

I am pleased to introduce Issue 8 of the Nutrition Research Update. This edition explores a variety of timely topics in nutrition including an upcoming symposium on dietary approaches to reduce the risk of type 2 diabetes, recent European dietary protein recommendations for older adults and new research on the benefits of breakfast.

As the new Senior Director of Nutrition Research and Communications at the Egg Nutrition Center, one of my objectives is to disseminate credible scientific information on nutrition and health. In that vein, we aim to feature new and exciting research findings in the Nutrition Research Update on topics relevant to optimal health and disease prevention. If you have any suggestions for the content or questions about the studies or concepts presented, please don't hesitate to contact us at info@eggnutrition.org.

Regards,



Tia Rains, PhD
Senior Director of Nutrition Research and Communications
Egg Nutrition Center

ENC Research Program

ENC administers an annual research program with approximately \$2 million dollars provided by America's egg farmers through the USDA and the American Egg Board. **Grant submissions are due January 1, 2014.** Please visit our [website](#) for additional information.



See ENC

Look for ENC at these upcoming events:

[American Association of Family & Consumer Sciences \(AAFCS\) Webinar](#)

November 21, 2013
4:00pm ET

[Dietary Approaches to Diabetes: Resources from the Joslin Diabetes Center](#)

[Advances & Controversies in Clinical Nutrition](#)

December 5-7, 2013
Washington, D.C.

[Symposium](#)

December 5, 2013

1:30 – 4:30pm ET

[The Controversial Role of Dietary Protein in Diabetes and Related Disorders](#)

ENC Research Program

Sign up [here](#) to receive notifications about our upcoming grant and fellowship program.

Research We're Reading

Click [here](#) to see some of the latest research we're reading.

ENC Online

EggNutritionCenter.org

[Nutrition Unscrambled Blog](#)

On Twitter:

[@IncredibleEggs](#)

[@RDAnna](#)

Subscribe

To receive future ENC newsletters & information [Click here](#)



SPECIAL FEATURE

ASN Satellite Symposium to Advance the Understanding of Dietary Approaches to Reduce Risk of Type 2 Diabetes Mellitus

The prevalence of diabetes is rapidly increasing, affecting 8.3% or 25.8 million Americans (1). Even more alarming, an estimated 79 million Americans have prediabetes, a condition characterized by the presence of either impaired glucose tolerance or impaired fasting glucose. Individuals with prediabetes have a significantly higher risk for developing type 2 diabetes, as the insulin resistance associated with impaired glucose...[read full article](#).

DIETARY PROTEIN

Revisiting Dietary Protein Recommendations in Older Adults: Moving Past Nitrogen Balance Studies

Historically, dietary protein recommendations have been based on the essentiality of amino acids to serve as building blocks for structural proteins, as well as precursors for numerous enzymes, hormones, neurotransmitters, membrane transporters, and other important molecules (1). As such, recommended intakes are similar in adults of all ages...[read full article](#).

BREAKFAST RESEARCH

Recent Developments in Research on Breakfast Consumption

Scientific evidence continues to accumulate on the importance of breakfast. A recent [prospective study](#) from researchers at the Harvard School of Public Health looked at the relationships between eating habits, including eating breakfast, and incident coronary heart disease (CHD) in a cohort of 26,901 males. Over 16 years of follow up, results showed that skipping breakfast...[read full article](#).

WHAT WE'RE READING

Research We're Reading

• "[Egg consumption and coronary atherosclerotic burden](#)"
Chagas et al. *Atherosclerosis*. 2013; 229: 381-384

• "[Relationships between sarcopenic obesity and insulin resistance, inflammation, and vitamin D status: the Korean Sarcopenic Obesity Study](#)"
Kim et al. *Clin Endocrinol*. 2013; 78: 525-53

• "[Influence of vitamin D status on respiratory infection incidence and immune function during 4 months of winter training in endurance sport athletes](#)"
He et al. *Exerc Immunol Rev*. 2013; 19: 86-101

• "[Omega-3 fatty acid intakes are inversely related to elevated depressive symptoms among United States women](#)"
Beydoun et al. *Am J Clin Nutr*. 2013; E-pub ahead of print

[View All](#)

SPECIAL FEATURE

ASN Satellite Symposium to Advance the Understanding of Dietary Approaches to Reduce Risk of Type 2 Diabetes Mellitus

The prevalence of diabetes is rapidly increasing, affecting 8.3% or 25.8 million Americans (1). Even more alarming, an estimated 79 million Americans have prediabetes, a condition characterized by the presence of either impaired glucose tolerance or impaired fasting glucose. Individuals with prediabetes have a significantly higher risk for developing type 2 diabetes, as the insulin resistance associated with impaired glucose homeostasis ultimately leads to a progressive decrease in insulin secretion from pancreatic beta-cells. The presence of prediabetes is also positively associated with other conditions, such as heart disease and stroke (2).

Diet and lifestyle intervention studies have shown that weight loss can considerably reduce or delay the progression of prediabetes to type 2 diabetes. For example, the Diabetes Prevention Program showed that a weight loss and physical activity program reduced the development of type 2 diabetes by 58% during a 3-year period (3). However, there is a limited understanding of the dietary factors beyond weight loss that may influence the development of type 2 diabetes. For example, is there an optimal dietary pattern that reduces the development of type 2 diabetes, either through promotion of weight loss/maintenance or other mechanisms?

The role of dietary protein, in particular, is not well understood with respect to diabetes risk. Further, the paucity of scientific evidence is conflicting. Studies have shown that higher protein diets promote greater and more rapid weight loss and more favorably affect diabetes risk factors than higher carbohydrate diets (4). Further, feeding studies have shown that protein-rich meals and diets reduce postprandial glucose and insulin responses (5). However, increased amino acid concentrations have been shown in some studies to induce insulin resistance in skeletal muscle (6). One observational study showed that chronic high dietary protein intakes were associated with increased incidence of type 2 diabetes (7). Additionally, it is unknown to what extent dietary protein specifically affects different outcomes, since increasing protein content of a meal or diet displaces carbohydrate, fat, or both.

To advance the understanding of these topics, ENC is convening a group of internationally-recognized experts for a Satellite Symposium, in conjunction with the [American Society for Nutrition's Advances & Controversies in Clinical Nutrition](#) meeting on Thursday, December 5th in Washington, D.C.

"The Controversial Role of Dietary Protein in Diabetes and Related Disorders" will bring together four distinguished speakers to address different aspects of dietary protein's role in type 2 diabetes:

Kevin Maki, PhD, Midwest Center for Metabolic and Cardiovascular Health, "Pathophysiology of Type 2 Diabetes Mellitus and Metabolic Implications of Diet"

Theresa Nicklas, DrPH, Baylor College of Medicine, "Relationships between Eating Patterns, Adiposity, and Cardiovascular Risk Factors"

Barbara Gower, PhD, University of Alabama, "Macronutrients and Metabolic Health"

Amy Campbell, MS, RD, LDN, CDE, Joslin Diabetes Center, "Dietary Protein in the Practical Management of Prediabetes and Diabetes"

Please mark your calendars for this thought-provoking symposium.

References:

¹ Centers for Disease Control and Prevention. National diabetes fact sheet: national estimates and general information on diabetes and prediabetes in the United States, 2011. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2011.

² Marrero D. The prevention of type 2 diabetes: an overview. *J Diabetes Sci Technol.* 2009;3:756-760.

³ Knowler WC, Barrett-Connor E, Fowler SE, Hamman RF, Lachin JM, Walker EA, Nathan DM; Diabetes Prevention Program Research Group. Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *N Engl J Med.* 2002;346:393-403.

⁴ Paddon-Jones D, Westman E, Mattes RD, Wolfe RR, Astrup A, Westerterp-Plantenga M. Protein, weight management, and satiety. *Am J Clin Nutr.* 2008;87:1558S-1561S.

⁵ Layman DK, Clifton P, Gannon MC, Krauss RM, Nuttall FQ. Protein in optimal health: heart disease and type 2 diabetes. *Am J Clin Nutr.* 2008;87:1571S-1575S.

⁶ Tremblay F, Lavigne C, Jacques H, Marette A. Role of dietary proteins and amino acids in the pathogenesis of insulin resistance. *Annu Rev Nutr.* 2007;27:293-310.

⁷ Sluijs I, Beulens JW, van der A DL, Spijkerman AM, Grobbee DE, van der Schouw YT. Dietary intake of total, animal, and vegetable protein and risk of type 2 diabetes in the European Prospective Investigation into Cancer and Nutrition (EPIC)-NL study. *Diabetes Care.* 2010;33:43-8.

[Next Article >> Dietary Protein](#)



See ENC

Look for ENC at these upcoming events:

[American Association of Family & Consumer Sciences \(AAFCS\) Webinar](#)

November 21, 2013
4:00pm ET

Dietary Approaches to Diabetes: Resources from the Joslin Diabetes Center

[Advances & Controversies in Clinical Nutrition](#)

December 5-7, 2013
Washington, D.C.

[Symposium](#)

December 5, 2013
1:30 – 4:30pm ET

The Controversial Role of Dietary Protein in Diabetes and Related Disorders



ENC Research Program

Sign up [here](#) to receive notifications about our upcoming grant and fellowship program.



Research We're Reading

Click [here](#) to see some of the latest research we're reading.



ENC Online

[EggNutritionCenter.org](#)

[Nutrition Unscrambled Blog](#)

On Twitter:

[@IncredibleEggs](#)

[@RDAnna](#)



Subscribe

To receive future ENC newsletters & information [Click here](#)



DIETARY PROTEIN

Revisiting Dietary Protein Recommendations in Older Adults: Moving Past Nitrogen Balance Studies

Historically, dietary protein recommendations have been based on the essentiality of amino acids to serve as building blocks for structural proteins, as well as precursors for numerous enzymes, hormones, neurotransmitters, membrane transporters, and other important molecules (1). As such, recommended intakes are similar in adults of all ages, 0.8 g of high-quality protein per kilogram body weight (kg BW) per day (d). This equates to approximately 50 g per day or 10-12% of daily energy intake for most adults, a level almost all Americans achieve.

However, there is a growing body of evidence that higher protein intakes may be optimal for health, particularly for certain age groups, persons at risk for nutrition-related chronic diseases, as well as for individuals with a high level of physical activity. Such findings have not been taken into account in determining protein needs, a process based almost exclusively on maintaining nitrogen balance. For example, there are numerous studies that have shown greater weight loss as well as more favorable changes in body composition and chronic disease risk markers in adults consuming 1.5-2 times the recommended level of protein compared to current recommendations (2, 3). Recently, higher intakes of protein (23-28% of energy) have also been shown to improve cardiovascular risk markers in children (age 5-18 years) participating in the Diogenes Study, a pan-European randomized trial evaluating dietary protein and glycemic index (4).

Older adults, in particular, may have far greater protein needs than previously thought due to age-related changes in body composition, most notably, loss of lean body mass. This was recently addressed in a position paper prepared by the PROT-AGE Study Group, an international panel of experts appointed by the European Union Geriatric Medicine Society and endorsed by several other international scientific organizations (5). Based on the panel's review of the recent scientific evidence, optimal protein intakes for older adults (defined as age >65 years) are 1.0-1.2 g per kg BW per d for healthy persons and up to 1.2-1.5 g per kg BW per d in those with acute or chronic disease, with the exception of those with severe kidney disease not on dialysis (who should limit protein intake). Such intakes are associated with improved bone health, cardiovascular function, wound healing, recovery from illness and overall functionality. The benefits of dietary protein, particularly with respect to maintaining and building lean mass, can be further potentiated by consuming 25-30 g of protein per meal as well as incorporating endurance and resistance exercise, where possible. While the panel acknowledges the need for additional research, these guidelines are a pivotal step in improving the overall health of older adults and creating a framework for determining protein needs for all age groups beyond merely nitrogen balance.

Sources:

¹ Food and Nutrition Board: Institute of Medicine. Dietary Reference Intakes for energy, carbohydrate, fiber, fat, fatty acids, cholesterol, protein, and amino acids (macronutrients). Washington DC: National Academy Press, 2005.

² Noakes M, Keogh JB, Foster PR, Clifton PM. Effect of an energy-restricted, high-protein, low-fat diet relative to a conventional high-carbohydrate, low-fat diet on weight loss, body composition, nutritional status, and markers of cardiovascular health in obese women. *Am J Clin Nutr.* 2005;81:1298-306.

³ Wycherley TP, Moran LJ, Clifton PM, Noakes M, Brinkworth GD. Effects of energy-restricted high-protein, low-fat compared with standard-protein, low-fat diets: a meta-analysis of randomized controlled trials. *Am J Clin Nutr.* 2012;96:1281-98.

⁴ Damsgaard CT, Papadaki A, Jensen SM, Ritz C, Dalskov SM, Hlavaty P, Saris WH, Martinez JA, Handjieva-Darlenska T, Andersen MR, Stender S, Larsen TM, Astrup A, Mølgaard C, Michaelsen KF; Diogenes. Higher protein diets consumed ad libitum improve cardiovascular risk markers in children of overweight parents from eight European countries. *J Nutr.* 2013;143:810-7.

⁵ Bauer J, Biolo G, Cederholm T, Cesari M, Cruz-Jentoft AJ, Morley JE, Phillips S, Sieber C, Stehle P, Teta D, Visvanathan R, Volpi E, Boirie Y. Evidence-Based Recommendations for Optimal Dietary Protein Intake in Older People: A Position Paper From the PROT-AGE Study Group. *J Am Med Dir Assoc.* 2013;14:542-59.

[Next Article >> New Breakfast Research](#)



See ENC

Look for ENC at these upcoming events:

[American Association of Family & Consumer Sciences \(AAFCS\) Webinar](#)

November 21, 2013
4:00pm ET

Dietary Approaches to Diabetes: Resources from the Joslin Diabetes Center

[Advances & Controversies in Clinical Nutrition](#)

December 5-7, 2013
Washington, D.C.

[Symposium](#)

December 5, 2013
1:30 – 4:30pm ET

The Controversial Role of Dietary Protein in Diabetes and Related Disorders



ENC Research Program

Sign up [here](#) to receive notifications about our upcoming grant and fellowship program.



Research We're Reading

Click [here](#) to see some of the latest research we're reading.



ENC Online

[EggNutritionCenter.org](#)

[Nutrition Unscrambled Blog](#)

On Twitter:

[@IncredibleEggs](#)

[@RDAnna](#)



Subscribe

To receive future ENC newsletters & information [Click here](#)



BREAKFAST RESEARCH

Recent Developments in Research on Breakfast Consumption

Scientific evidence continues to accumulate on the importance of breakfast. A recent [prospective study](#) from researchers at the Harvard School of Public Health looked at the relationships between eating habits, including eating breakfast, and incident coronary heart disease (CHD) in a cohort of 26,901 males. Over 16 years of follow up, results showed that skipping breakfast was associated with a 27% greater risk of CHD compared to not skipping breakfast (1). Another [cross-sectional study](#) of 2,148 European adolescents (12-18 yr) showed that breakfast consumption was positively associated with cardiorespiratory fitness, but not overall activity, muscular fitness, or speed/agility (2). And lastly, a [cross-sectional study](#) of 5,625 Iranian students (10-18 yr) showed that students classified as seldom breakfast eaters (29.0%) were at greater risk for metabolic syndrome and related factors (obesity, elevated triglycerides, LDL-cholesterol) compared to those who ate breakfast regularly (47.3%) or often (23.7%) (3).

Also published in the last few months, a [meta-analysis](#) in the *American Journal of Clinical Nutrition* (AJCN) made the headlines when researchers from The University of Alabama at Birmingham called into question the nature and strength of the evidence linking breakfast consumption to hunger management and body weight, two benefits of breakfast that are generally touted by health professionals (4). However, the primary objectives of the meta-analysis were to evaluate biased research reporting and over-replicating research, two factors that can contribute to scientific conclusions that are not necessarily accurate. The researchers conducted an in-depth analysis of the available research (92 unique articles) on breakfast consumption and body weight and rated the accuracy with which investigators represented their own work as well as how subsequent studies reported prior research results. For example, the authors explored examples of cases where data were misrepresented by investigators, often being referred to as causal when the research was observational in nature.⁴

The headlines focused on one component of the analysis, the apparent lack of randomized control trial (RCT) evidence measuring the effects of breakfast consumption on body weight. In fact, at the time of their analysis, they identified only one study long enough in duration to evaluate the influence of breakfast skipping on weight loss (5). Results of that study showed that habitual breakfast skippers who switched to eating breakfast lost more weight than those continuing to skip breakfast. However, habitual breakfast eaters that switched to no breakfast lost more weight than those who continued to eat breakfast, resulting in the conclusion that "those who had to make the most substantial changes in eating habits to comply with the program achieved better results." What was alarming and of interest to the researchers of the aforementioned *AJCN* paper was not so much the lack of RCTs on the topic, but that 62% of the articles they identified incorrectly reported the results of this RCT, suggesting that eating breakfast led to greater weight loss.

While the information presented in this article is intriguing, we suggest that it raises more interesting discussion points about scientific analysis overall than breakfast itself. There is, in fact, ample observational evidence demonstrating that skipping breakfast is associated with obesity. RCTs on other health outcomes have shown favorable effects of breakfast on focus and attention during the morning, particularly in kids, and biomarkers of metabolic health, such as insulin sensitivity and the lipid profile in adults (6, 7).

The 2010 Dietary Guidelines Advisory Committee raised a number of interesting questions about breakfast during their deliberations and the 2010 Dietary Guidelines for Americans recommend eating a nutrient-dense breakfast due to evidence linking breakfast consumption to weight loss, weight maintenance and improved nutrient intake. The health implications of breakfast consumption will certainly remain a topic of interest in the scientific community!

Sources:

- Cahill L, Chiuev S, Mekary R, et al. Prospective study of breakfast eating and incident coronary heart disease in a cohort of male US health professionals. *Circulation* 2013; 128: 337-343.
- Cuenca-Garcia M, Ruiz JR, et al. Association of breakfast consumption with objectively measured and self-reported physical activity, sedentary time and physical fitness in European adolescents: the HELENA Study. *Public Health Nutr.* 2013; 11:1-11.
- Shafiee G, Kelishadi R, Qorbani M, et al. Association of breakfast intake with cardiometabolic factors. *J Pediatr.* 2013 Sep 9. [Epub ahead of print]
- Brown AW, Bohan Brown MM, Allison DB. Belief beyond the evidence: using the proposed effect of breakfast on obesity to show 2 practices that distort scientific evidence. *Am J Clin Nutr.* 2013 Sep 4. [Epub ahead of print].
- Schlundt DG, Hill JO, Sbrocco T, Pope-Cordle J, Sharp T. The role of breakfast in the treatment of obesity: a randomized clinical trial. *Am J Clin Nutr.* 1992; 55: 645-51.
- Hoyland A, Dye L, Lawton CL. A systematic review of the effect of breakfast on the cognitive performance of children and adolescents. *Nutr Res Rev.* 2009; 22: 220-43.
- Farshchi HR, Taylor MA, Macdonald IA. Deleterious effects of omitting breakfast on insulin sensitivity and fasting lipid profiles in healthy lean women. *Am J Clin Nutr.* 2005; 81: 388-96.

[Next Article >> What We're Reading](#)



See ENC

Look for ENC at these upcoming events:

[American Association of Family & Consumer Sciences \(AAFCS\) Webinar](#)

November 21, 2013
4:00pm ET

[Dietary Approaches to Diabetes: Resources from the Joslin Diabetes Center](#)

[Advances & Controversies in Clinical Nutrition](#)

December 5-7, 2013
Washington, D.C.

[Symposium](#)

December 5, 2013
1:30 – 4:30pm ET

[The Controversial Role of Dietary Protein in Diabetes and Related Disorders](#)



ENC Research Program

Sign up [here](#) to receive notifications about our upcoming grant and fellowship program.



Research We're Reading

Click [here](#) to see some of the latest research we're reading.



ENC Online

[EggNutritionCenter.org](#)

[Nutrition Unscrambled Blog](#)

On Twitter:

[@IncredibleEggs](#)

[@RDAnna](#)



Subscribe

To receive future ENC newsletters & information [Click here](#)



WHAT WE'RE READING

Research We're Reading

- ["Egg consumption and coronary atherosclerotic burden"](#)
Chagas et al. *Atherosclerosis*. 2013;229:381-384
- ["Relationships between sarcopenic obesity and insulin resistance, inflammation, and vitamin D status: the Korean Sarcopenic Obesity Study"](#)
Kim et al. *Clin Endocrinol*. 2013;78:525-53
- ["Influence of vitamin D status on respiratory infection incidence and immune function during 4 months of winter training in endurance sport athletes"](#)
He et al. *Exerc Immunol Rev*. 2013;19:86-101
- ["Omega-3 fatty acid intakes are inversely related to elevated depressive symptoms among United States women"](#)
Beydoun et al. *Am J Clin Nutr*. 2013; E-pub ahead of print
- ["High-density lipoprotein cholesterol, coronary artery disease, and cardiovascular mortality"](#)
Silbernagel et al. *Eur Heart J*. 2013; E-pub ahead of print
- ["Insufficient amounts and inadequate distribution of dietary protein intake in apparently healthy older adults in a developing country: implications for dietary strategies to prevent sarcopenia"](#)
Valenzuela et al. *Clin Interv Aging*. 2013;8:1143-1148
- ["Effects of high-protein diets on fat-free mass and muscle protein synthesis following weight loss: a randomized controlled trial"](#)
Pasiakos et al. *Faseb J*. 2013;27:3837-47
- ["Association between fruits and vegetables intake and frequency of breakfast and snacks consumption: a cross-sectional study"](#)
Lazzeri et al. *Nutr J*. 2013;12:123

[Next Article >> Research Program](#)



See ENC

Look for ENC at these upcoming events:

[American Association of Family & Consumer Sciences \(AAFCS\) Webinar](#)

November 21, 2013
4:00pm ET

Dietary Approaches to Diabetes: Resources from the Joslin Diabetes Center

[Advances & Controversies in Clinical Nutrition](#)

December 5-7, 2013
Washington, D.C.

[Symposium](#)

December 5, 2013
1:30 – 4:30pm ET
The Controversial Role of Dietary Protein in Diabetes and Related Disorders



ENC Research Program

Sign up [here](#) to receive notifications about our upcoming grant and fellowship program.



Research We're Reading

Click [here](#) to see some of the latest research we're reading.



ENC Online

[EggNutritionCenter.org](#)

[Nutrition Unscrambled Blog](#)

On Twitter:

[@IncredibleEggs](#)

[@RDAnna](#)



Subscribe

To receive future ENC newsletters & information
[Click here](#)



ENC Research Program

ENC administers an annual research program with approximately \$2 million dollars provided by America's egg farmers through the USDA and the American Egg Board. **Grant submissions are due January 1, 2014.** Please visit our [website](#) for additional information.



CONGRATULATIONS

2013 Egg Nutrition Center Research Grant and Dissertation Fellowship Recipients

Research Grants

Wayne Campbell, PhD. Purdue University

"Effects of egg consumption on carotenoid absorption from co-consumed, non-egg foods"

Marie Caudill, PhD, RD. Cornell University

"Improving choline, DHA, and amino acid supply to the infant during lactation"

Victor Fulgoni, PhD. Nutrition Impact, LLC.

"Differing effects of statistical approaches to assess the relationship between egg consumption patterns and adiposity using data from 2001-2008 NHANES"

David Katz, MD, MPH, FACPM, FACP. Yale University

"Egg ingestion in adults with type 2 diabetes: Effects on glycemic control, anthropometry, diet quality and cardiometabolic status"

Dingbo Lin, PhD. Oklahoma State University

"Egg lutein prevents inflammation through activating AMP-activated protein kinase in hepatic mitochondria"

Ouliana Ziouzenkova, PhD. The Ohio State University

"Identification of anti-inflammatory properties of eggs in adipose tissue"

Kerri Boutelle, PhD. University of California, San Diego

"A pilot study examining the impact of eggs for breakfast on weight loss and hunger in obese children"

Wayne Campbell, PhD. Purdue University

"Effects of dietary protein patterning on weight loss and resistance training-induced changes in body composition, skeletal muscle, and indices of metabolic syndrome"

Dissertation Fellowship

Sze Ting (Cecilia) Kwan, Cornell University

"Choline as a modulator of placental function for improving fetal development"

For more information regarding the Egg Nutrition Center Research Grant Program, contact the Egg Nutrition Center at research@eggnutritioncenter.org



See ENC

Look for ENC at these upcoming events:

[American Association of Family & Consumer Sciences \(AAFCS\) Webinar](#)

November 21, 2013
4:00pm ET

Dietary Approaches to Diabetes: Resources from the Joslin Diabetes Center

[Advances & Controversies in Clinical Nutrition](#)

December 5-7, 2013
Washington, D.C.

[Symposium](#)

December 5, 2013

1:30 – 4:30pm ET
The Controversial Role of Dietary Protein in Diabetes and Related Disorders



ENC Research Program

Sign up [here](#) to receive notifications about our upcoming grant and fellowship program.



Research We're Reading

Click [here](#) to see some of the latest research we're reading.



ENC Online

EggNutritionCenter.org

[Nutrition Unscrambled Blog](#)

On Twitter:

[@IncredibleEggs](#)

[@RDAnna](#)



Subscribe

To receive future ENC newsletters & information [Click here](#)

