

Discovery of “Skincare Effects” in Relaxing and Refreshing Scents

Shiseido has discovered the existence of “skincare effects” that improve skin conditions in relaxing scents (sedative-effect ingredients) and refreshing scents (stimulant-effect ingredients). In relation, it has been confirmed that “Tea Rose Element” (contained in the floral scent of modern hybrid tea rose), an ingredient with sedative effects, promotes recovery of the skin barrier function^{*1}, while “Star Anise Element” (contained in the fruits of star anise), an ingredient with stimulant effects, stimulates blood circulation (skin flushing) as well as raises skin surface temperature.

Shiseido has been promoting aromachology research to scientifically substantiate the usefulness of scent since 1984. Up until now, the sedative and stimulant effects of scent along with other effects, including the activation of the sympathetic nervous system, have been discovered and subsequently applied to the development of skincare cosmetics, fragrances and other products. In addition, research was carried out in the 1990s regarding the connection between the skin and the mind, in which it was discovered that scent not only has psychological and physiological effects on the human body, but that its influence extends to such skin functions as inhibiting excess sebum secretion.

Together with this latest discovery through which new skincare effects as a result of scent have been verified, Shiseido will continue to pursue the beneficial effects of scent as a means of further supporting the cosmetic lifestyles of our customers.

History of Shiseido Aromachology Research

- 1984 Started aromachology research.
- 1984 1. Sedative and stimulant effects of scent
(Discovered function of scent in which mood is relaxed or refreshed by the effects of scent.)
- 1994 2. Effects of scent in alleviating insomniac tendencies
(Discovered the ancient Egyptian fragrance Kyphi has an effect on improving the sleep of persons with insomniac tendencies.)
- 1995 3. Effects of scent on homeostasis functions
(Discovered scent has an important effect on maintaining homeostasis functions of the human body through the nervous and endocrine systems.)
- 2000 4. Recovery and promotion effects of scent on skin barrier functionality
(Discovered recovery of skin barrier functionality, which is inhibited by stress, is promoted by scent.)

- 2002 5. Activation of sympathetic nervous system by scent
(Formulated new theory related to slimming in which activation of the sympathetic nervous system by the effects of such scents as grapefruit, pepper, fennel and tarragon is used to promote expression and activation of UCP, which was found to “burn up” neutral fat.)
- 2002 6. Effects of scent on inhibiting sebum production
(Discovered effects of scent on inhibiting sebum production, which causes shiny and sticky skin.)
- 2002 7. Effects of scent on usability of cosmetic products
(Discovered that scent changes people’s perception of weight.)
- 2002 8. Skincare effects of relaxing and refreshing scents

Skincare Effects of Scent

Shiseido measured the skincare effects of scent (recovery of skin barrier function, skin flushing and cheek skin temperature) during experiments conducted on 16 women in their 20s.

In measuring the rates of recovery of the skin barrier function, the skin barrier on the forearms of test subjects was impaired on an experimental basis. At the same time, a scent was introduced at a stage where a predetermined level of stress was induced (color/word test*²), and the changes in the rate of moisture loss of subjects exposed and not exposed to the scent were compared. Consequently, these significant results confirmed that fragrance materials with sedative effects facilitated the recovery of the skin barrier function as compared to cases where no such scents were inhaled (Figure 1).

When comparing changes in skin color and skin temperature before inhaling a scent versus three hours later, fragrance materials with stimulant effects were shown to increase the flush of skin and raise skin temperature as compared to cases where no such scents were inhaled (Figure 2 and 3). Accordingly, face color with the radiance of fresh, healthy-looking skin can be realized through the stimulation of blood circulation as a result of inhaling a scent.

*1: Skin barrier function: The function in which the skin protects the body from harmful effects in the external environment in addition to preventing the loss of essential substances within the body.

*2: Color/word test: A test in which the words “red,” “blue,” “green” and “yellow” are randomly printed using these respective four colors of ink, and respondents are given 60 minutes to determine the color of ink of these words. The need to concentrate so as not to confuse the written word and the correct color induces stress.

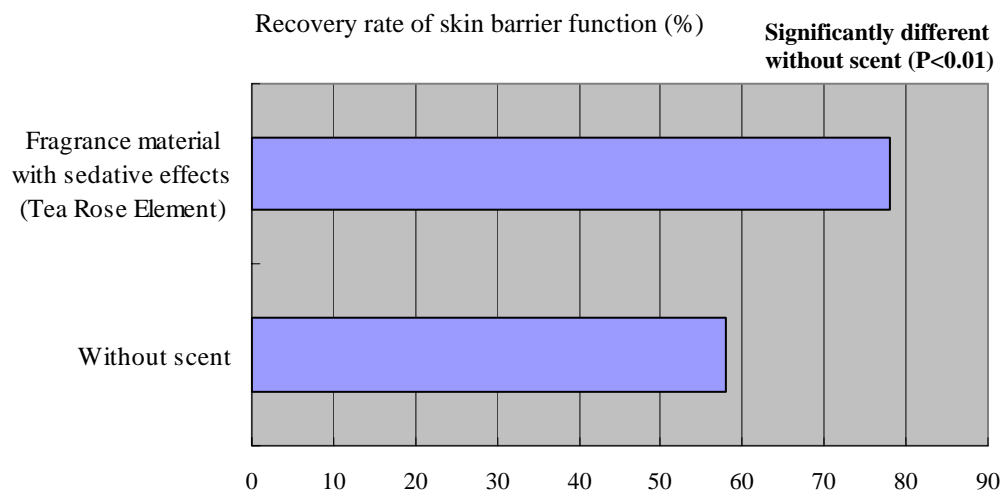


Figure 1: Recovery of Skin Barrier Function due to Fragrance Material with Sedative Effects (Tea Rose Element)

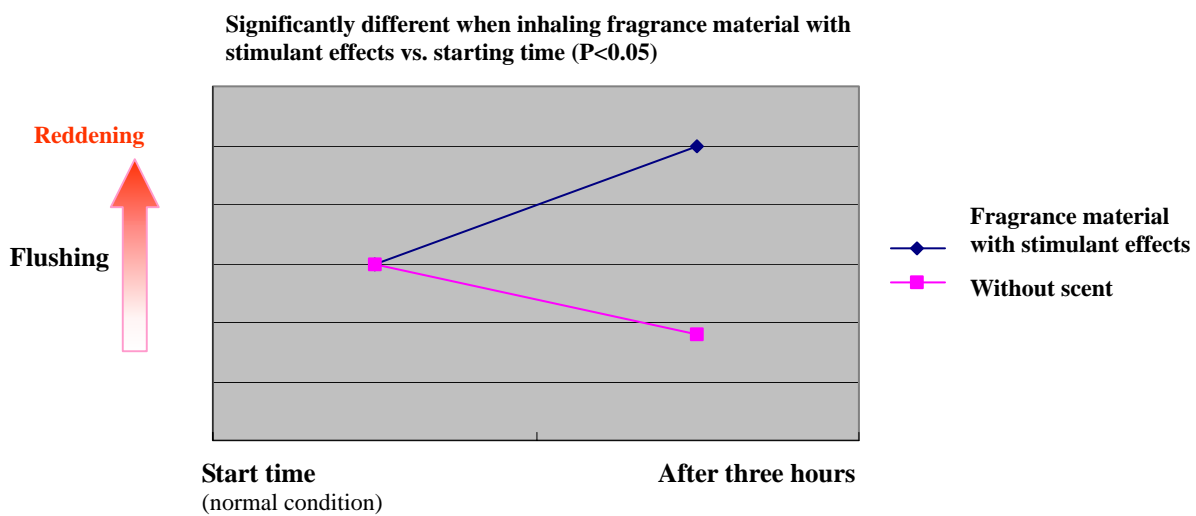


Figure 2: Rise of Cheek Color due to Smelling Fragrance Material with Stimulant Effects (Star Anise Element)

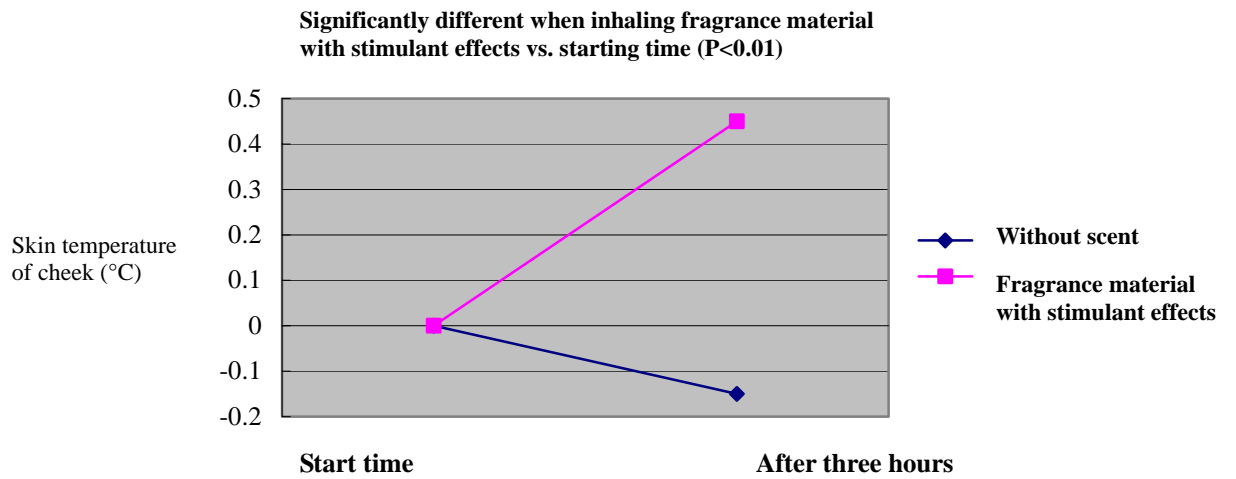


Figure 3: Rise in Skin Temperature of Cheek due to Smelling Fragrance Material with Stimulant Effects (Star Anise Element)