Post Marathon Recovery: Understanding Muscle Soreness



After finishing your race and completing your challenge. What's next? Do your legs get sore after running? Muscle soreness is very common after a workout. Post recovery is just as important as pre-workout, it can help the muscle to repair, rebuild and strengthen. Without sufficient time to recover, the body will continue to wear down from intensive exercises.

What is muscle soreness?

Generally, muscle soreness caused by exercise can be classified as acute or chronic. *Acute muscle soreness* refers to temporary hypoxia in the muscles, accumulation of metabolites, and pain. It will affect

anyone, from athletes to beginners. Regardless of your level of fitness, *acute muscle soreness* will happen when you try a new kind of exercise your body isn't used to, or you level up your workout intensity.

Chronic muscle soreness often occurs one to two days after the training. The exact cause is still unknown, but most studies suggest that it is caused by minor muscle damage. Especially with lesser-used or trained muscles, or when engaging in sudden and intense or excessive and eccentric exercise. The best prevention is to train gradually so that the muscles can slowly build strength to perform repetitive exercises and adapt.

Muscle soreness vs muscle strain

In most cases, the soreness will shortly disappear after you stop exercising. It is crucial to distinguish muscle soreness and muscle strain. If the discomfort lasts longer than a few days, and you experience unbearable pain, loss of joint range of motion due to severe swelling. You may want to seek medical attention if you experience any of these symptoms after exercising.

How to treat muscle soreness?

The remedies to muscle soreness are to perform gentle exercises, stretching or walking. You can also consider

Tips to Avoid Muscle Soreness:



- 1. Exercise according to your health and conditions.
- 2. During training, try to avoid concentrating on a single body part for a long time, do not overload certain muscle groups.
- 3. Stretch more to help prevent muscle spasms.
- 4. The Progressive Overload: The "overload principle" of muscle training makes muscles vulnerable to injury. In conjunction with the "Progressive Overload", slowly improving the quality of muscle training can effectively avoid injury.

massage and using a heating pad or a warm bath, it helps to improve blood circulation and to ease discomfort temporarily. Avoid overdoing exercises, otherwise it will easily cause more serious injuries.

When you are planning for your training program, bear in mind to plan for recovery too. Pay attention to how your body feels to determine your recovery needs and you can modify your training along the way.

About the author

Dr Chi-Chung Kong is an orthopaedic surgeon focusing on knee surgery. A sports enthusiast.