## Functional Fruits and Exercise: Cherries and Berries


### 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 recovery
- **Benefit:** Tart cherry concentrate and juice may be promising for certain aspects of athlete recovery. Tart cherry may assist in strength/exercise recovery, reducing pain/soreness, inflammation and/or muscle damage. There is some, but limited, evidence of a performance benefit following TC ingestion. Unclear effect on adaptations and potential GI side effects.

### 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, fat oxidation and exercise recovery. Effects on exercise performance may be attributed to blackcurrants’ role with nitric oxide, leading to increased blood flow. Potential for GI distress with blackcurrant beverage.

### 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 and potential benefits for certain exercise parameters including peak power output, time to exhaustion and certain types of resistance exercise (e.g., Olympic lifts). 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 important. One review paper noted individual allergic reactions as one potential negative side effect.

### 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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REFERENCES