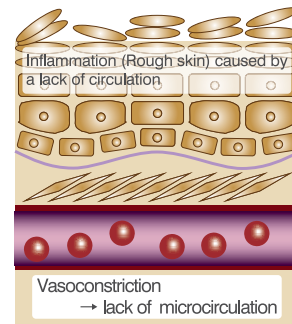
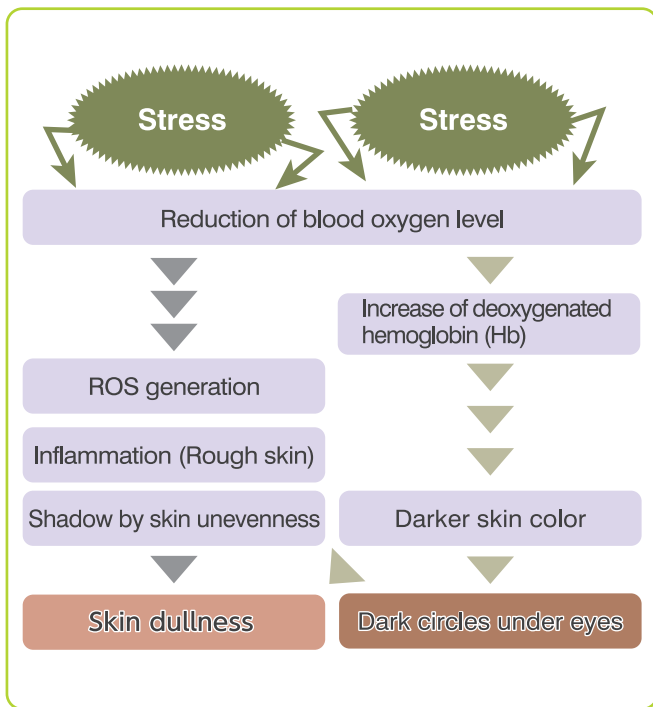


Alpha Glucosyl Hesperidin

Brightening effect:

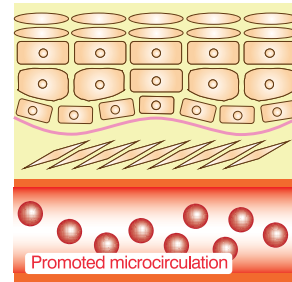
Improvement of microcirculation for skin yellowness, dullness and dark circles

Skin microcirculation reduction occurs due to daily stress, climate changes, lack of exercise and insufficient sleep, etc. Lack of skin microcirculation causes dark circles under the eyes and skin dullness. Alpha Glucosyl Hesperidin (AGH) helps improve skin tone by promoting microcirculation on the skin surface to promote healthier skin.



Alpha Glucosyl Hesperidin

Brightening effect



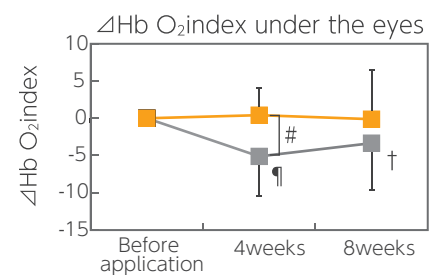
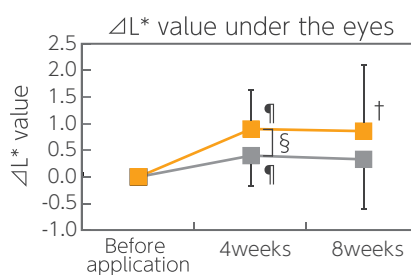
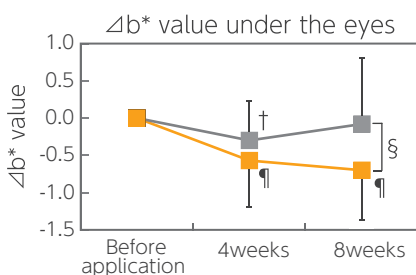
Application to the eye areas using lotion containing Alpha Glucosyl Hesperidin suggest improvement of skin condition.

(High b* value group under eyes, (n=14))

Improves skin yellowness

Improves skin dullness

Improves dark circles under eyes



Legend: ■ Placebo, ■ 0.5% AGH

† p < 0.05 vs. Before application † p < 0.1 vs. Before application

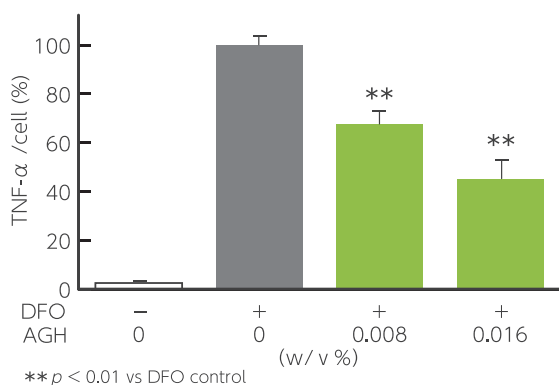
§ p < 0.1 vs. Placebo # p < 0.05 vs. Placebo

Efficacy of Alpha Glucosyl Hesperidin

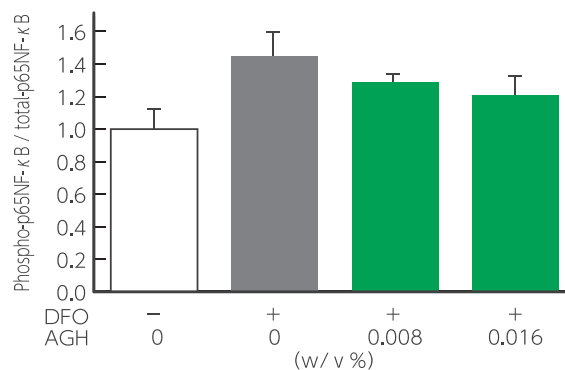
Anti-inflammatory Effect under Stress Conditions

Normal Human Epidermal Keratinocytes (NHEK) were treated with AGH in the presence of DFO

Effect on TNF- α production



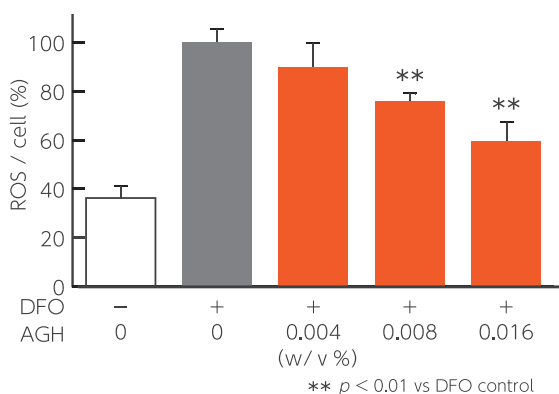
Effect on NF- κ B phosphorylation



The addition of Alpha Glucosyl Hesperidin tends to suppress DFO-induced TNF- α production and NF- κ B phosphorylation.

Inhibition of ROS Generation under Stress Conditions

Normal Human Epidermal Keratinocytes (NHEK) were treated with AGH in the presence of DFO



The addition of Alpha Glucosyl Hesperidin significantly inhibited DFO-induced ROS generation.

Characteristic of Alpha Glucosyl Hesperidin

Hesperidin is extremely insoluble in water, hence it has limited uses. Hayashibara utilizes enzyme technology to bind glucose to hesperidin which greatly improves its solubility in water. It has been traded under the name of Alpha Glucosyl Hesperidin.



Solubility in water

Type of Hesperidin	Solubility (g/100g water)
Hesperidin	0.002
Alpha Glucosyl Hesperidin	283

INFORMATION of Alpha Glucosyl Hesperidin

INCI Name

Glucosyl Hesperidin

中文名称

葡糖基橙皮苷

For further information and more detail of these data, please contact us at the below contact details.

NAGASE & CO., LTD.

Life & Healthcare Products Dept. Personal Care Products Div.
Hayashibara Products Sec.
5-1, Nihonbashi-Kobunacho, Chuo-ku, Tokyo 103-8355, Japan
(TEL/FAX) +81-3-3665-3864/+81-3-3665-3131
dnpchb@nagase.co.jp <https://www.nagase-personalcare.com/>

Alpha Glycosyl Hesperidin is manufactured by
Hayashibara Co., Ltd. in Japan.

It is the exclusive responsibility of the customer to determine that the use and functional claims made about the ingredient or finished product are consistent with all legal requirements of the location in which they are sold. Further, that the sale of the finished product does not infringe on any third party patents.