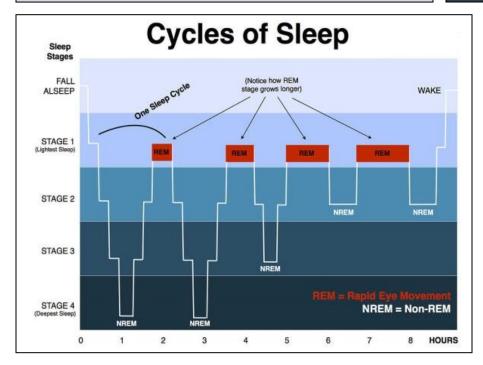
## **SLEEP & RECOVERY**

# Sleep is one of the most important aspects of recovery for athletes. Unfortunately, it is often one of the most neglected parts of our training.

- Stimulation and recovery happens during sleep.
- Tissue regenerates and neuropathways are formed.
- Growth hormone (HGH) is produced which is essential to the repair and restoration process of the body.
- Cortisol, the "stress" hormone, is produced which enables anti-stress & anti-inflammatory functions.
- Limited sleep can lead to elevated production of cortisol which can cause rapid weight gain, high blood pressure, muscle weakness, and mood swings.
- Adequate sleep and exercise helps to regulate proper cortisol levels.
- If we don't recover, the potential for injury increases.

#### HOW MUCH SLEEP DO WE NEED EACH NIGHT?

AGE	HOURS
Newborns (0-3 months)	14-17
Babies (4-11 months)	12-15
Toddlers (1-2 years)	11-14
Preschoolers (3-5 years)	10-13
Children (6-13 years)	9-11
Teenagers (14-17 years)	8-10
Adults (18-64 years)	7-9
Elderly (65+ years)	7-8



#### **RISKS OF SLEEP DEPREVATION**

- Decreased athletic performance
- Trouble concentrating
- Poor memory
- Decreased motor skills
- Increased impulsiveness
- Mood swings
- Low sex drive
- Suppressed immune system
- Vision issues
- Type 2 diabetes
- Cardiovascular disease
- Obesity
- Depression

#### THE AVERAGE PERSON ONLY GETS 5 HOURS OF SLEEP EACH NIGHT

### Sleep is the #1 performance enhancer!

#### **CYCLES OF SLEEP**

- Melatonin levels increase at night and peak between 2 – 3 am.
- Our circadian rhythm (sleep/wake cycle) makes us sleepy at night and wakes us in the morning.
- Each cycle lasts between 90 120 minutes.
- HGH and cortisol levels are regulated during stages 3 and 4 of the sleep cycle.
- 75% of the HGH in our bodies is produced when we sleep; most during stages 3 and 4.