

# Sleep and the Lifecycle of an Athlete

LTAD Stage Specific Sleep Recommendations	Sleep Recommendations			
	Duration (hrs/night)	Quality	Phase	Key Points
<b>Active Start</b> (Females & Males 0-6 years)	13-16	<ul style="list-style-type: none"> <li>Establish and maintain a sleep/nap routine</li> <li>Ensure a comfortable/safe sleep environment</li> <li>Avoid stimulation 1-2 hrs before bed; minimize "screen time"</li> </ul>	<ul style="list-style-type: none"> <li>Consolidate nighttime sleep period</li> <li>Decrease naps to 1-2/day in the first year</li> <li>Natural light exposure first thing in the morning</li> </ul>	<ul style="list-style-type: none"> <li>Establish stable sleep routines and a bedtime routine</li> <li>Use a sleep transition object</li> <li>Introduce independent sleep initiating behaviors</li> </ul>
<b>FUNDamentals</b> (Females 6-8, Males 6-9)	10-11 + 30 min nap between 2-4pm	<ul style="list-style-type: none"> <li>Maintain a regular sleep/nap routine</li> <li>Ensure a comfortable sleep environment</li> <li>Establish independent sleep initiating behaviors</li> <li>Observe sleep for sleep disorders</li> </ul>	<ul style="list-style-type: none"> <li>Establish a neutral sleep pattern between 9pm and 8am</li> <li>Encourage predictable afternoon nap/rest</li> <li>Establish reliable meal routines (breakfast is the most important meal of the day)</li> </ul>	<ul style="list-style-type: none"> <li>Reinforce 15-30 min bedtime routine</li> <li>Avoid stimulation 1-2 hours before bed, control "screen time"</li> <li>Good nutrition and meal routines reinforce sleep routines</li> </ul>
<b>Learn to Train</b> (Females 8-11, Males 9-12)	9.5-10 + 30 min nap between 2-4pm	<ul style="list-style-type: none"> <li>Maintain a regular sleep/nap routine</li> <li>Ensure a comfortable sleep environment</li> <li>Observe sleep for sleep disorders</li> </ul>	<ul style="list-style-type: none"> <li>Maintain Neutral sleep pattern</li> <li>Get early morning light exposure for 30 min. daily*</li> <li>Maintain reliable nutrition routines (breakfast is the most important meal of the day)</li> </ul>	<ul style="list-style-type: none"> <li>Maintain 15-30 min. bedtime routine</li> <li>Monitor and control "screen time"</li> <li>Monitor caffeine intake</li> </ul>
<b>Train to Train</b> (Females 11-15, Males 12-16)	9 + 30 min nap between 2-4pm	<ul style="list-style-type: none"> <li>Ensure a comfortable sleep environment</li> <li>Initiate regular napping strategy</li> <li>Monitor for excessive sleepiness and fatigue</li> <li>Observe sleep for sleep disorders</li> </ul>	<ul style="list-style-type: none"> <li>Maintain a regular sleep/nap routine</li> <li>Get early morning light exposure for 30 min. daily*</li> <li>Monitor for a delayed sleep phase (difficulty falling asleep and waking up for school)</li> <li>Maintain reliable nutrition routines (breakfast is the most important meal of the day)</li> </ul>	<ul style="list-style-type: none"> <li>Reinforce the importance of sleep routine</li> <li>Monitor for cumulative sleep debt (&lt;9 hours/night or &lt;56 hours/week)</li> <li>Monitor caffeine intake</li> <li>Do not train on an unrested body</li> </ul>
<b>Train to Compete</b> (Females 15-21 +/-, Males 16-23 +/-)	8-10 + 30 min nap between 2-4pm	<ul style="list-style-type: none"> <li>Ensure a comfortable sleep environment when travelling and competing</li> <li>Monitor for competition stress and anxiety → insomnia</li> <li>Monitor for excessive sleepiness and fatigue</li> <li>Observe sleep for sleep disorders</li> </ul>	<ul style="list-style-type: none"> <li>Maintain regular sleep/nap routine</li> <li>Monitor for a delayed sleep phase (difficulty falling asleep and waking up for school)</li> <li>Get early morning light exposure for 30 min. daily</li> <li>Maintain reliable nutrition routines (breakfast is the most important meal of the day)</li> </ul>	<ul style="list-style-type: none"> <li>Focus on reducing sleep debt. Get 56-70 hours of sleep/week</li> <li>Do not train if unrested and sleep deprived</li> <li>Avoid technology (screen time) before bed</li> <li>If your sleep is poor seek help</li> </ul>
<b>Train to Win</b> (Females 18+, Males 19+)	8-10 hrs + 30 min nap between 2-4pm	<ul style="list-style-type: none"> <li>Ensure a comfortable sleep environment when travelling and competing</li> <li>Monitor for competition Stress &amp; anxiety → insomnia</li> <li>Observe sleep for sleep disorders</li> </ul>	<ul style="list-style-type: none"> <li>Maintain regular sleep/nap routine</li> <li>Monitor for a delayed sleep phase (difficulty falling asleep and waking up for school)</li> <li>Get early morning light exposure for 30 min. daily*</li> <li>Maintain reliable nutrition routines (breakfast is the most important meal of the day)</li> </ul>	<ul style="list-style-type: none"> <li>Focus on reducing sleep debt. Get 56-70 hours of sleep/week</li> <li>Do not train if unrested and sleep deprived</li> <li>Avoid technology (screen time) before bed</li> <li>If your sleep is poor get help</li> </ul>
<b>Active for Life</b> (Any age participant)	7-9 + 30 min nap between 2-4pm	<ul style="list-style-type: none"> <li>Maintain a regular sleep/nap routine keep your sleep debt to a minimum</li> <li>Ensure a comfortable sleep environment</li> <li>If your sleep is poor quality seek help!</li> </ul>	<ul style="list-style-type: none"> <li>Maintain a regular sleep schedule</li> <li>Get early morning light exposure for 30 min daily</li> <li>Maintain reliable nutrition routines (breakfast is the most important meal of the day)</li> </ul>	<ul style="list-style-type: none"> <li>Get your sleep!</li> <li>Maintain meal routines and always eat breakfast</li> <li>Learn to nap</li> <li>Do not train if you are fatigued or sleep deprived</li> </ul>

\*see: <http://www.litebook.ca/>

**Table 1.** Stage specific recommendations for the critical determinants of sleep and associated key points. Adapted from Weiss.<sup>5</sup>