overtraining and hydration

the center for the female athlete /

overtraining syndrome

It is normal to feel a temporary decrease in performance after periods of intense exercise. The body is fatigued and depleted of energy. It needs to be replenished before performance improves. This performance decrease can last anywhere from a few days to a few weeks. It is best treated with a short amount of time off or easier workouts. Afterwards, sports performance is typically better than before the intense exercise. This is a common technique used by coaches—to time an athlete's peak performance with an important event. It is not a cause for concern.

Overtraining syndrome is different than normal changes in performance based on exercise intensity. When the body overtrains for too long, body systems begin to break down and change in function. Overtraining syndrome can affect psychological, neurological, endocrine and immunologic systems. Athletes notice decreased performance, but they also have difficulty with mental stressors, hormone changes, fatigue, sleep difficulties and increased susceptibility to infection.



There is no test to officially diagnose overtraining syndrome. When an athlete is experiencing these symptoms, it can last months at a time. They need extended time off to recover. Some may also do well by decreasing to a lower level of competition and removing the mental pressure to be at peak performance. Getting a medical team involved can also help with recovery and timing a sports return for when the athlete is ready.

sports and hydration

Hydration is key to good sports performance and athlete health. The "right" amount to drink varies between different athletes and different circumstances. Exercising in a hot, humid environment requires more hydration than exercising in a cool, comfortable environment – even for the same athlete. The more an athlete is adapted to the heat, the more they sweat. The saltier the sweat, the more electrolytes they need. As you can see, the fluids you need today may not be the fluids you need next month. Here are some easy tips to keep up with the body's changing needs.

Check hydration by looking at the urine color.
Urine should be pale yellow to colorless. Darker colors indicate dehydration.



- Drink water before and at the beginning of workouts.
- Add electrolyte replacement sometime around 30-60 minutes into a workout (the ideal time varies, depending on the athlete's individual sweat content).
- Sports drinks such as Gatorade and Powerade were designed to replace fluids lost through sweat, but these are not the only options available.
- After the workout is done, switch back to water for the rest of the day. Replace additional salt through food.





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