

K2 HOW 2



#K2HOW2

Growth Spurts

Load Management

Common Injuries to look out for

ADOLESCENT K2:HEALTH

BY KRYSTAL WEIR

Adolescents today are now training to the same level as adults. It seems that the motivation to be the best has now outweighed the general wellbeing of looking after our young athletes.

The peak growth ages for females are 11-13 years of age and the boys are 14- 16 years of age.

Loading is very important to manage particularly during periods of peak growth. A significant growth spurt is greater than 1cm per month.

Parents of high load adolescent athletes need to measure their children's height weekly to assess if training should be adjusted to avoid potential injury.

One month post a growth spurt adolescents will have a reduction of 30% in strength; this needs to be taken into consideration when monitoring an athlete's program to avoid unwanted bone stress.

Fractures, apophysis irritation, growth plate disturbances and apophysis avulsions are all risk factors during this time. This is due to bones growing faster than muscles which increases the load at attachment and bone sites.



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A significant growth spurt is 1cm per month.



LOAD MANAGEMENT

Load is calculated by perceived exertion X minutes of training time or reps, metres etc.

Over a week you can calculate your load; this is classified as acute training load.

Over three weeks you take a rolling average. This equals your chronic load.

Provided that your acute load does not exceed your chronic load, you should remain injury free.

The sweet spot for loading acute to chronic is 0.8- 1.3. Once you go over >1.5 you are in the danger zone (Gabbett 2015).

Cricket also found that 2-4 days after acute peak you are 2-4 times at greater risk over the next 7 days.

Note that if you increase your training load by 15% in one week. You are 21-49% at greater risk of injury (Drew 2016)

COMMON INJURIES IN ADOLESCENTS

Sever's disease is a common inflammation of the growth plate of calcaneal apophysitis or heel bone. Loaded force or sudden growth spurts can irritate the growth plate & becomes painful and debilitating.

Osgood-Schatters is a tibial tubercle apophysitis or lesion of the insertion of the patella tendon below the knee cap.

Managing load during growth spurts will help to decrease the pain associated with these conditions.

Consult your local physiotherapist for load management strategies and to rule out other problematic conditions.

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