## *September 30, 2018*

While this week's post will not focus directly on a nutritional topic, it discusses something equally as important to maintaining health and allowing you to train at your highest level; sleep will be the focus for this week.

#### Why is sleep so important?

Adequate amount and quality of sleep are vital for maintaining health. Sleep helps your brain to function properly, your body to heal and repair itself, helps to regulate and balance hormones, supports a healthy immune system, and helps your body to function optimally (National Heart, Lung, and Blood Institute, n.d.). Without adequate sleep, not only will your athletic performance suffer, but your performance in school, at work, and your relationships with those around you may be impacted as well. According to the National Sleep Foundation, research has found sleep deprivation increases cortisol levels and can decrease the production of glycogen and carbohydrates stored for energy during exercise (National Sleep Foundation, n.d.). On the next few pages are infographics that explain the various impacts inadequate sleep can have on your health and performance.

#### How much sleep do you need?

The amount of sleep a person needs can vary depending on age, activity, life circumstances, etc. General guidelines recommend for children ages 6-12 are 9-12 hours of sleep a day, teenagers (13-18 years) need between 8-10 hours, and adults need an average of 7-8 hours of sleep a day (National Heart, Lung, and Blood Institute, n.d.). As mentioned, these guidelines are general, some people may need more sleep to feel fully functional and in heavier periods of training more sleep may be required to aid with recovery.

Tip #4: Try and avoid caffeine too close to bedtime. Especially if you are sensitive to the effects of caffeine, try and avoid caffeine after 3-4 o'clock in the afternoon to allow the caffeine to work its way out of your system

before you try and sleep. Some people do not experience adverse sleep from consuming caffeine, but for the average person, it takes 5-6 hours for half of the caffeine consumed to be eliminated. Therefore, it is best to have your caffeinated beverages in the morning rather than later in the day.

#### Tips to Better Sleep

Tip #1: Get in a routine. Getting your body used to going to bed and waking up at a certain time each day can improve quality of sleep. While it may be difficult to do this with all we have going on in our lives, consistency is key. Try and aim for similar times each day, but it is better to make sure you are getting the amount you need even if your sleep schedule has to be shifted some on different days.

Tip #2: If you will be traveling to a different time zone for a competition, try and get yourself accustomed to the time difference in the weeks leading up to it. Whether this means arriving early (few days/weeks) or shifting your sleeping schedule/habits slightly at home to better prepare you and your body for when it comes time to compete.

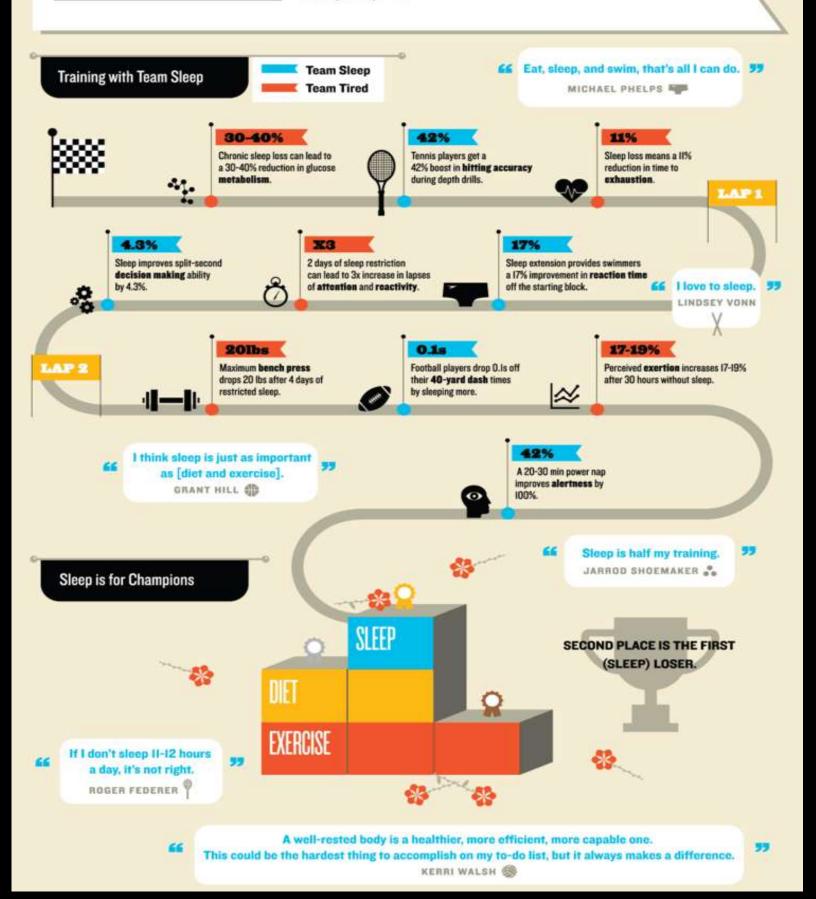
Tip #3: Turn off electronics and try and avoid exposure to blue light 30-60 minutes before bed. This may be difficult but avoiding this type of light stimulus and allowing your mind to unwind may make it easier to stay and fall asleep at night.

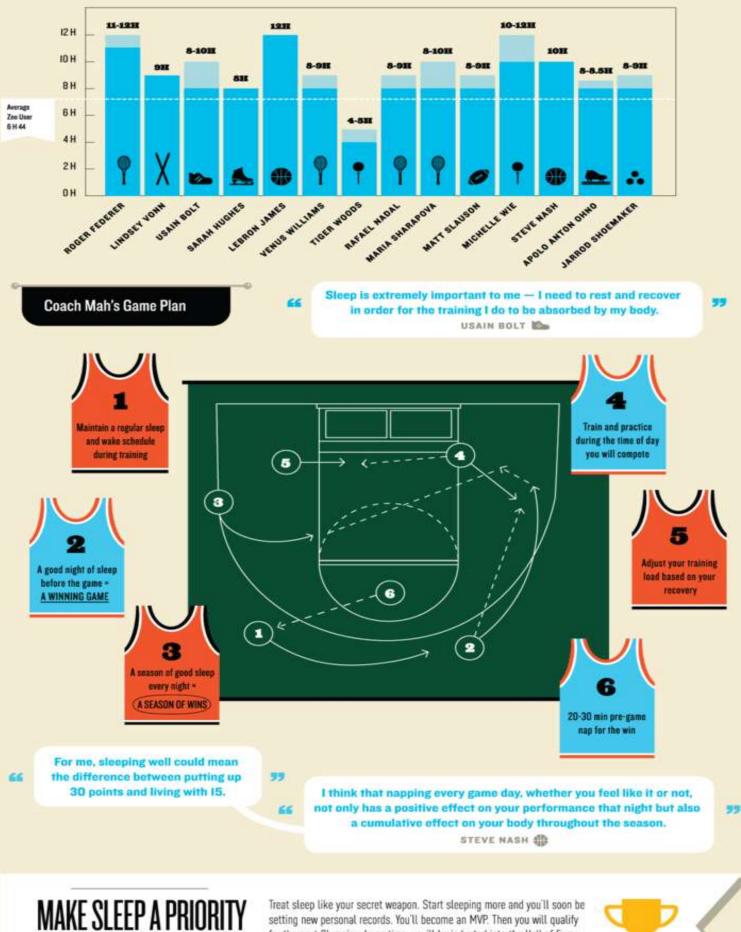
Tip #5: Try and avoid using sleep aids. While they can help you to fall asleep, your body may become dependent on them if you use them too much and make it dificult to fall asleep naturally. In addition, some people may experience a hangover-like affect the day after taking sleep aids. Prolonged drowsiness, lack of motivation, fatigue, or feeling down may occur in some individuals. Other remedies like listening to music, reading a book, or meditating can help to relax and improve quality of sleep during the night. (Fatiguescience, 2013)

# SLEEP TO BE AN ALL-STAR

Meet your sleep coach Cheri Mah who works with collegiate athletes and Olympians, as well as professional teams in the NBA, NFL, and NHL. Coach Mah teamed up with Zeo to help you become an awesome All-Star athlete and along the way, will help you unlock the secret power of optimal sleep for peak athletic performance. So if you're ready to tap into a competitive advantage, let's get to work.

Powered by ZEO with Coach Mah





IN YOUR DAILY TRAINING

Treat sleep like your secret weapon. Start sleeping more and you'll soon be setting new personal records. You'll become an MVP. Then you will qualify for the next Olympics. In no time, you'll be inducted into the Hall of Fame. Ready. Break.

(Kreicas, 2017)

## Sleep & Sports Performance How a good night's sleep can improve your athletic attributes

#### Weight control ·

Being in-shape is key to performance, and the numerous studies into sleep deprivation and obesity have established a link between the two – those who sleep the least tend to be more obese. Sleeping well makes eating the right foods a much easier task – lack of sleep increases cravings for high-calorie junk food, as well as decreasing how much your lifestyle dictates your weight, as opposed to your genetics.

#### **Decision** making

During sleep, memory consolidation occurs, which essentially is the process of turning newly-acquired information into permanent long-term memories. Sleeping well after training ensures that the simulations carried out during practice become ingrained in your overall ability, thus improving your split-second subconscious decisions during a competitive event.

## Reaction time

NASA found that the alertness of their pilots improved by 54%, and their overall performance by 34% in the hours following a 26 minute nap, which NASA also identified as being the optimum nap duration.

## Motivation

There is a positive correlation between sleep quality and proneness to anxiety and depression. Being motivated is the first step on the journey to peak athletic condition, and sleeping well can help avoid giving up on a strict training regime.

#### Stamina

The quality of your night's sleep can significantly influence your physical and mental energy levels the next day – research<sup>1</sup> shows that the perceived level of physical exertion during exercise significantly increases when subjects are sleep deprived, decreasing one's capability to push themselves to the maximum.

#### Accuracy

Research carried out by the University of Stanford found that when their women's tennis team extended their sleeping time to ten hours per night for five weeks, they were able to hit more accurate tennis shots, as well as improving their sprint times.

## Recovery

Sleep facilitates the production of human growth hormone (HGH) which repairs damaged muscles. Getting a good night's sleep allows your body to fully recover from a work-out or training, maximising your preparedness for the next day's exercising and helping to alleviate any potential injury problems. Netherlands star Wesley Sneijder believes that some of his teammates' injuries have been due to inadequate sleep, and that sleep has been a key to consistency for him.



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Importance of Sleep for Elite Athletes

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