## 〈教育セミナー〉

### ライフステージと香粧品学

# 更年期と香粧品

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## **Menopause and Cosmetics**

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#### Abstract

Menopause is a natural and significant event of every woman's life. Most women experience this stage when they are 45–55 years old. Typical symptoms of menopause are menoxenia, autonomous nerve unbalance, mood swings and so on. The menopause causes hypoestrogenism, which accelerates age-related deterioration, such as thinner skin, an increase in number and depth of wrinkles, increased skin dryness, and decreased skin firmness and elasticity. Hormone replacement therapy has been shown to improve epidermal hydration, skin elasticity, skin thickness, and also reduce skin wrinkles. However, it has also been reported that hormone replacement therapy may increase the risk of cardiovascular events and breast cancer. This article reviews the possibility on cosmetic scientific approach to the menopausal skin changes.

The functionality of essential oils and aroma chemicals on  $17\beta$ -estradiol was investigated. As a result, Ambrette seed oil and several macrocyclic musks stimulate secretion of  $17\beta$ -estradiol on females but not on males. Study with regard to the efficacy of makeup and esthetic facial massage demonstrated that these actions also stimulate secretion of female sex hormone on females. The reduced efficacy of hormone replacement therapy seen in sun-exposed skin appears to correlate closely with the decreased estrogen receptor induced by UVB irradiation. The stimulation of female sex hormone secretion by fragrance, makeup and esthetic facial massage, and the prevention of UVBinduced reduction of estrogen receptor may be effective for the improvement of the skin changes observed in menopausal women.

Key words: menopause, cosmetics, skin aging, estradiol, estrogen receptor.