

Rest & Recovery

Are you training for a race or a run, or exercising for health benefits? Did you know that recovery from training is actually more important than the training itself, as repair and rebuilding of damaged muscle tissue can occur only during a recovery period?

Charlie Hoolihan, director of personal training for the Pelican Athletic Club in Mandeville, Louisiana, talks below about two crucial steps for recovery:

1. Adhering to the healthful-lifestyle behaviors of proper sleep and nutrition
2. Establishing a flexible, well-thought-out training plan that includes significant recovery workouts and workout cycles

Sleep: The Ultimate Recovery

Sleep lets your body recover and repair. Studies say sleeping 7–9 hours a night is critical for biochemical balance, raising levels of substances like growth hormone—a primary muscle-repair agent— and reducing inflammatory chemicals like cortisol, IL-6 and TNF-a (Dement 2000; Gonnissen et al. 2012).

Sleep enhances the muscle-building effect of exercise by increasing protein synthesis and helping the nervous system return to a more relaxed, parasympathetic state. Sleep also boosts immune function, which leads to optimal recovery of muscle tissue (Hauswirth & Mujika 2013).

Nutrition: Fueling Recovery

Improving strength, speed, endurance and power requires an adequate balance of nutrients from carbohydrates, fats and proteins. Each has a specific role in improving performance, from fueling and recovering from workouts (carbohydrates and fats) to building and rebuilding muscle tissue (proteins).

Consuming more vegetables and fruits and other foods like omega-3 fats that can reduce inflammation is important to exercisers who are altering their internal physiology every day (Gillies 2007). Eating these types of food assists in restoring balance because nutrients that contribute to healing tend to be more alkaline in nature and help bring the body's natural pH to proper levels (UAB 2013).

Active Recovery

Active recovery can also help your body bounce back after strenuous workouts. Active recovery often takes the form of “cooling down” after intensive exercises such as swimming, track-and-field events and vigorous workouts. The primary focus is to keep the heart pumping below maximum, but above resting levels, to help the body process metabolites faster.

An active-recovery workout on the day after a challenging workout can enable you to continue your training (and keep contributing to aerobic capacity) without increasing wear and tear on your body. For help in determining effective active-recovery workouts, work with a certified personal trainer.

Developing A Periodization Schedule

In order to best give your body time to recover, it's helpful to create a periodization schedule for your workouts. Periodization is the process of structuring training into phases. The training plan should follow a specific periodization schedule with periods of increased intensity interspersed with recovery periods within each week and throughout a cycle of weeks.

A periodization schedule can be linear or nonlinear. Linear periodization stretches out over a long-time frame and consistently increases effort. For instance, effort rises in each week of a 3-week cycle and then gives way to a recovery week—a pattern repeated over several months to a whole year. Nonlinear periodization follows similar buildup and recovery patterns but may increase intensities sooner in an undulating manner.

Linear is good for athletes who have specific seasons, while nonlinear can be better for fitness clients whose schedules tend to be affected by life's random pattern. Both formats have proved effective in improving performance (Simão et al. 2012).

Whichever method you choose, your baseline fitness level and end goals must be founded in reality and determined by a current maximal or submaximal effort. A 5- to 10-repetition resistance training set at best weight (5- to 10-repetition maximum) or an hourlong cardiovascular sequence for best distance or average speed can provide the foundation of the training program. For help in creating an appropriate periodization plan, work with a certified personal trainer.

References

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