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### Trace Elements in Hot Spring Water

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#### Abstract:

A number of study about trace elements have been actively presented and discussed in Japan Society for Biomedical Research on Trace Elements established in 1990. During this time, analytical instrument and technique have also developed remarkably and consequently standard value changed in some biological trace elements. Hot springs have a great deal with people since ancient times and have been attracted widespread popularity as relaxing and healing place via bath or drinking, and Japanese people especially enjoy hot spring. A wide variety of trace elements included in hot spring water have an important role for healing effectiveness of hot spring. There are many studies about effects of hot spring for human body. The study about elucidation of generative mechanism of hot spring and influence of heavy metal at spring water drinking progress at rapid speed with improvement of measurement accuracy. On the other hand, effluent regulation have also been a big problem in hot-spring area. In particular some trace elements are involved in the effluent regulation. In this paper, definition of trace elements in hot spring including geochemical significance, problem of effect for human body of trace elements at spring water drinking and effluent regulation were discussed.

**Key words:** hot spring water, trace element, drinking hot spring water, affect on human body, effluent regulation

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