

STRENGTH

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What is Strength?

Ability to resist and / or produce force under given conditions;

Also the quality of bodies by which they endure the application of force without breaking or yielding; -- in this sense opposed to frangibility; as, the strength of a bone, of a beam, of a wall, a rope, and the like.





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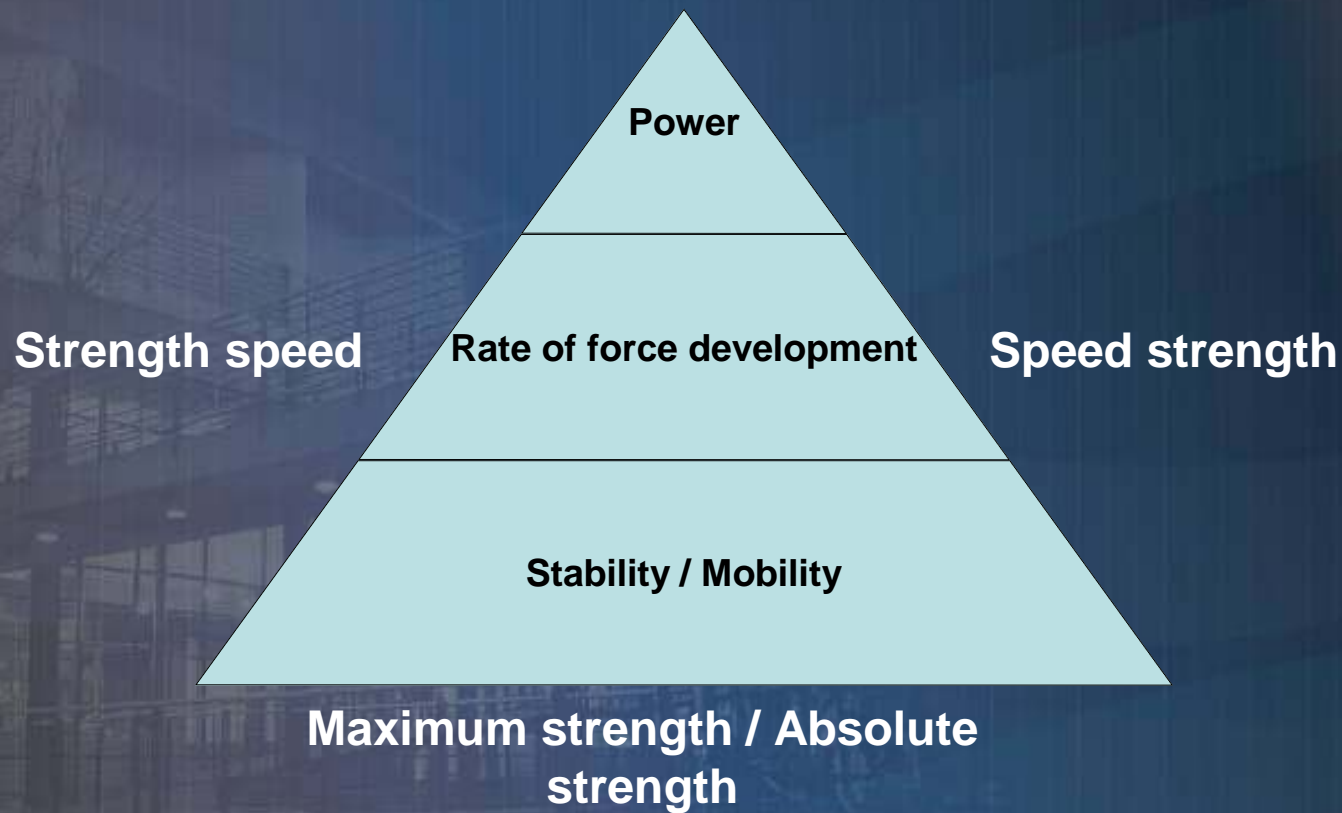
Strength components



- Maximum strength
- Strength Speed
- Speed Strength
- Power / Rate of force development
- Stability
- Mobility



Power triangle



Definitions



Maximum strength=

The ability of a group of muscles to voluntarily produce maximum tension against an external object to optimal motivation.

For example 1RM Squat

Strength speed=

Working with strength practise movements with weights at high speed with strength being higher priority than speed.

For example Squat with 50-60% of 1RM at high / max speed

Speed strength=

Doing high velocity movements with relatively light implements at maximum effort.

For example Medicine ball throws and jumps and even plyometrics



HOW?



**SKILL
PRACTISE**

Weightlifting

Powerlifting

Kettlebells

**Bodyweight /
gymnastics**

**Pilates / Yoga
Based activity**

Strongman

**Eccentric /
shock
Training
Jumps /
Plyometrics**





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Ryan Lochte Strongman Training for Swimming

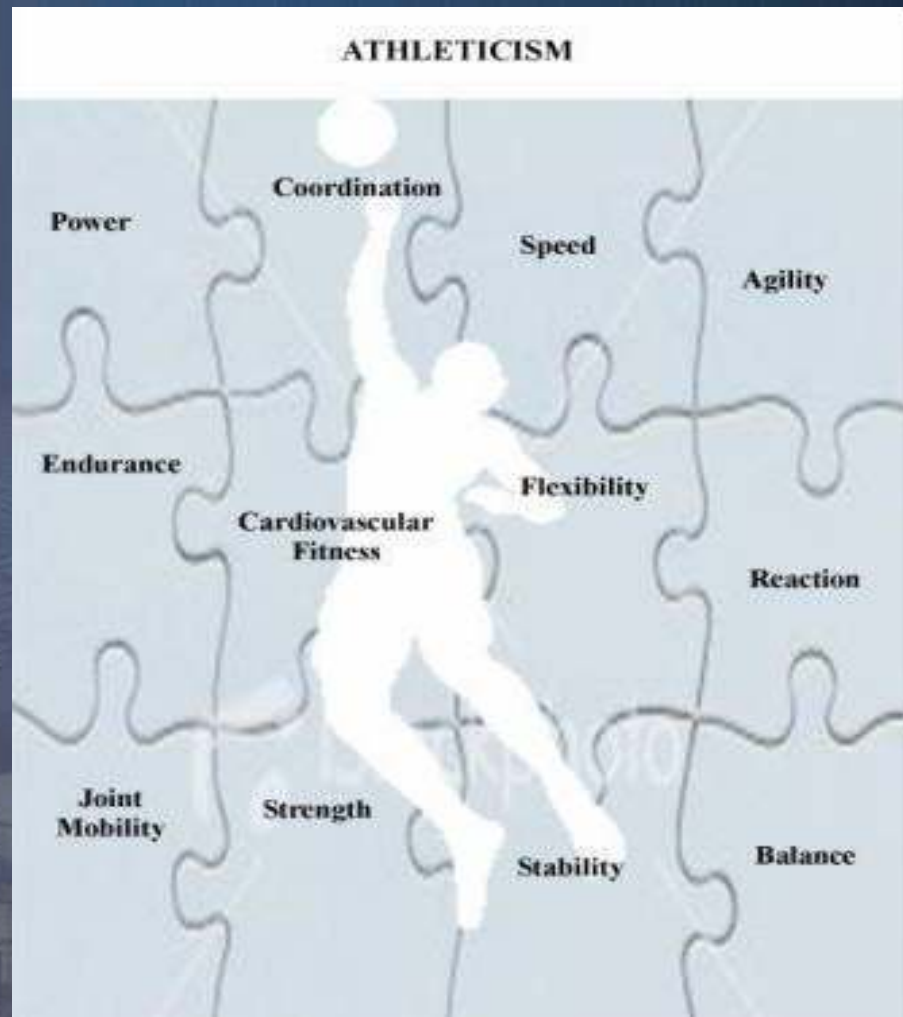


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<http://www.endzoneathletics.com/content/view/35/66/>



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Motor learning applies to all training.



Every new exercise is a new skill

Mastery of a new skill

1000 correct repetitions

10'000 Mastery

100'000 THE Master!



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Adaptation

Any Biological organism adapts to the environment, or to the stimulus applied to that organism.

And that organism will adapt **SPECIFICALLY** to that stimulus.

**Specificity + Frequent practise =
Success!**



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Strength & Conditioning Practise
sessions are structured in a goal /
outcome specific way.

To improve athletic performance and
prevent injuries



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How do you increase strength?



Maximize:

- Tension
- Frequency

Minimize

- Fatigue
- Number of exercises



Max Strength as the foundation



ENTER POWERLIFTING (Squat / deadlift / bench press and their variations)

The more tension you can generate the stronger you will be

- Irradiation
- Bracing
- Successive induction
- Power breathing



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The exercises for today



Press

- **Standing shoulder press**

(Mobility, flexibility, stability, abdominal strength, posture, upper body)

Pull

- **Deadlift**

(Mobility, flexibility, stability, abdominal strength, posture, lower body)

