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Verification of the efficacy of long-term bathing in a weakly radioactive alkaline simple sulfur spring on arteriosclerosis based on the mathematical model of the development of arteriosclerosis: including verification using an improved analysis method

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The efficacy of a single bath in weakly radioactive alkaline simple sulfur springs, radioactive springs and alkaline springs on arteriosclerosis has been previously verified based on a mathematical model of the development of arteriosclerosis [1 –5]. On the other hand, studies have also been conducted on the efficacy of long-term bathing in weakly radioactive alkaline simple sulfur springs on arteriosclerosis and it has been found that bathing over a long period of time (about three months) is effective with more frequent bathing being even more effective [1]. In this study, the efficacy of long-term bathing in weakly radioactive alkaline simple sulfur springs on arteriosclerosis is reverified using an improved analysis method [3]. Based on the mathematical model of the development of arteriosclerosis, it has been revealed that keeping blood cholesterol levels low inhibits the progression of arteriosclerosis [5]. Therefore, blood cholesterol levels are estimated using a minimally invasive skin cholesterol ester level measurement device that irradiates the skin with mid-infrared light and calculates the cholesterol ester level of the skin from the absorption spectrum intensity. In the improved analysis method, the change in the difference between the "peaks" and "valleys" of the cholesterol ester absorption spectrum before and after bathing is examined. The analysis revealed that after about three months of bathing, statistically significant increase of people whose cholesterol levels returned to normal due to disappearance of these "peaks" and "valleys" is confirmed. This means that the efficacy of long-term bathing on arteriosclerosis has been verified.

References

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