

ABSTRACT

Effects of protein supplement ingestion on training for cyclists.

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Background

Previous studies have indicated that a protein intake of 2.0 g/kg BW/day is sufficient to improve training adaptation in athletes. However, athletes frequently take supplements containing protein and/or amino acids in addition to ingesting sufficient protein in their daily meals. The objective of this study was to investigate the effects of taking an extra protein supplement on training adaptation when protein consumption from daily meals was sufficient.

Methods

Seventy-seven cyclists were surveyed on protein supplement use and 17 cyclists were investigated the effects of protein supplement ingestion on training adaptation.

Results

Twenty-nine cyclists (38%) took protein supplement. The 3 most common reasons for taking protein supplement were to increase muscle protein synthesis and muscle performance, to increase muscle mass, and to ensure sufficient protein intake. No significant increase in protein intake per day or muscle performance was observed.

Conclusions

The ingestion of extra protein supplement was not found to enhance training adaptation among athletes that consume meals containing sufficient energy and nutrients.

Key words athlete, protein, supplement, training adaptation