To Stretch or not to Stretch

Stretching has been reported to have numerous benefits to muscle health. Not only does it have a positive effect on muscle recovery, stretching also increases joint mobility for injury prevention. The common belief is that flexibility training elongates muscles fibers for an increased range of motion, but this “elongation” is actually a decrease in the sensitivity of sensory neurons. In the IHP Seminar Series on the 27th of April, IHP’s exercise specialist Annabelle Fong explained the benefits of stretching, before and after exercise training.

Annabelle began by introducing the physiology behind stretching, as well as explaining the importance of sensory neurons and its’ influences on muscle length. She discussed how flexibility training allows the muscle to extend in a larger range of motion by increasing pain tolerance instead of lengthening muscle fibers. In order to decrease the possibility of injury, it is important to combine both strength and flexibility training in one’s workout in order for the muscle to adapt in different ranges.

She further differentiated commonly used stretches: static, dynamic, ballistic, and proprioceptive neuromuscular facilitation (PNF). Static stretching is a slow and constant stretch held at a time frame of 15 to 30 seconds, preferably used as a cool-down at the end of a training session. Dynamic stretching is a slow and controlled stretch mimicking sports movement and increasing the core temperature; hence it is great for a warm-up before training. Ballistic stretching is a rapid bouncing-like movement commonly used for stretching. However this type of stretching has a high risk of injury without any proven additional benefits, hence it is not recommended. Lastly, PNF involves both passive and active muscle movement to increase the range of motion and is greatly favored over other methods for increasing flexibility as it facilitates muscular inhibition.

To take this knowledge into practice, Annabelle invited the participants to join her in a practical session to experience the discussed stretching methods. She demonstrated a dynamic warm-up, with five different simple and sport oriented movements. This was followed by a static stretch session to relax all muscles of the body. Some of the movements were slightly adjusted according to the individual’s flexibility, while everyone was working at their own pace. Stretching is indeed suitable for everyone and should be incorporated into your training routine.