

## **GLOSSARY:**

**Adenosine Triphosphate (ATP):** A complex chemical compound that is formed with the energy released from food and that is stored in all cells, particularly muscle cells. Only with the energy released from the breakdown of this compound the cell can perform work.

**Fast-twitch Fiber:** A muscle fiber characterized by fast contraction time, high anaerobic capacity and low aerobic capacity, all making the fiber suited for high power output activities.

**Fatigue:** A state of weariness, discomfort and decreased efficiency resulting from prolonged or excessive exertion.

**Isokinetic Contraction:** Muscular contraction executed at a constant speed and in such a fashion that the tension developed by the muscle while shortening is maximal over the full range of joint motion.

**Isometric Contraction:** Muscular contraction while tension is developed but with no change in the length of the muscle. Also referred to as static contraction.

**Isotonic Contraction:** Muscular contraction in which the muscle shortens with varying tension while lifting a constant load. Also referred to as dynamic contraction and concentric contraction.

**Lactic Acid:** A fatiguing metabolite of the lactic acid (anaerobic) system resulting from the incomplete breakdown of glucose.

**Slow-twitch Fiber:** A muscle fiber characterized by slow contraction time, low anaerobic capacity, and high aerobic capacity, all making the fiber suited for low power output activities.

**Speed Play (Fartlek):** An exercise programme involving alternating fast and slow running over natural terrains. It is the forerunner of the interval training system.

**Strength:** The maximal pulling force of a muscle or muscle group.