Synopsis of Original Research Paper

Exploration of useful scented liquid from plants for relax and good sleep

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The purpose of this study is to examine the effect of an olfactory stimulus on changes in a physiological index and sleep. Using aromas during the loading of stress, we measured beat-to-beat interval (R-R interval) times from electrocardiogram (ECG) recordings. Measurement of heart rate (HR) variability from short and long-term ECG recordings is a non-invasive method for evaluating cardiac autonomic regulation. In an analysis of the power spectrum in the R-R interval times, the high and low frequencies in the physiological index of stress loading suggest that the aromas have an effect on the autonomic nervous system. As the strain on the sympathetic nerve was relaxed, we conclude that the aroma affected the sympathetic nerves. We also measured the average amount of sleep and quality of waking by the activity meter and a questionnaire during the aroma-load. We conclude that there are individual differences in amount of sleep and quality of waking.