

Allenare la forza nei giovani: da problema a necessità

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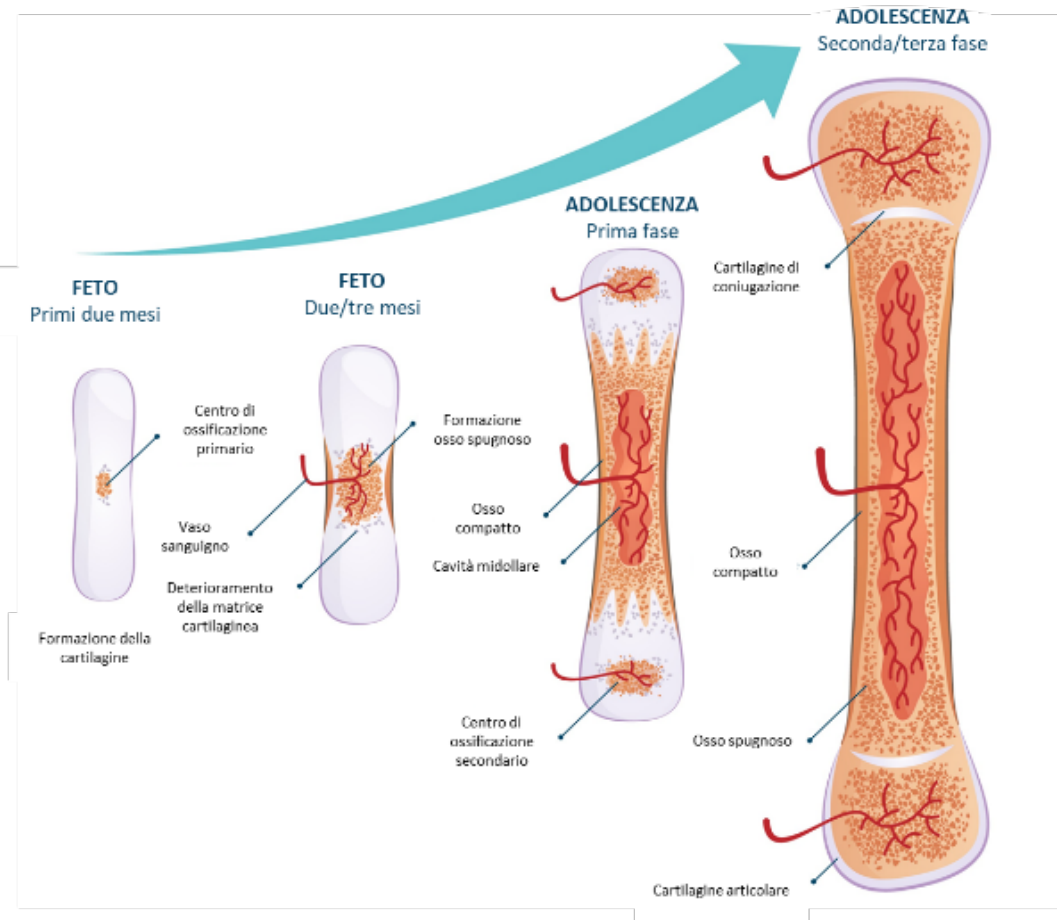
Coordinatore Corso Europeo in Elite Strength and Conditioning

Problema: rallenta la crescita?!



Come cresciamo?

- Genetica
- Ormoni
- Osteociti, osteoblasti, osteoclasti
- Ricambio osseo e crescita



Come possiamo evitare di crescere?!

- Impedimento meccanico
- Modificazione genetica
- 206 ossa...





Forza nei giovani

- Esiste un'età utile? Ed una inutile?!
- Forza non è ipertrofia
- Componenti neurali della forza



Forza nei giovani: perché?

- Aumento forza
- Aumento performance
- Aumento capacità cognitive

Forza nei giovani: cosa dicono gli esperti

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Resistance Training for Children and Adolescents

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MEDICINE AND FITNESS

Forza nei giovani: interpretazioni errate

TABLE 2 Misconceptions Versus Evidence

Misconceptions	Evidence
A child is unable to increase strength before puberty.	Prepubertal children are able to gain strength by an increase in neurologic recruitment of muscle fibers, and gains in strength can be made with low injury rates if resistance training programs are well supervised with an emphasis on proper technique.
Young boys and girls may get “muscle bound” if they resistance train.	Prepubertal strength gains occur by neurologic mechanisms, and pubertal gains may augment muscle growth by actual muscle hypertrophy enhanced by pubertal hormones.
Resistance training may decrease aerobic performance in youth.	Improvements in aerobic performance have been shown with combined aerobic and resistance training programs, and combined aerobic and resistance programs do not appear to impair strength gains in children.
Resistance training may stunt growth.	Well-designed resistance training programs have not been shown to have a negative effect on physical (growth plate) health, linear growth, and cardiovascular health in youth.
Children are stronger now than ever before.	There is a need to target strength deficits and build strength reserves due to declining measures of muscular fitness in modern-day youth.
1 RM testing is unsafe for youth.	1 RM testing may be a safe method for assessing muscular strength in youth provided that qualified supervision is present and appropriate testing guidelines are followed.

- Incremental loads may then be added by using either body weight or other forms of resistance as long as proper form can be maintained.
- In youth with more advanced training age, higher loads and intensities will be necessary to increase muscular strength and power in preparation for sports.^{30,43,44}
- 1 RM testing may be appropriate to develop an individualized resistance training program and monitor progress.

11. Incorporate weightlifting exercises and their derivatives into an exercise program under the direction of a qualified professional. Progress from a wooden dowel to an unloaded barbell as RTSC improves.
12. Educate athletes about the risks associated with the use of performance-enhancing substances and/or drugs and anabolic steroids to discourage the use of such substances.

8. Address all major muscle groups of the upper and lower body along with the core and include multijoint activities, such as squats and weightlifting exercises, for a comprehensive program for building muscular strength and power. These exercises may be complemented by adding more focused exercises to address sport-specific goals.
9. Sensibly incorporate resistance training and account for time spent in resistance training as part of the total training plan to reduce the risk of overuse injuries. Monitoring time spent resistance training in school- and community-based programs in addition to other types of training is important to account for true total training volume.⁹³

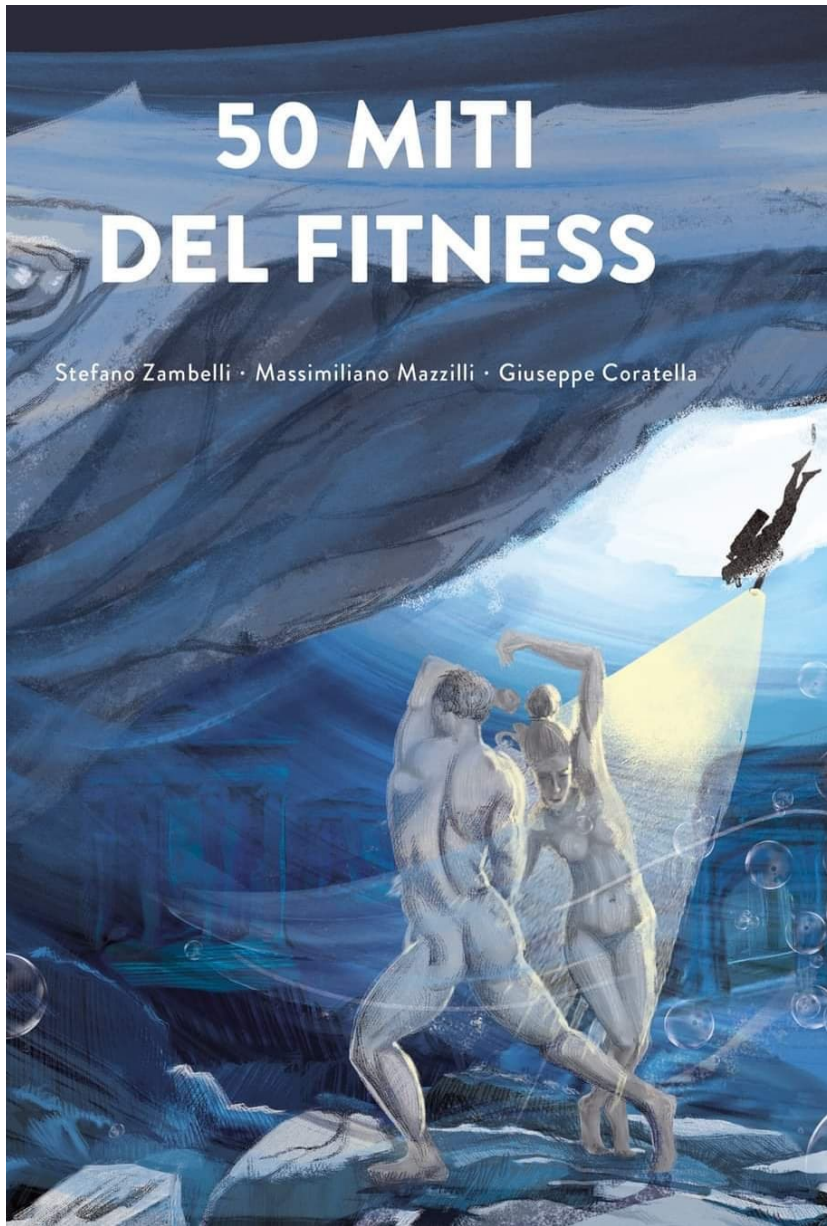
Forza nei giovani: alcune indicazioni

Per riassumere: allenare la forza nei giovani

- NON è associata a danni crescita
- Migliora prestazioni fisiche e cognitive
- Si può modulare a qualsiasi età
- Carichi e TECNICA fondamentali
- 1000 modi per fare forza



David and Goliath:
size differentials can
be overcome with
good technique



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Grazie per
l'attenzione!

