

# **The Importance of Healthy Sleep Habits for the Young Swimmers**

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# Sleep & Athletic Performance

Verdon, A. (2011), “The Importance of Sleep for Athletic Performance” RETRIEVED FROM [www.discoveroccer.info./2011](http://www.discoveroccer.info./2011).

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- ❑ Sleep is a crucial restorative process.
- ❑ Positive correlation between physical and mental stress and the amount of sleep needed to “restore” the body.
- ❑ Sleep as the 1<sup>st</sup> casualty.
- ❑ Late evening swim periods followed by late meals and studying impairs a swimmer’s body’s ability to recover.
- ❑ Outcome, decreased performance.

# Sleep and It's Impact on Performance:

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- ❑ Lost sleep hinders the brain's ability to perform effectively:
- ❑ **cerebral cortex in the frontal lobe of the brain**
  - **Most important mental functions in sport:**
  - Focus, Concentration, Flexibility, Decision-Making and Information-Processing.

# Sleep and It's Impact on Performance:

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- The very deep or **Rapid Eye Movement (REM)** sleep\_helps
  - Consolidate activities,
  - Tasks and skills undertaken that day.
- Crucial “indispensable” role in
  - Helping motor learning and
  - Skill acquisition.

# Sleep and It's Impact on Performance:

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- Sleep is a significant stimulator of growth hormone release.
  - Promotes Cell Growth & Reproduction.
  - Increases Muscle Mass
  - Stimulates the Immune System.
- Sleep deprivation raises levels of the stress hormone Cortisol
  - May interfere with tissue repair and growth.

# Tips to Improve the Quality of Your Sleep:

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1. Create a sleep schedule:
  - Your body loves routine.
2. Avoid coffee, alcohol and other stimulants prior to heading to bed.
3. Try to avoid high intensity exercise and large meals after 7:30pm
  - (Assuming bed time of 10pm).
4. Create quiet time before bed.

# Tips to Improve the Quality of Your Sleep:

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- ❑ **Create the best possible “sleep environment”.**
- ❑ **To Leave or Not To Leave?**
  - The 30 Minute Rule.
- ❑ **The After-School Nap**
  - Guidelines & Limitations.

# What Is The Ideal Amount of Sleep For Your Swimmer?

MA, C. (6/9/08) "Extra Sleep Helps Give Stanford Athletes Peak Performance" RETRIEVED FROM [www.medicalnewstoday.com](http://www.medicalnewstoday.com)

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- Stanford University study (2008):
  - Small number of participants: N = five (5)
  - Subjects: men's and women's swimming teams.
  - Swimmers who get an extra amount of sleep are more likely to have better performance, mood, and alertness.
  
- Results: The participants maintained their usual sleep-wake pattern for the first two weeks of the study, and then extended their sleep to 10 hours per day for six to seven weeks.

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□ Stanford University study (2008):

Results: With extra sleep, swimmers

- Swam a 15-meter meter sprint 0.51s faster,
- Reacted 0.15s quicker off the blocks,
- Improved turn time by 0.10s, &
- Increased kick strokes by 5.0 kicks.

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- The Stanford Sleep Disorders Clinic & Research Laboratory:
  - *“Typically, many athletes accumulate a large sleep debt by not obtaining their individual sleep requirement each night, which can have detrimental effects on cognitive function, mood, and reaction time. These negative effects can be minimized or eliminated by prioritizing sleep in general and, more specifically, obtaining extra sleep to reduce one’s sleep debt” (Mah, 2008).*

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- Many of the swimmers, who participated in this study
- “... *set multiple new personal records and season best times, as well as broken long-standing Stanford and American records while participating in this study*” Mah (2008).

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Mah (2008) recommends athletes:

- Make sleep a part of the training program,
- **Aiming for 8+ hours most of the time.**
- **Should extend nightly sleep for several weeks before competition to reduce sleep debt.**