

〈一般論文〉

## Effects of Cedrol on the Autonomic Nervous System and Survey of Sleep and Stress in USA

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### Abstract

We previously reported that cedrol, an odorous component derived from cedarwood oil extracted from conifers such as Himalayan cedar and pine, affects the autonomic nervous system and produces a sedative effect by shifting the autonomic balance to the parasympathetic side. We also performed surveys and comparative studies on the effect of cedrol in 3 countries with ethnic and environmental differences (Norway, Thailand, and Japan) and found that cedrol showed significant sedative effects in all 3 countries.

In this study, we first performed a questionnaire survey concerning the subjects' perceptions about stress and sleep in northern and southern New Jersey, which is in the suburbs and within the commuting range of New York, and Colorado Springs, which is in a relatively remote area, in the United States, where people are reported to be highly stress-conscious. Then, we performed a comparative survey to clarify whether cedrol produces the same sedative effect as that observed in our previous studies, and found that it also acted on the autonomic nervous system and created a parasympathetic-dominant state at all 3 regions in the United States. Cedrol is expected to exert favorable effects on stress and sleep of Americans, and to be effective for controlling their high-stress lifestyle.

**Key words:** cedrol, cedarwood, autonomic nervous system, parasympathetic activities dominant, Pittsburgh Sleep Quality Index.