Fast muscle and slow muscle can be toned at the same time.

Muscle can be broadly divided into two types, fast muscle ("1") and slow muscle ("2"). Normally they cannot be toned at the same time, because fast muscle requires high intensity training while slow muscle requires training continually and for longer periods at lower intensity. When KAATSU Training is begun, there is insufficient blood flow volume because of the application of pressure and so in the slow muscle, which starts working immediately, there is a lack of oxygen. This is an artificial inducement of the state usually only achieved by high intensity exercise. The brain is therefore tricked into thinking there is a large load on the fast muscle, which would normally take more time to become active. In this way, KAATSU Training enables simultaneous toning of fast muscle and slow muscle using light loads.

Glossary

1 [Fast muscle]
Fast muscle being able to contract instantaneously. Fast muscle is suitable for exercise requiring great power and it is used mostly in anaerobic exercises. Fast muscle is highly enlarged and needs to be toned if the aim is to increase muscle mass or strength.

2 [Slow muscle]
Slow muscle being able to contract continuously. Slow muscle is suitable for exercise requiring stamina and it is used mostly in aerobic exercise. Slow muscle is difficult to enlarge and needs to be toned if the aim is to tighten-up muscles or build stamina.

Growth hormone is secreted in large amounts, activating the body’s metabolism.

Lactic acid is produced by the breakdown of sugar used for energy in muscle contraction due to movement action. When more lactic acid is produced and the blood concentration level of lactic acid rises, there is added stimulation to the hormone secreting sites in the brain leading to elevated secretions of growth hormone, adrenaline and anabolic hormones ("1").

During the application of pressure, the concentration of lactic acid within muscular vessels suddenly rises due to the restriction of blood flow, and the intramuscular receptors ("2") are strongly stimulated. The signals from these receptors induce the action of the pituitary gland ("3"), which secretes large amounts of growth hormone and other hormones. Growth hormone is extremely potent, and its impact on body tissue functions produces favorable anti-aging effects such as rejuvenation, beautiful skin, increased height, hair growth, reduced obesity, and longevity.

Glossary

1 [Anabolic hormones]
Hormones involved in the synthesis of proteins.

2 [Receptors]
structures upon which molecules that have a mechanism for receiving various kinds of internal and external stimuli and changing it for use as information.

3 [Pituitary gland] An endocrine gland located in the base of the brain above the in the middle, its anterior face has the role of regulating hormone-producing organs throughout the body.