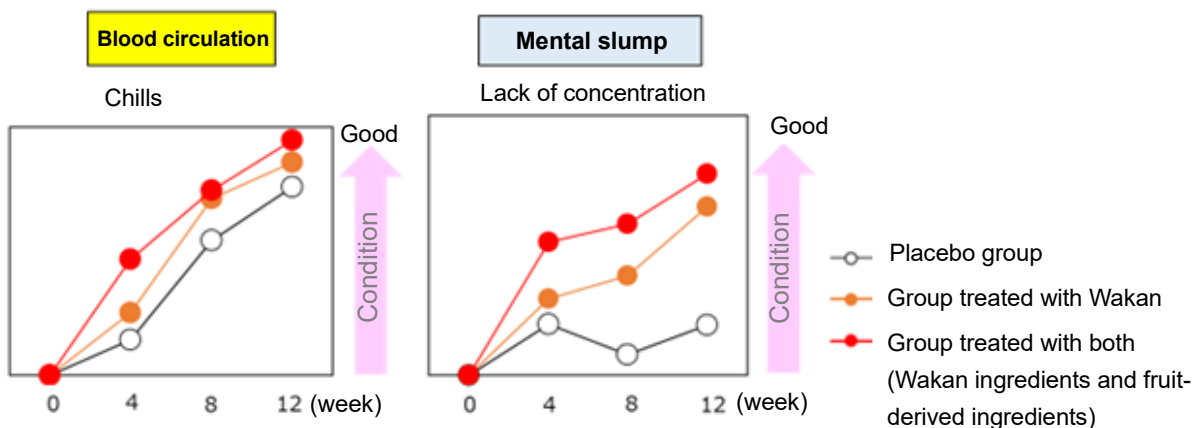
*2 In this concept, five functions maintaining/promoting mind and body health mutually support and keep balance. Accordingly, a poor physical condition can be controlled not only by mitigating one specific symptom but also by focusing on the background of a person’s life.

Confirmation of skin improvement effects through body and mind by the combined use of Wakan ingredients and fruit-derived ingredients

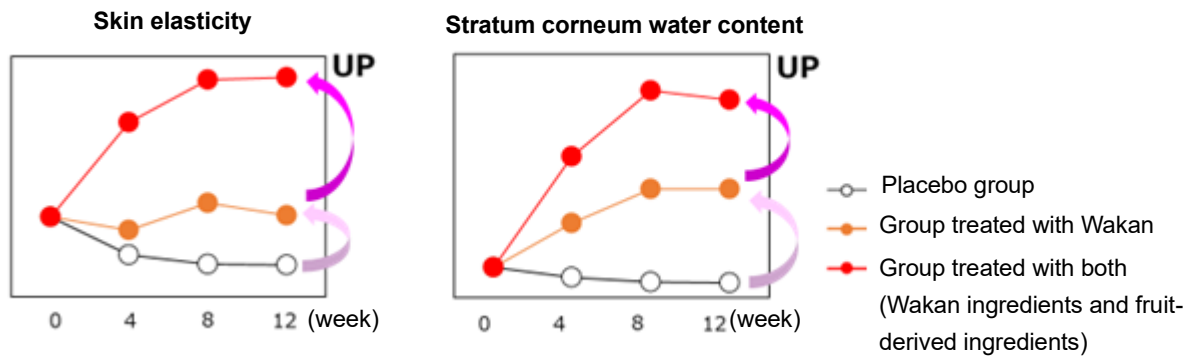
We have confirmed the influence on the condition of the body and skin in humans, concerning the effects of Wakan ingredients which we have expected and invented to improve skin conditions through a linkage with body and mind *3. According to our comparison among the three groups: the placebo group; the group treated with Wakan ingredients as described above; and the group treated with both these Wakan ingredients and a combination of fruit-derived ingredients (lingonberry and Amla fruit) *1 which we have confirmed the effects of collagen production promotion, the evaluation of physical conditions has confirmed that the group with Wakan ingredients and the group with both have felt more improvement in their chills, related to blood circulation and mental slump, as well as “lack of concentration” when compared to the placebo group. Also, in the evaluation of skin conditions, the group with Wakan ingredients shows better skin conditions such as skin elasticity and the stratum corneum water content than the placebo group and this has clarified that the Wakan ingredients have skin improvement effects.

Furthermore, the group treated with both shows more improvement than the group with Wakan ingredients, confirming that the combination with the fruit-derived ingredients can further increase the amount of improvement.

*3 With evaluation targets of Japanese women between 35 and 50 years old who feel poor physical conditions such as blood circulation and mental slump and skin problems, they are divided into a placebo group of 30 people, a group of 30 people treated with Wakan ingredients, and a group of 33 people treated with the both (Wakan + fruit-derived ingredients). Their physical conditions are evaluated based on the questionnaires and skin (cheek) conditions were evaluated with a measuring instrument.



Improvements in physical conditions (blood circulation and mental slump) through the combined intake of Wakan ingredients and fruit-derived ingredients



Skin improvements (skin elasticity and stratum corneum water content) through the combined intake of Wakan ingredients and fruit-derived ingredients

Elucidation of the impact of Wakan ingredients by the GPCR analysis

G-protein-coupled receptor (GPCR) is a receptor that recognizes various substances ranging from peptides, proteins, ions, amines, to lipids, and it has been made clear that GPCR is essential to the physiological function of human. To estimate the impact of the selected Wakan ingredients on the skin, body and mind, a comprehensive analysis of activation has been conducted with a total of 200 types of GPCRs in this research. As a result, it has been confirmed that the Wakan ingredients have activated many of those GPCRs, and further investigation has clarified many of the functions of GPCRs activated by the Wakan ingredients are related to the control of blood vessels and central nerves. Thus, these results strongly indicate that the effects of Wakan ingredients on the skin that were confirmed in this research are provided through the impact on blood flow and nerves.

Future perspectives

By focusing on the connection between skin, body and mind, Shiseido will propose a wide variety of cares connected to mental and physical conditions such as food, exercise and sleep, in addition to our conventional cosmetic products, and aim to realize our management strategic vision of being a “Personal Beauty Wellness Company”. The results of this research will be applied to our future development of new products and services in the Inner Beauty category for users seeking their unique and healthy beauty.

About our R&D strategies

Under one of three pillars of our R&D strategies, “Skin Beauty INNOVATION”, this research has been conducted in the “food product” category approaching with solutions including intaking of supplements and food to draw out skin beauty from the inside through body and mind. Also, the approach of this research is not bound by the conventional method in Shiseido and creates new values through an active fusion with external knowledge and technology.

- Integrated Report 2022 (Beauty INNOVATION)

https://corp.shiseido.com/report/en/2022/value_creation/innovation/

- Keywords

Skin Beauty INNOVATION, Inner Beauty, Food

<Researcher's challenges>

■ Approach of our R&D philosophy "DYNAMIC HARMONY"

This research has been conducted by the Inside/Outside approach of Shiseido's unique R&D philosophy "DYNAMIC HARMONY". By focusing on the connection between skin, body and mind, this research intends to draw out the natural and healthy beauty of our users from the inside. Furthermore, by fusing our strengths with the expertise of another company in a different industry, we have been making a bold challenge to create a new value.



Dr. Mano Chinatsu,
researcher

Dr. Toyoda Masahiko,
researcher

■ Investigation and examination of vast amounts of evidence prior to the examination of the effects on human

"Even if a "skin problem" looks the same on the surface of skin, each person has a unique cause inside the body and needs a different treatment." Taking into account of this fact, while taking hints from the concept of Eastern medicine, we went ahead of this traditional theory and spent a lot of time in working on and elucidating each one of these causes based on the Western medicine evidences. This is the key point of our collaboration with Tsumura. Shiseido has been conducting research and obtained knowledge not only on skin surfaces but also the influence of blood vessels, lymph vessels, immunity and intestinal environment on skin. On the other hand, Tsumura has clarified the action mechanism of individual crude drugs inside the body not only by the traditional Kampo drug prescriptions but also through the perspective of Western medicine. By carefully and seamlessly connecting each one of the pieces of knowledge in the two companies, both of us have confirmed that eternal skin concerns unchanging skin problems such as poor skin firmness, moisture and translucency can be scientifically explained from the five approaches based on Eastern medicine. We consider this as a valuable asset produced by the two companies.

Shiseido's R&D Philosophy "DYNAMIC HARMONY":

- Shiseido Formulates its Unique R&D Philosophy "DYNAMIC HARMONY" (2021)

<https://corp.shiseido.com/en/news/detail.html?n=00000000003252>

- The "DYNAMIC HARMONY" special website:

<https://corp.shiseido.com/en/rd/dynamicharmony>