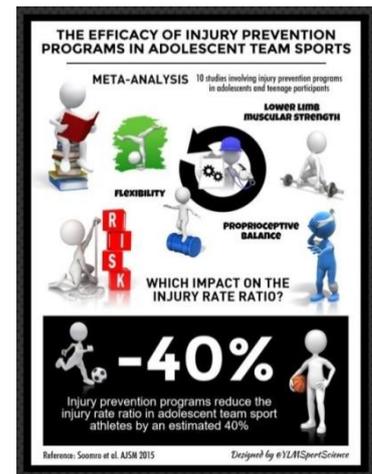


## Kids and Sport

It is imperative for children and adolescents to be active during their growing years, especially for muscle and bone strengthening that will provide life-long benefits. However active kids face physical risks in sport – and their risk profiles are different to that of adults. Active kids face the challenges of the adolescent growth spurt; immature and underdeveloped co-ordination, skills and perception; and varying physical maturity levels within the same age group, leading to unbalanced competition and increased risk. Gender also plays a role, with girls more susceptible to injury when compared to boys, especially in relation to knee injuries where ACL rupture rates can be 4 times higher.

But it's not all bad news! It has been estimated that approximately 50% of child and youth sports injuries are preventable, and there has been an explosion in injury prevention research in the past decade that provides us with a clear direction to pursue to help achieve this. A 2015 Meta-analysis of research found that injury prevention programs focusing on lower limb strength, flexibility and balance can reduce the injury rates in adolescent team sports by an estimated 40%. Nordic hamstring exercises have been shown to reduce the incidence of hamstring strains by 70%, and in those who have a previous hamstring injury, re-injury rates have been reduced by as much as a whopping 85%!! (see links below for additional injury prevention resources).



Strength training has previously thought to be unsuitable for the growing athlete. Recent research now indicates that strength training under the guidance of **expert and close supervision**, can have an injury preventing and performance enhancing effect. In fact adolescent injury rates during strength training (and by implication injury risks) are significantly lower than those recorded during other organised sports. The most important guidance in relation to adolescent strength training is that programs are progressed slowly, cautiously and only under expert and experienced supervision.

Children or adolescents who undergo a rapid increase in sporting demands (intensity and/or duration) may be susceptible to overload/overuse injuries. Prior injury was also highlighted as a general risk for active children and adolescents, and the importance of thorough and complete rehabilitation that extends beyond the initial return to sport was also discussed.

The final area we explored at the Kids and Sport lecture was the role of Pre-season or Pre-participation Physiotherapy Screening to assess individual injury risk factors and physical vulnerabilities, and shape a personalised injury reduction/performance enhancing exercise program.

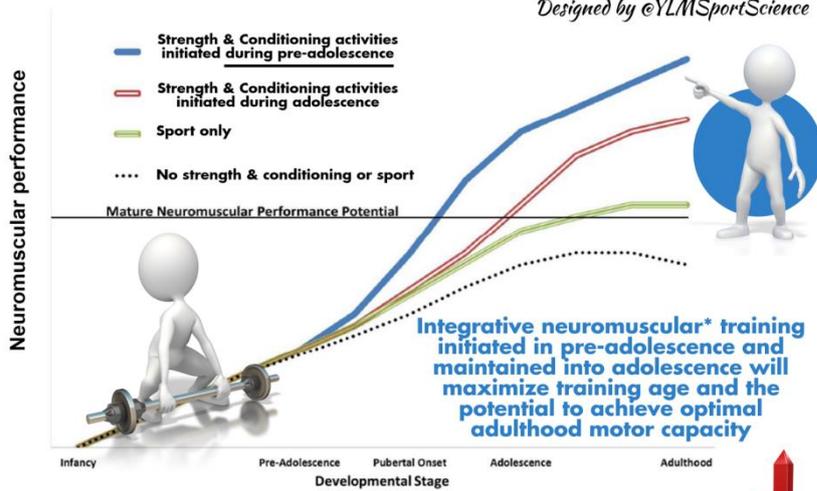
We would be happy to discuss these, or any other issues of concern that you may have in relation to Kids and Sport, or to present this information at your local sporting club or school. Feel free to contact the My Physio team any time: on 9570 7181, Freecall 1800 My Physio (1800 697 497) or drop in to our My Physio reception at GESAC for a chat.

Click on the following thumbnail images for further links, and see below for additional infographics:



# How Young is "Too Young" to Start Training?

Designed by @YLMsportScience



## Reference

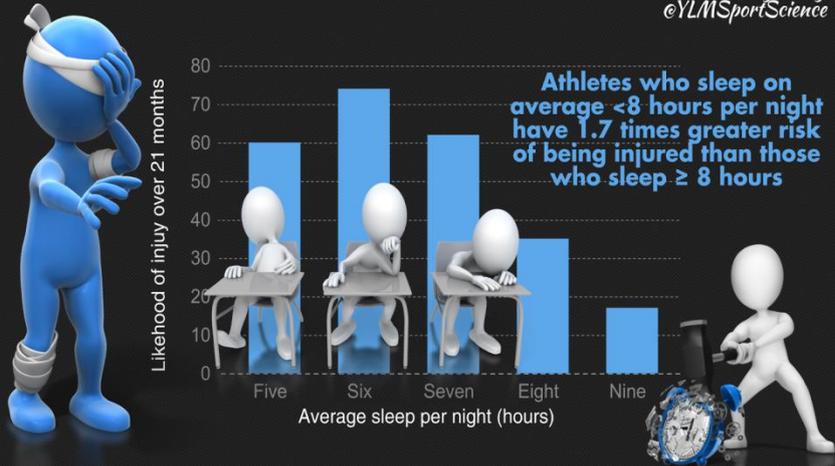
by Myer, Lloyd, Brent & Faigenbaum, ACSMs Health Fit J 2014

\*Resistance training, dynamic stability exercises, core focused training, plyometric drills and agility training



# Likelihood of Injury Based on Hours of Sleep per Night

Designed by @YLMsportScience



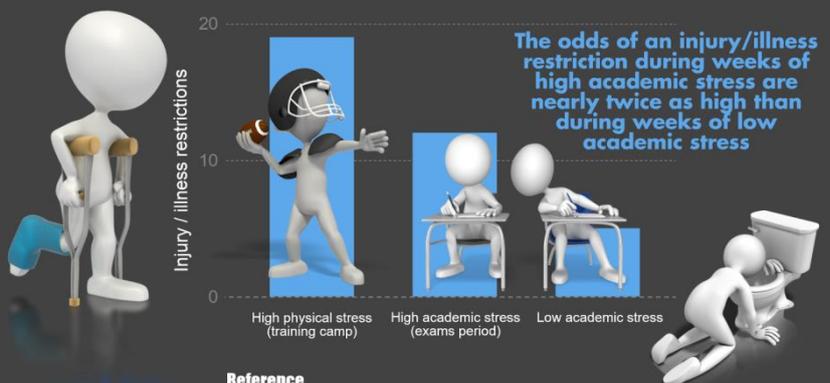
## Reference

Chronic Lack of Sleep is Associated With Increased Sports Injuries in Adolescent Athletes by Milewski et al. in J Pediatr Orthop 2014



# Stress, illness and injury in college football players

Designed by @YLMsportScience



## Reference

The effect of physical and academic stress on illness and injury in division 1 college football players by Bryan Mann et al. in J Strength Cond Res, May 2015



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