Request for Clarification:

The authors are satisfied that their original responses to the prior Manuscript Clarification address the issues raised here.

Lowery et al. (6) reported, in contrast to an often-observed heterogeneity in training-induced hypertrophy, remarkably consistent between-group changes in muscle mass to find statistical significance between an HMB-FA+ATP (beta-hydroxy beta-methyl butyrate-free acid and adenosine triphosphate) supplemented \((n = 8)\) versus placebo \((n = 9)\) groups. The difference divergence between the supplemented and placebo groups occurred despite optimal training and optimal nutritional support. We note that HMB has been shown to result in a trivial training-induced adaptive advantage (8) and that the gain in lean body mass was in previously resistance-trained subjects who would have had less propensity to gain lean body mass (7). For absolute clarity, could the authors please present the absolute body weight and body composition (lean body mass and fat mass) as opposed to % change data? We believe this would be helpful for readers.

There are data for FA-HMB showing improved muscle protein turnover (9). However, we note that leucine had the same anabolic effects as FA-HMB (9) and that dietary protein can exert a positive effect on gains in muscle mass with resistance training (1). The placebo group, recipients of optimal protein and leucine intake, did not seem to respond at all to the overreaching phase. Can the authors speculate why?

Lowery et al. (6) supplemented with ATP, which has undetectable bioavailability (2). Wilson et al. (10), reported that ATP (400 mg·d) resulted in a positive effect on muscle mass, strength, and power gains. The authors’ state (4) that a previously reported increase in postexercise blood flow induced by the ATP (5) in the supplemented group could be responsible. The magnitude of that flow increase was only about 100–150 ml·min, was not consistently observed across weeks of supplementation, and lasted no more than 3–6 min postexercise (5). How do the authors think a small, inconsistent, and short-lasting increase in blood flow could affect performance?

In the response to Hyde et al. (4), Lowery et al. (6) stated that they selected “...a responsive population who possess...a quantity of lean mass indicative of previous responses to resistance training...” What was the screening process to pick the participants? The authors state their subjects had muscle “…an order of magnitude [an order of magnitude is defined as 10-times greater, so this cannot be the case] higher than average lean mass...” Could the authors please state the exact criteria for inclusion as a participant? It would be useful for the authors to describe how many participants were recruited and screened, the final number entered into the study, and the number of dropouts. Were participants randomized to treatment and placebo groups, pair matched based on body mass, lean body mass, strength, or another variable?

Stuart M. Phillips1
Alan A. Aragon2
Paul J. Arciero3
Shawn M. Arent4
Graeme L. Close5
D. Lee Hamilton6
Eric R. Helms7
Menno Henselmans8
Jeremy P. Loenneke9
Layne E. Norton10
Michael J. Ormsbee11
Craig Sale12
Brad J. Schoenfeld13
Abbie E. Smith-Ryan14
Kevin D. Tipton15
Matthew D. Vukovich15
Colin Wilborn16
Darryn S. Willoughby17

1McMaster University, Hamilton, Ontario, Canada
2California State University, Northridge, Northridge, California
3Skidmore College, Saratoga Springs, New York
4Rutgers University, New Brunswick, New Jersey
5Liverpool John Moores University, Liverpool, United Kingdom
6University of Stirling, Stirling, United Kingdom
7Sports Performance Research Institute New Zealand, Auckland, New Zealand
8Bayesian Bodybuilding Research and Development, Gorinchem, The Netherlands
REFERENCES


GAME TIMES AND HIGHER WINNING PERCENTAGES OF WEST COAST TEAMS OF THE NATIONAL FOOTBALL LEAGUE CORRESPOND WITH REDUCED PREVALENCE OF REGULAR SEASON INJURY: ERRATUM

In the February 2017 issue of the Journal of Strength and Conditioning Research in the article by Brager, AJ and Mistovich, RJ, “Game Times and Higher Winning Percentages of West Coast Teams of the National Football League Correspond With Reduced Prevalence of Regular Season Injury”, the author “Ronald J. Mistovich” should be listed as “R. Justin Mistovich”.

REFERENCE