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生活環境の変化と敏感肌

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**Changes in Living Environment and Sensitive Skin**

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**Abstract**

Although “sensitive skin” is not an academic term that indicates skin symptoms, it is widely recognized by consumers and is a skin problem that cannot be ignored. It is not difficult to imagine that sensitive skin is closely related to modern life. In addition, due to seasonal changes and climate change such as new lifestyles, sensitive skin may be exposed to rapid changes in the external environment, which is considered to be one of the factors. In this paper, I would like to show about the relationship between changes in the external environment and sensitive skin. I would also like to mention that as a mechanism by which the barrier function and moisturizing function, which are important functions of the skin, are disturbed by changes in the external environment. In particular, this article introduces that Caspase14 (C14), which are both natural moisturizing factor (NMF) production-related enzymes and denucleation-related enzymes and NMF-producing enzyme Bleomycin Hydrolase (BH) become unstable due to climate changes. It has been clarified that the gene expression of C14 is reduced by changing to a low humidity or low temperature state. On the other hand, it is clarified that the gene expression of BH fluctuates depending on the season in Japan. It also reveals that this seasonal variation is no longer seen in patients with atopic dermatitis. These results show that the skin has a mechanism to flexibly maintain homeostasis against external environmental stimuli. However, it suggests that disruption of this mechanism may be involved in the formation of sensitive skin, including atopic dermatitis. In other words, in order to prevent sensitive skin, it is important to maintain skin function and homeostasis that are not disturbed by the external environment, which is one of the causes of sensitive skin.

**Key words:** enviromental change, climate change, Bleomycin Hydrolase (BH), Caspase14 (C14), sensitive skin.