The effect of local cryotherapy after exercise induced indices of muscle damage on subjective and objective recovery characteristics

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• 22 healthy and active adults (23 ± 2 yrs, 170 ± 8 cm, 66 ± 10 kg)
• Pre-questionnaire
• Baseline: Anthropometry, DOMS, RPE, VJP, PPO

• Exercise protocol: 3 x 30 CMJ (2 min. break)

• Application: 20 minutes
  – COLD (+8°C) or THERMONEUTRAL (+32°C)

• Follow-up 0, 24, 48, 72 hours:
  – DOMS and RPE, VJP and PPO

*McMahon et al. 2015, Sayers et al. 1999*
* Indicates a significant time effect (p<0.05)

# Significantly different to baseline values within groups (p<0.05)
• Local post-exercise cooling did not enhance recovery

• The jump protocol induced muscle pain
  – Muscle damaging markers (Blood markers, MVC,...) would have been helpful

• Vertical jump performance – Familiarization session
• Effect of local cooling on skin temperature and especially muscle temperature is unclear.