

## **SGE: Origin and Unique Properties**

SGE volcanic mineral (Super Growth Energy Stone) was discovered in 1978 near Mt. Ohkue, close to Takachiho Gorge, in Kyushu, Japan. These regions have a complex geology, having been the subject of repeated volcanic activities over many thousands of years. This volcanic activity has created the formation of a large layered caldera.

SGE mineral consists of various common and rare trace elements, and is the result of volcanic metamorphism over many years. Researchers believe that SGE stone was formed by the crystallization of the sandstones during large volcanic activity in the Shimanto Marine Stratum, which makes up the geographic formation of the southwestern regions of Japan.

Initial attention was drawn to SGE stone after an analysis of the water issuing from the mineral bedrock formations. Examination of SGE groundwater showed that it contains more than 50 minerals, many of them rare. SGE stone was found to be composed of several metamorphic mine minerals, as well as a few kinds of basic elements and trace metallic elements that are not found in ordinary mineral stones.

Along with basic elements such as magnesium oxide (MgO), aluminum oxide (Al<sub>2</sub>O<sub>3</sub>), potassium oxide (K<sub>2</sub>O), silicon dioxide (SiO<sub>2</sub>), and magnesium oxide (MgO), SGE stone also contains rare earth elements such as erbium, lanthanum and lutetium, as well as abundant trace elements including vanadium, rubidium and zirconium. Also found in SGE is titanium, which is related to the maintenance of organisms; and selenium, which enhances immune system function and reduces inflammation.

The manganese, copper and zinc contained in SGE stone is believed to contribute toward its ability to vitalize super oxide dismutase (SOD), an antioxidant and free-radical inhibitor, by removing active oxygen in the body.

## **SGE From the Viewpoint of Health**

By Shigeyuki Hirose, Dr. of Medicine

The healing effects of SGE stone have been investigated using several types of experiments and examinations, including rat experiments by Dr. Niwa and Professor Serge Jurasunas. I have been conducting clinical trials based on these experiment data since 2000. I have identified more SGE stone effects than I had expected, which improved various health conditions.

Clinical trials were conducted as follows: The number of patients is about 1,000 people. The patients suffer from a variety of health conditions, such as rheumatoid arthritis, cancer, atopic dermatitis, psoriasis vulgaris, and other chronic diseases. Remedies are sand baths containing ceramic balls made of SGE stone, drinking SGE water, and ingesting SGE stone powder of 1 micron in diameter. It should be noted that most of the patients improved their quality of life.

My clinic has given the SGE treatment to conditions resulting from traffic accidents, frozen shoulders (periarthritis numeroscapularis), excess sensitivity to cold, osteoporosis, neurosis, etc., and had good effects. Patients who had sand baths and SGE powder became active in their daily lives

because they didn't feel tired. I myself also experienced that the sand bath has apparent effects on recovery from fatigue. It also helps decrease body-fat percentage and weight. Oral dose tests of SGE water and powder showed rapid recovery from fatigue despite short sleeping hours, and almost no smell in the stool. It is inferred that SGE is closely related to the vitalization of intestinal bacteria, the prevention of lipid peroxide formed through the attachment of free radical to lipid, and the elimination of substances that cause fatigue in the human body.

### **Super Oxide Dismutase**

SGE Stone has functions similar to super oxide dismutase (SOD). Since it was known that SGE stone impedes lipid peroxide, it has been used to protect the human body from lipid peroxide that exists in the radiation and red corpuscle membranes. We know that chemotherapy and radiation impede SOD in lung cancer. It is also known that SGE stone has anti-inflammatory effects on lung cancer and malignant tumors. SGE stone also has effects on rheumatoid arthritis patients who had steroid treatments.

Among rheumatoid arthritis patients who take SGE internally and SGE sand baths, 85 patients showed anti-inflammatory effects. They didn't feel painful stiffness in the morning. I was amazed to see rheumatoid arthritis patients' recovery, including a boy who had difficulty in walking while he took steroids. Two months later, the patients could swim. The special sand bath therapy decreased fatty acid to a fourth in the blood of rheumatoid arthritis patients. Due to the decrease of fatty acid, the patients recovered their blood flows and peripheral circulatory disturbances, which eliminated stiffness they had felt in the morning.

### **About The SGE Health Project**

By Dr. Michihiko Ueda, Dr. of Medicine

Life maintenance activities of human beings are controlled by electric signals that run through neural pathways. A human being is energetic. From this viewpoint, scientific experiment data showing that SGE is a natural radioactive isotope and far-infrared radiator interestingly suggest that SGE has some effects on the human body.

Clinical cases also showed that an SGE sand bath had remarkable effects on rheumatoid arthritis. In balneotherapeutic medicine, the effects of thermo-therapy on rheumatism and other chronic diseases have been already proven. Interestingly, SOD's enzyme vitalization function, which has close relationships with free radicals, was also reported with scientific experiment data.

Oxygen is essential to compose bio-energy that maintains the life of human beings, and the roles of reactive oxygen to maintain vital functions are very important. On the other hand, part of reactive oxygen becomes harmful free radicals, causes inflammation of cells and produces fat lipid peroxide, and thus causes aging or diseases. The human body originally has functions to immediately scavenge free radicals in our cells or make it harmless with antioxidant enzymes.

What is important is not a simplistic scavenging ability, but a selective metabolic scavenging ability. In this sense, SOD and other internal enzymes have important roles. We plan to further promote the verification with pharmacological tests concerning effects of SGE trace elements and energy on vital functions, and relationships with the vitalization of internal enzymes.

## **SGE From the Viewpoint of Science**

By Dr. Shoji Kubota, Dr. of Science

All substances in nature emit weak radiation that can be called growth energy, and about 90 percent of this is uranium series and thorium series radiation. In contrast, in **SGE** stone, a potassium series radioisotope ( $^{40}\text{K}$ ) radiates energy effective to the human body. The value is  $8.1 \times 10^{-1} \text{ q/g}$ , which is quite high compared with those of other well-known remedial substances.

Another feature is that SGE stone is a high-level far-infrared radiator. The far-infrared radiation emission rate in the wavelength region of 4.0 to 24 microns is, on average, as high as 95 percent. SGE stone emits far-infrared energy of 4 to 14 microns, called growth wavelength, and produces great energy by resonating with biological body molecules.

Energy presence was identified in SGE stone with a measuring device that can measure weak electromagnetic wave energy. This can mean that SGE stone emits mid- to far-infrared radiation, which has drawn worldwide attention, and special weak energy, which well explains the excellent functions and effects of SGE stone.

## **Vital Trace Elements**

SGE Stone has more than twenty kinds of trace elements that help to maintain vital functions. A composition investigation of SGE stone revealed that it contains quartz ( $\alpha\text{-SiO}_2$ ), albite ( $\text{NaAlSi}_3\text{O}_8$ ), annite ( $\text{KFe}_3(\text{SiAl})_4\text{O}_{10}(\text{OH})_2$ ), a kind of isinglass, and small amount of parawollastonite ( $\text{B-CaSiO}_3$ ). One of the features of SGE stone is that it contains abundant essential trace elements, as well as magnesium, calcium, potassium, and other major elements in its chemical composition. It should be especially noted that SGE stone contains most of more than fifty kinds of essential trace elements with significant roles in the human body.

For example, SGE stone contains trace metal elements that are not contained in ordinary rocks. They include vanadium, useful for the remedy of diabetes; manganese, copper, and zinc to vitalize super oxide dismutase (SOD), a reactive oxygen-scavenging enzyme; cobalt, related to a growth factor of organisms; titanium in an extremely small amount to maintain vital functions coexisting with other elements; and selenium to help immunization and give anti-inflammatory effects. SGE stone also contains many rare-earth elements that are considered to be original constituents of the earth.

## **The Negative Ion: Balancing Vital Functions**

The environment currently surrounding us doesn't have enough electrons, and oxidation has been progressing because of the recent increase in factors for environmental destruction, such as chemicals with excess electrons.

The human body transmits various information with internal electric signals to maintain life. With a balanced arrangement of plus ions and minus ion, our body functions work properly with the smooth flow of electric signals. However, in the current environment, our body doesn't have enough electrons. Negative ions have an important role in recovering a normal balance between plus and minus ions and creating a neutral status. Our experiments on the negative ions produced by SGE stone revealed that while positive ions exceeded negative ions in ordinary room conditions, negative ions increased when we put SGE stone in the room.

## **Improving Blood Circulation: SGE Heightens Metabolic Functions**

We conducted an experiment on blood-circulation speed after drinking SGE water, using an ultrasonic Doppler blood-flow measuring device. We monitored blood circulation speed every 30 minutes for three hours after drinking 400 ml of SGE-treated water. In this experiment, the blood circulation speed increased as time elapsed. We conducted the same experiment with tap water for a control group, but there were no changes in the blood circulation speed. The experiment showed that SGE water helps improve blood circulation--one of the major factors in maintaining health--and heightens metabolic functions of the human body.