

## Recovery Tips

### HOW TO PROMOTE REGENERATION AND ACTIVE RECOVERY

**Prevention is Key** - Overtraining, late nights, and/or poor nutrition will dump waste products into blood and can deplete carbohydrate energy stores in the muscle. This metabolic stress taxes the nervous system and reduces your energy levels. Metabolic Stress can be reduced with appropriate recovery periods and fuel replenishment.

Regeneration requires attention to sleep, work and travel patterns. If the activities in your daily living do not allow for down time (low stress/high relaxation) then recovery between exercise bouts will be progressively more difficult, if not impossible.

Active recovery is the participation in low intensity activities in between normal or intensive exercise bouts. Active recovery can be very effective at reducing metabolic stress and promoting supercompensation.

**Immediate Response** - Recovery is promoted by the following both passive and active recovery methods.

Recovering from **longer or extensive** training (i.e., long slow, Zone 1-3).  
The functions below are in order of importance to the recovery process.

Function	Response Function (activity after exercise)
1. Nutritional (fluid and fuel stores) 2. Physiological (muscle cell) 3. Neurological (peripheral NS) 4. Psychological (central NS)	1. Drink and eat (carbohydrates within 30 minutes post exercise). 2. Light exercise / stretch / massage 3. Contrast shower/spa / massage 4. Increase motivation / reinforce emotional health

Recover from **speed or intensive** training (i.e., Zone 4-5)  
The functions below are in order of importance to the recovery process.

Function	Response Function (activity after exercise)
1. Neurological (peripheral NS) 2. Physiological (muscle cell) 3. Nutritional (fluid and fuel stores) 4. Psychological (central NS)	1. Contrast shower / spa / massage 2. Light exercise / stretch / massage 3. Drink and eat 4. Increase motivation / reinforce emotional health

### Recovery after races or high impulse training

Triathlon coach Gale Bernhardt suggest the following time-lines for race recovery:

- Bicycle races: 1 to 3 days per hour of racing
- Triathlon races: 3 to 5 days per hour of racing
- Running races: 4 to 6 days per hour of racing

To recover from sustained high intensity training in zones 3-5 (i.e., high impulse), at least 36 hours of recovery time will be required before additional high impulse training should continued. .