

FUNCTIONAL FRUITS AND EXERCISE: CHERRIES AND BERRIES

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TART CHERRY

- **Form:** Concentrate or juice
- **Amount:** 30 ml concentrate or 8-12 fl. oz juice
- **Occasion:** Twice daily (e.g., minimum 4 d before event, day of and 2 d post) for recovery³²
- **Benefit:** Tart cherry concentrate and juice may be promising for certain aspects of athlete recovery. Tart cherry may assist in strength/exercise recovery^{1,2,3,4,5,6,7}, reducing pain/soreness^{1,3,8,9,10}, inflammation and/or muscle damage^{2,3,6,9,10,11}. There is some, but limited, evidence of a performance benefit following TC ingestion. Unclear effect on adaptations and potential GI side effects³²



BLACKCURRANT

- **Form:** New Zealand Blackcurrant (NZBC) extract
- **Amount:** 300-600 mg NZBC extract daily for 7 d
- **Occasion:** 7 d before event/competition and 2-3 h pre-event for performance
- **Benefit:** NZBC may have promising effects on certain exercise performance parameters^{12,13,14,15,16,17}, fat oxidation^{12,18,19,20} and exercise recovery^{21,22,23,24}. Effects on exercise performance may be attributed to blackcurrants' role with nitric oxide^{13,33}, leading to increased blood flow. Potential for GI distress with blackcurrant beverage¹²



POMEGRANATE

- **Form:** Juice or extract
- **Amount:** 750-1,000 mg extract or 500-1,000 mL juice daily
- **Occasion:** Pre-exercise (30 min – 2.5 h) and/or chronic (2-15 d)
- **Benefit:** Pomegranate has demonstrated positive effects on athlete recovery^{25,26,27,28} and potential benefits for certain exercise parameters including peak power output, time to exhaustion and certain types of resistance exercise (e.g., Olympic lifts)^{25,29,30,31,32}. More research is needed on the benefits of pomegranate for athletic performance and recovery and effects on training adaptations. Research indicates that timing strategy may be important²⁵. One review paper noted individual allergic reactions as one potential negative side effect⁴³

KEY TAKEAWAYS

- Tart cherry and pomegranate have the most support for overall recovery, while there is only some evidence to support blackcurrant use
- Mixed evidence for tart cherry and exercise performance with stronger support for blackcurrant and pomegranate
- Limitations: Unknown effects on adaptations, certain research study shortcomings, large volumes used in some studies may not be appropriate/realistic for certain athletes

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