

**Prevention of aging skin yellowish discoloration by the anti-glycation effect of Sakura Extract**

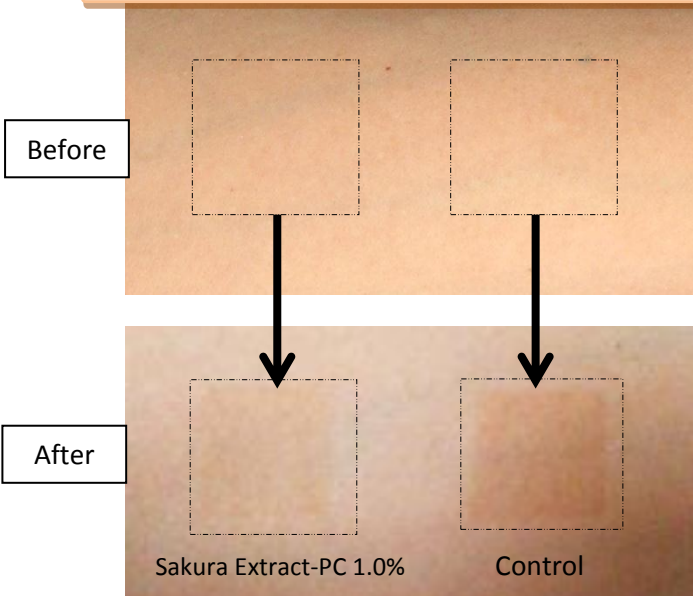
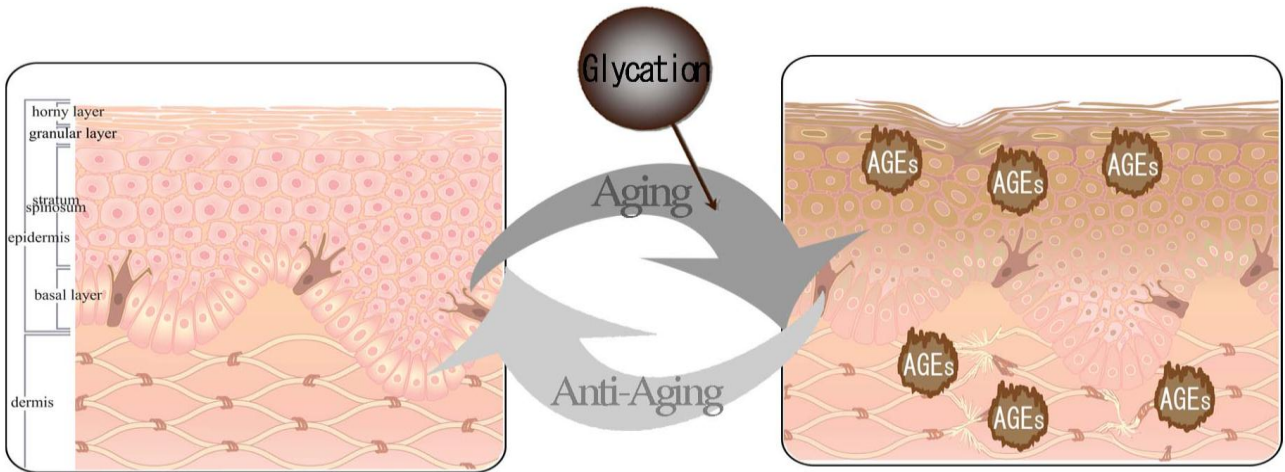
Skin aging due to oxidative stress may cause “rusty” skin appearance. Meanwhile, glycation stress related aging of skin due to accumulation of AGEs<sup>\*1</sup> may result in “burnt” skin appearance. Recent reports have shown that AGEs formed in the dermis cause skin yellowing<sup>\*2</sup>. In addition to UV light exposure, AGEs has been found to accumulate in the epidermis which ultimately reduce skin elasticity, dullness and skin yellowish discoloration. Besides prevention on melanin production, anti-glycation is considered an important anti-aging approach in the maintenance of healthy skin texture.

Oryza Oil & Fat Chemical CO., Ltd., has successfully shown the inhibitory effect of Sakura Extract on AGEs production. Further research has demonstrated the preventive effect of Sakura Extract on “yellowish discoloration” skin model induced by DHA<sup>\*3</sup> based on the theory of Maillard reaction .

\*1: AGEs (Advance Glycation End Products) are end products forms in series of ono-enzymatic reactions between sugar and protein.

\*2: Ohshima H, Oyobikawa M, Tada A, et al: Melanin and facial skin fluorescence as markers of yellowish discoloration with aging. Skin Res Technol 15; 496-502: 2009

\*3: DHA- dihydroxyacetone, which reacts with amino acid of keratin protein in stratum corneum, to generate the kind of AGEs called melanoidin.



**Experimental Method:**  
 Water soluble Sakura Extract-PC 1.0% was applied topically on human forearm previously treated with aqueous solution of DHA 3% on non-woven fabric (2x2cm) for 3 hours.  
 The aqueous solution of excipients of Sakura Extract-PC was used as control. The degree of browning of skin was compared 3 hours after application of non-woven fabric containing DHA 3%.

As illustrated above, browning of skin area treated with Sakura Extract-PC 1% was significantly suppressed compared with control. Sakura Extract which suppress AGEs production similarly prevent skin yellowish discoloration.