日本香粧品学会誌 Vol. 46, No. 1, pp. 8-19 (2022)

**(Regular Article)** 

## Appearance of Psychophysiological Effect of Hydrogen Inhalation and Effect of Continuous Use on the Skin Properties

## Takashi TAKEHARA<sup>1, \*</sup>, Yukari HAYASHI<sup>1</sup>, Miyuki FUJISHIRO<sup>2</sup>, Eri KITAMURA<sup>2</sup>, Yukihiro YADA<sup>3</sup>

(Accepted: September 22, 2021)

## Abstract

We first investigated psychosomatic effects of hydrogen inhalation in humans. Psychologically, anti-stress action and an increase in ability to concentrate were observed. Physiologically, it was suggested that hydrogen inhalation increases the sedative effects and brain activity by suppressing sympathetic nervous activity. Thus, the effects of continuous hydrogen inhalation for 2 weeks on the psychological effects and skin properties were investigated. In addition to reduction of awareness of stress and negative emotions, improvement of skin firmness and blotches was observed. These findings suggested that continuous hydrogen inhalation exhibits regulating effects on skin conditions.

Key words: hydrogen inhalation, psychophysiological effect, anti-stress, skin properties, regulating effects.