Heat shock proteins (HSPs) are present in all organisms from E. coli to humans and have been preserved very well over species. HSPs are then found to be induced by various types of stress, not only by heat stress, and repair the stress-induced misfolded proteins, thus protecting the body from stress. HSPs come in various sizes according to their molecular weights, of which HSP70 (70 kDa) is especially well known for being induced by heat stress. HSP70 is efficiently induced by mild hyperthermia and has the important physiologic function of biophylaxis action (protection from stresses), an immunoenhancing effect (activation of NK cells), and a molecular chaperone action (folding of proteins).

We confirmed that HSP70 was induced by mild hyperthermic living (Kaon Seikatsu) such as bath and hot-spring, and established the HSP bathing method (that had taken a bath for 10-20 min. at 40-42°C, keep it warm for 15 minutes after that) to increase HSP70. In the HSP bathing method, HSP70 and NK cells activity increased significantly on two days after bathing. About five minutes could be shortened by using bath additive including the carbonic acid at the bathing time. The rise of the heartbeats with the step going up and down was decreased by HSP bathing, and the physical index increased significantly. In the results of the questionnaire concerning health, tiredness and muscular pain were reduced, the confusion of feelings was controlled, and the result of the improvement mentally and physically was obtained in the HSP bathing.

On the other hand, various functions of whole body decrease with aging. Also, the induction of HSP70 rapidly decrease on the sixties, the senior citizen become weakening to the stresses and the immunity. In this report, it was shown about the relationship between the benefits of bathing, hot springs and HSP70.

Japan is the best country of long life expectancy in the world, and a lot of Japanese like bath. It seems that one of the reasons of a Japanese long life is the induction of HSP70 by a certain daily activity like bathing, and this would be helpful in reducing medical expenses in the elderly.

Moreover, there are some reports that HSP70 is related to long life. As for recent high-profile folding diseases caused by misfolded proteins, such as Alzheimer disease, and Parkinson disease, HSP70 induced by bathing can be expected to be supplementary remedy through the molecular chaperone effect of HSP70. Especially, bath and hot-spring (40-42°C) in Japan is suitable for inducing HSP70. It seems that the hot-spring hopping is the most reasonable ecological way to keep fit as the healthy method in the old age.

**Keywords:** Heat shock protein 70 (HSP70), HSP bathing method, Kaon Seikatsu (Mild hyperthermic living), Healthy aging, Hot-spring popping