

Join USDEC at the 13th Asian Congress of Nutrition,
Bali, Indonesia for a symposium on:

Reassessing Protein Requirements for Sustained Well-Being: Optimizing Intake Quantity and Quality



August 5, 2019
3:30-5:00pm



Manado Room,
Bali International
Convention Center



Recommended dietary allowances for important nutrients such as protein have traditionally been established in terms of minimum amounts necessary to avoid nutritional deficiencies. A growing body of evidence, however, suggests that such dietary protein recommendations may be inadequate for certain vulnerable population groups such as seniors and undernourished young children, as well as for athletes and people trying to manage their weight. Evolving science also continues to examine differences in protein quality amongst various animal and plant-based protein sources, as well as explore the impact of protein intake timing on health outcomes. In this session, nutrition research leaders will share the latest scientific evidence on the effects of consuming higher protein diets (within the context of the Acceptable Macronutrient Distribution Range), review differences in protein quality and how it may affect the ability of a protein to deliver the desired benefits. It will also discuss practical recommendations and approaches on refining dietary guidance to optimize protein consumption for long-term health across life stages.



SESSION CHAIR

Dr. Khor Geok Lin

*Emeritus Professor
Universiti Putra Malaysia,
Malaysia*

Reassessing Protein Requirements for Sustained Well-Being:

Protein Requirements and Optimal Intakes for Aging: Are We Ready to Recommend More than the Recommended Daily Allowance?

Dr. Stuart M. Phillips, Professor, Kinesiology and Medicine, McMaster University, Tier 1 Canada Research Chair—Skeletal Muscle Health, Canada



ABSTRACT:

The Dietary Reference Intakes set the protein RDA for persons >19 y of age at 0.8 g protein/kg/d. A growing body of evidence suggests, however, that the protein RDA may be inadequate for older individuals. The evidence for recommending a protein intake greater than the RDA comes from a variety of metabolic approaches. Methodologies centered on skeletal muscle are of paramount importance given the age-related decline in skeletal muscle mass and function (sarcopenia) and the degree to which dietary protein could mitigate these declines. In addition to evidence from short-term experimental trials, observational data show that higher protein intakes are associated with greater muscle mass and, more importantly, better muscle function with aging. We are in dire need of more evidence from longer-term intervention trials showing the efficacy of protein intakes that are higher than the RDA in older persons to support skeletal muscle health. We propose that it should be recommended that older individuals consume ≥ 1.2 g protein/kg/d and that there should be an emphasis on the intake of the amino acid leucine, which plays a central role in stimulating skeletal muscle anabolism. Critically, the often-cited potential negative effects of consuming higher protein intakes on renal and bone health are without a scientific foundation in humans.

BIO:

Stuart Phillips obtained a Ph.D. from the University of Waterloo in Human Physiology in 1995. He joined McMaster University in 1998 and is currently a full Professor in the Department of Kinesiology and School of Medicine. He is Tier 1 Canada Research Chair in Skeletal Muscle Health. He is also the Director of the McMaster Centre for Nutrition, Exercise, and Health Research and the Physical Activity Centre of Excellence. His research is focused on the impact of nutrition and exercise on human protein turnover, specifically in skeletal muscle. He is also dedicated to understanding how exercise and dietary protein impact body composition, strength, and function in aging. Dr. Phillips has authored more than 185 original research papers and 75 reviews. He is a 5-time nominee and a 3-time winner of McMaster Student Union's Outstanding Teaching Award. He was also the inaugural recipient of the Canadian Society for Exercise Physiology's Mentorship award. In 2018 he was named by Clarivate as a highly cited researcher being in the top 1% of all cited researchers in nutritional sciences. Dr. Phillips is a fellow of the American College of Sports Medicine, the American College of Nutrition, and the Canadian Academy of Health Sciences.

Impact of Whey Protein-Rich Higher-Protein Diet on Body Weight and Composition Management in Middle-aged and Older Adults

Dr. Jung Eun Kim, Assistant Professor, Food Science & Technology Programme, c/o Department of Chemistry, National University of Singapore



ABSTRACT:

Mounting evidence indicates that consuming a higher-protein diet is an effective means to manage body weight and composition in various energy states and exercise training conditions. Currently, there is considerable interest in the use of dairy proteins, whey protein in particular, as supplements or in conjunction with lifestyle changes to improve body composition in vulnerable population such as middle-aged and older adults. Higher-protein diet with whey protein maintained the body weight and improved the body composition by losing fat mass during 9-month exercise training in overweight and obese middle-aged adults. In addition, a 6-month intervention in mobility-limited older adults indicated that whey protein supplementation in combination with resistance exercise tended to promote greater increases in lean mass, mid-thigh cross sectional area, and muscle strength.

Although a mass of evidence supports the beneficial effects of whey protein supplementation on body composition in men, there is limited data to make an equivalent claim in women. Of practical concern, there is a perception that whey protein supplementation may induce “bulkiness” in women. Findings from a recent systematic review and meta-analysis suggest that whey protein supplementation improves body composition by modestly increasing lean mass and this improvement is more robust during weight loss in women.

Collectively, in conjunction with lifestyle changes, consuming a whey protein-rich higher-protein diet is an effective dietary strategy to improve body composition, especially in middle-aged and older

adults. Moreover, whey protein may be more beneficial for improving body composition when included as part of a weight loss program in women. However, more study is needed in Asian populations since most research findings are Western-centric.

BIO:

Dr. Jung Eun Kim is presently an Assistant Professor in the Food Science & Technology Programme, c/o Department of Chemistry at the National University of Singapore and she is also a nutrition scientist with advanced training in dietetics and human clinical research. She graduated with a B.S. and M.S. at the Ewha Womans University, South Korea and she earned her Ph.D. degree in Nutritional Sciences at the University of Connecticut, USA. Dr. Kim further completed a dietetic internship at Yale-New Haven Hospital, USA and became a registered dietitian. Then she had a post-doctoral research associate role at the Purdue University, USA.

Dr. Kim’s long-term research goal is to develop and validate dietary strategies and recommendations that effectively protect against age-associated morbidities including cardiovascular disease; cognitive decline; gastro-intestinal disease; sarcopenia; and osteoporosis and promote public health. To fulfill her long-term goal, her current research interest includes investigating the effects of dietary constituents (including bioactive compounds and dietary macronutrients, dietary protein in specific) or a healthy eating pattern diet on body composition and other cardio-metabolic health parameters in middle-aged and older adults from human clinical studies.

The U.S. Dairy Export Council



USDEC BOOTH #S1

While at the conference, please stop by the USDEC booth to learn more about the many health and wellness benefits of U.S. whey and milk proteins.

ABOUT U.S. DAIRY

The United States is the largest producer of whey proteins and a rising producer of milk proteins. U.S. dairy farmers are committed to the health of their cows, caring for the environment and delighting consumers with delicious, nutritious and sustainably-produced dairy ingredients. Multiple layers of checks and balances ensure that consumers can have confidence in the safety and quality of dairy products produced in the United States. U.S. dairy exports to Southeast Asia reached US\$771 million in 2018, up 12% over the prior year. Southeast Asia is a priority focus market for the U.S. dairy industry and the second largest overseas destination for U.S. Dairy after Mexico.

ABOUT DAIRY PROTEINS

Dairy (whey and milk) proteins are naturally found in cow's milk. Whey protein, a high-quality and complete protein, is one of the best sources of essential amino acids and a leading source of the branched chain amino acid leucine—which is unique in its ability to initiate muscle protein synthesis. Published research also indicates that as part of a higher protein diet, U.S. dairy proteins may help support weight management, healthy aging, exercise recovery, maintaining muscle and more.

ABOUT USDEC

The U.S. Dairy Export Council (USDEC) is a non-profit, independent membership organization representing the global trade interests of U.S. dairy producers, proprietary processors and cooperatives, ingredient suppliers and export traders. USDEC, together with its network of representatives in Southeast Asia and around the world, communicates science-based information on the health and nutritional benefits of U.S. Dairy to buyers, end-users and consumers to expand global demand and consumption of U.S. dairy products and ingredients.

For more information about the U.S. dairy protein health and nutrition benefits, please visit ThinkUSAdairy.org/nutrition.



GET IN
TOUCH

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