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A tale of confusion and misinformation - the evaluation of protein supplementation practices, knowledge and beliefs in recreational adult athletes.

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Title: A tale of confusion and misinformation – the evaluation of protein supplementation practices, knowledge and beliefs in recreational adult athletes.

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Introduction: There are clear recommendations for protein intake around resistance exercise to promote muscle protein synthesis. However, evidence-based information relating to protein intake and supplementation is plausibly limited to some athlete populations including those within recreational sporting clubs and gyms.

Methods:

- 46 athletes (sprint, triathlon, field-based team sports, strength, power sports and weight-making sports) completed a pilot questionnaire.
- Athlete protein intake frequency, amount, knowledge and beliefs regarding protein supplements were evaluated.

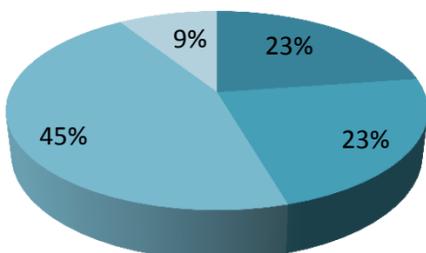
Results:

- 48% of athletes reported the regular use of protein supplements.
- 91% consumed a protein supplement immediately after resistance exercise.
- The main reported reasons for protein supplement consumption were to aid recovery (54%), for weight gain/ muscle gain (48%), to improve strength (33%) and improve performance (31%).
- 38% of the athletes were using protein supplements based on their coach's advice in comparison to 10% based on advice from a dietitian or nutritionist.
- Their protein supplements were purchased from their local health food store (26%), followed by at a pharmacy (22%), online (22%) and from a personal/team trainer (15%).

- **90%** of respondents supplemented protein after resistance exercise
- **55%** of respondents supplemented protein after endurance exercise
- **50%** of respondents supplemented protein after their competition

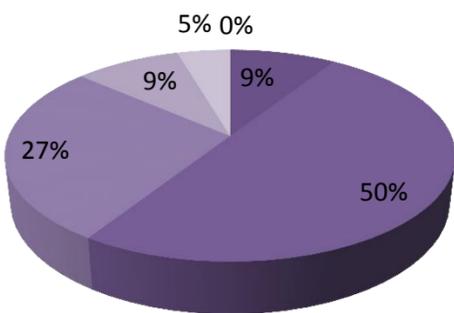
On average, how many days do you supplement protein per week?

■ 1-2 x ■ 3-4 x ■ 5-6 x ■ everyday



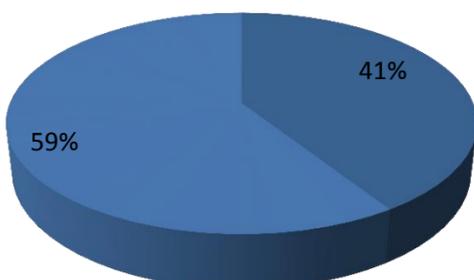
On average, what do you consume as a protein dose per serve?

■ 10g ■ 20g ■ 30g ■ 40g ■ >40g ■ Don't know



On the days you take protein supplements, on average how many times a day do you take them?

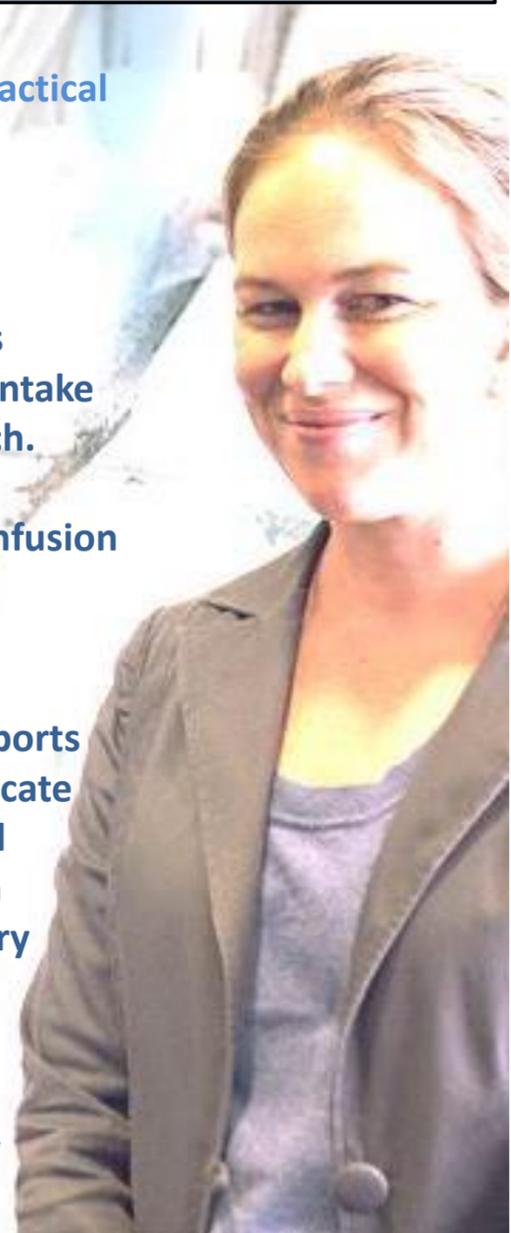
■ 1 x ■ 2 - 3 x ■ 4 x ■ >4 x



- **38%** nominated strongly agree/agree **versus 59%** strongly disagree/ disagree that their current diet is insufficient in protein if they don't supplement protein.
- **40%** nominated strongly agree/agree **versus 36%** strongly disagree/ disagree that there would be a negative effect of consuming too much protein on performance.
- **58%** nominated strongly agree/agree **versus 36%** strongly disagree/ disagree that there would be a negative effect of consuming too much protein on health.

Conclusions, discussion and practical application

- **Pilot research**
- **A range of causative factors influenced athlete protein intake practices including the coach.**
- **There was some athlete confusion regarding protein recommendations**
- **Further studies can guide sports dietitians to effectively educate and market evidence-based messages regarding protein supplementation and dietary protein intake to athletes.**



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