[IMAGE]

Avoid the Morning Train

The human body is known to go through rhythmic physiological cycles each day, as the body responds to ambient light, activity levels, mealtimes, and sleep. Similarly, our immune systems appear to be affected by the time of day, or by the time of day that we exercise, based on a recent study in the *British Journal of Sports Medicine.*

At 6 a.m., 14 competitive male swimmers performed a 400-meter crawl five times in a row, with one minute of rest between each 400-meter set. They repeated the same swim session on a separate day, but at 6 p.m. After each swim session, saliva samples were taken from the swimmers and measured for secretions of cortisol and IgA. Cortisol is a stress hormone that indicates a weakened immune system; conversely, IgA is a substance that helps the body fight respiratory tract infections.

Morning swims were associated with the production of significantly higher levels of cortisol and lower levels of IgA in the swimmers' bodies. In other words, swimmers who train in the morning may be at a higher risk for upper respiratory tract infections than those who train in the evening.

Don't misinterpret these findings, though. They don't necessarily apply to other sports, and working out in the morning is certainly better than not working out at all. If your schedule is flexible enough, however, consider swimming later in the day, rather than right after you wake up - especially if you're already feeling "under the weather."

Reference:

Dimitriou L, Sharp NCC, Doherty M. Circadian effects on the acute responses of salivary cortisol and IgA in well-trained swimmers. *British Journal of Sports Medicine* 2002:36, pp. 260-264.