Strength Training for Runners

Strength Training Can

Enhance running economy ↑8%

↑6% Faster time-trial performances over 1500-3000m and 5-10k

10k = ↓ 2-3 mins race time for a recreational runner

Reference: Effects of strength training on the physiological determinants of middle- and long-distance running performance: a systematic review. Sports Medicine 2018

Strength Training Guidelines for Runners

Moderate resistance

60-80% of 1 repetition max

5-15 repetitions

3-6 sets

Reference: Effects of strength training on the physiological determinants of middle-and long-distance running performance: a systematic review. Sports Medicine 2018

Strength Training Programmes

Reduce the risk of sports injuries by an average of 66%

Reference: Strength training as superior, dose-dependent and safe prevention of acute and overuse sports injuries: a systematic review, qualitative analysis and meta-analysis. British Journal of Sports Medicine 2018

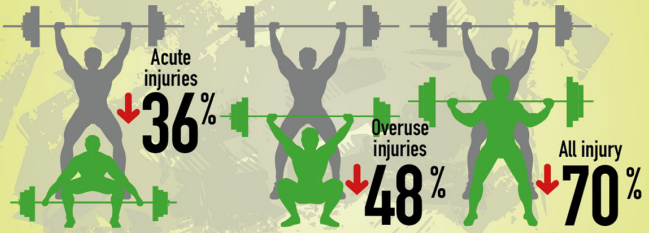
Strength Training Programmes

↑10% increase in strength training volume

↓ the risk of injury by >4%

Reference: Strength training as superior, dose-dependent and safe prevention of acute and overuse sports injuries: a systematic review, qualitative analysis and meta-analysis. British Journal of Sports Medicine 2018

Strength Training Reduces the Risk of



Acute injuries ↓36%

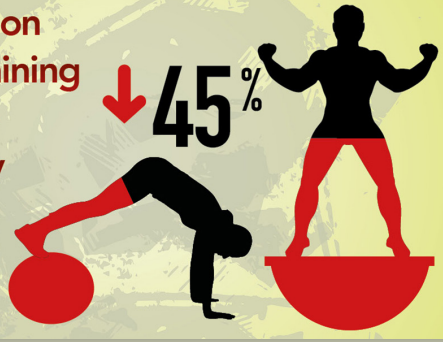
Overuse injuries ↓48%

All injury ↓70%

Reference: The effectiveness of exercise interventions to prevent sports injuries: a systematic review and meta-analysis of randomised controlled trials. British Journal of Sports Medicine 2014

Proprioception (Balance) Training Reduces the Risk of Injury

↓45%



Reference: The effectiveness of exercise interventions to prevent sports injuries: a systematic review and meta-analysis of randomised controlled trials. British Journal of Sports Medicine 2014.

Strength Training Improves Running Performance

19% → 24% increase in squat strength

4.8% → 8.1% improvement in running economy (this impact grows over time)

VO²max ↑4% which means that your body can take in more oxygen and deliver it to your muscles, enabling you to run faster for a given effort.

Reference: The Effect of Strength Training on Performance Indicators in Distance Runners. The Journal of Strength & Conditioning Research 2017.

Strength Training Needs Planning

>3h

OR

>24h

Strength sessions should be performed at least 3 hours (of rest and recovery) after a high intensity run

At least 24 hours recovery after strength training before doing a high intensity running session

Reference: Effects of strength training on the physiological determinants of middle- and long-distance running performance:a systematic review. Sports Medicine 2018

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