



Role of performance science in athlete health

Assoc. Prof. Stephen Bird

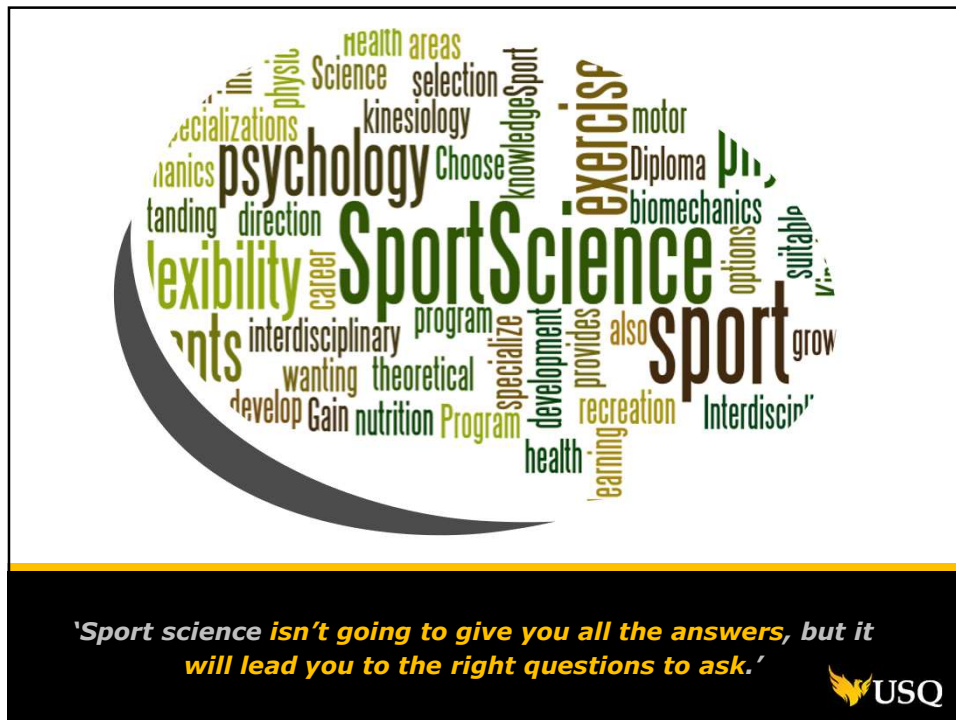
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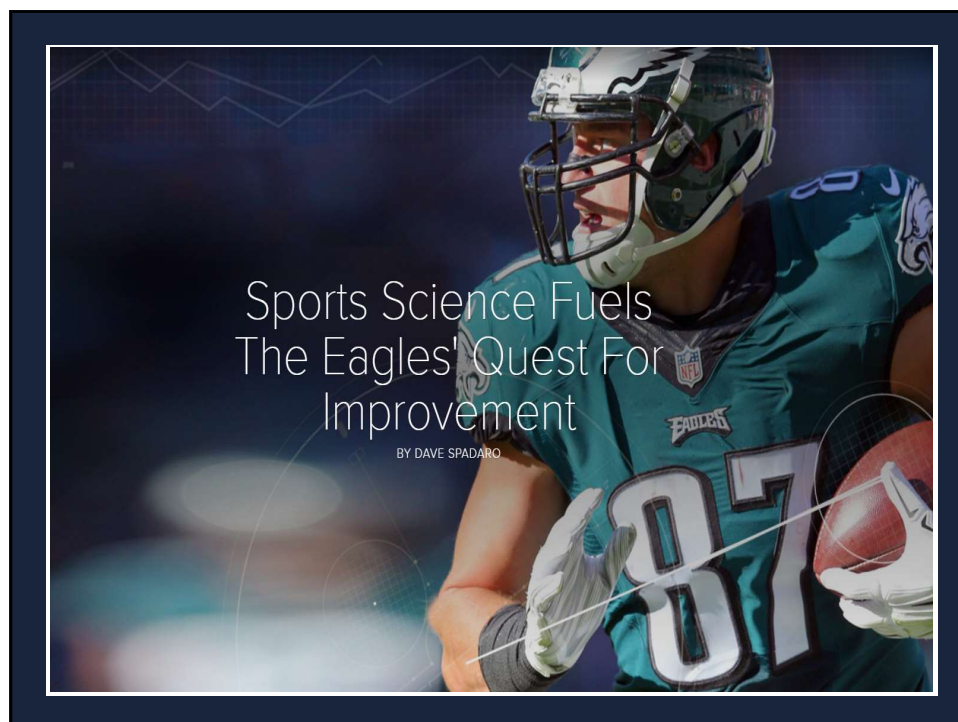
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Coach Chip Kelly Philadelphia Eagles

*'Seems crazy to me when teams insist relying on "old-school" methods as opposed to some of the **newest cutting-edge sports science technology**. Spending money on a sports science program isn't something that counts against the salary cap'*

Image credit: www.fox43.com

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Craig Bellamy Head Coach Melbourne Storm

'AC Milan is very much known for keeping players fresh and helping their recovery. Doing the small things right is one reason you succeed, because all the small things add up'



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Sports science behind Thurston's finals charge


Applying Sport Science


1. GPS tracking
2. Sleep profiles
3. General wellbeing
4. Musculoskeletal testing

Thurston's post-Origin results indicated his workload needed to be scaled back

Critical in safeguarding the fitness of Thurston

Johnathan Thurston has revealed how a \$70,000 sports-science program has the Cowboys champion on track for a record fourth Dally M Medal.

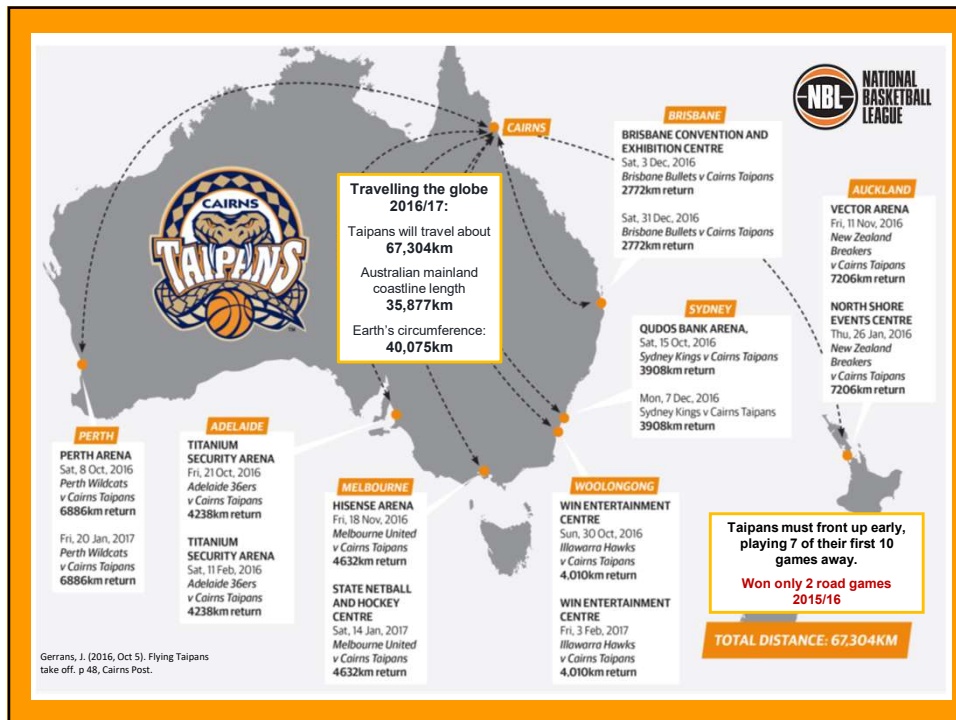
 Badel, Peter. The Courier-mail. (2015). Johnathan Thurston reveals the \$70,000 sports-science program that has him primed for NRL finals charge.



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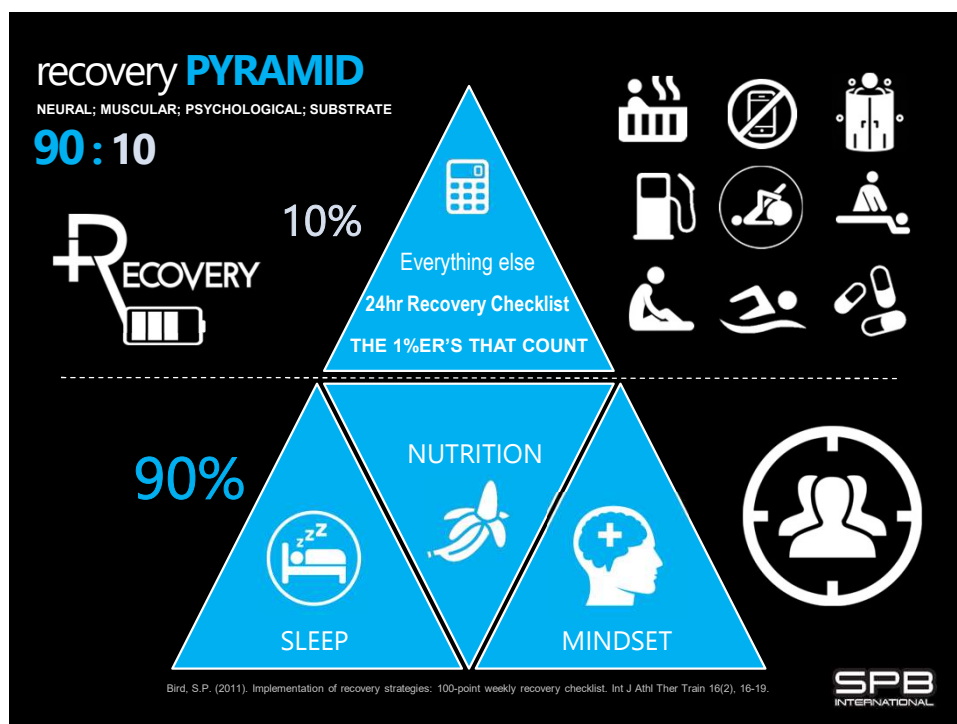
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Sleep and Injury in Young Athletes				
Référence : Fox et al. Sports Med 2019			Designed by @YLMsportScience	
STUDY	POPULATION	FINDINGS		
Luke et al. (2011)	360 young elite athletes (13.8 ± 2.6 years)	The number of fatigue-related injuries was higher when athletes' normal sleep duration was less than 6 h per night		
Milewski et al. (2014)	112 young athletes (15±2 years)	The risk of injury increased by 110% when athletes usually sleep less than 8 h of sleep per night		
Rosen et al. (2017)	340 young elite athletes (17±1 years)	When a minimum of 8 h of sleep was obtained, injury risk was reduced by 61%		
Van Rosen et al. (2017)	496 adolescent elite athletes (17±2 years)	Decreased sleep volume (sleep prior to the injury compared to the preceding 4 weeks) was a risk factor for injury		
Watson et al. (2017)	75 youth soccer players (16±2 years)	Sleep duration & quality were not significant predictors of injury		

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Thank you

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