

The Yale-Griffin Prevention Research Center

Newsflash

Summer 2019 Issue

The PRC has prepared this electronic **Newsflash** to keep you informed about our work and invite you to take part in our research, education and outreach activities. If you have ideas for working together on shared projects, please let us know.

For more information about the Yale-Griffin PRC:

Please visit our website at <https://yalegriffinprc.griffinhealth.org>

PRC Updates

Next Community Committee Meeting: It has been our usual practice to hold our annual Community Committee meeting in the spring. Since this is our last year of the current funding cycle, we'd like to postpone our meeting until the fall, when we can discuss the findings from our current core research project and plan for the upcoming funding cycle. We'll plan to meet in September or October and will schedule that once we get closer to the date. Until then, we wish everyone an enjoyable summer.

Current Projects

NEW STUDIES

Post-prandial Effects of Extra Virgin Olive Oil on Endothelial Function in Adults at Risk for Type 2 Diabetes: A Randomized Crossover Controlled Trial

This study will compare the after-meal effects of 2 kinds of olive oil on measures of cardiovascular health in adults at risk for type 2 diabetes. Diets rich in mono- and polyunsaturated fatty acids have been shown to improve cardiovascular health in people with or at risk for type 2 diabetes. Olive oils have a relatively high content of these fatty acids, with extra virgin olive oil having a significantly higher amount compared to refined olive oil. Funding is provided by Boundary Bend, an Australian olive oil producer.



- **Who we're recruiting:** Non-smoking adults between the ages of 25-75 years who are: (1) willing to undergo screening for eligibility; (2) able to visit Griffin Hospital in Derby 3 times for assessments; and (3) willing to eat a breakfast meal that includes olive oil during 2 of these visits.
- **What will happen:** Participants will consume 2 meals, each prepared with a different type of olive oil. They will have testing done before and after each meal.
- **Outcome measures:** Endothelial function and blood pressure
- **Compensation:** \$120 for taking part in all 3 study visits and assessments
- **How to apply:** Contact Ms. Rockiy Ayettey (email rockiy.ayettey@yalegriffinprc.org, phone 203-732-1265 ext. 300)

[Identifying and Overcoming the Impediments to Breastfeeding for Mothers with Diabetes](#)

Kim Doughty, MPH, PhD of the PRC and Sarah Taylor, MD, a neonatologist and associate professor of Pediatrics at the Yale School of Medicine, are conducting a two-year study to benefit women with gestational diabetes mellitus (GDM, which occurs during pregnancy) and their infants. Prior research has identified several potential benefits of breastfeeding for women with a history of GDM. These include: more stable blood glucose levels during pregnancy; improved insulin sensitivity during and after pregnancy; reduced risk of type 2 diabetes for several years after delivery; and slower early weight gain among their offspring. Despite established benefits of breastfeeding, there is evidence that women with GDM are less likely to initiate and continue breastfeeding due to less favorable attitudes toward breastfeeding, less perceived support, and less comfort with breastfeeding in front of others. This project will: (1) identify factors contributing to reduced breastfeeding initiation, duration, and exclusivity among women with GDM; (2) develop a screening tool to help clinicians identify women with GDM who need more breastfeeding support; and (3) develop interventions designed to address identified barriers. It is funded by a \$200,000 grant from the Allen Foundation.

[UPDATE – Community Health Opportunities Organized with Schools at the Epicenter \(CHOOSE\)](#)

Our core research project for this 5-year CDC funding cycle expands within/beyond VITAHLS school districts to include other health promotion “portals” as well in their respective communities.

[Physical Activity Resource Guide](#) – We have now completed the content and design of this online community portal. **[Active Valley CT: Your Active Lifestyle Resource for the Lower Naugatuck Valley](#)** features free or low-cost physical activity resources in Ansonia, Beacon Falls, Derby, Naugatuck, Oxford, Seymour, and Shelton. It provides brief descriptions of selected resources, along with links to their official websites and driving directions on Google Maps. Users can search for places to walk, run, hike, bike, swim, paddle a boat, play ball sports, or enjoy winter sports. The guide also features playgrounds, open fields, state parks, nature centers, parks & recreation departments, and senior centers. Our partners include the Naugatuck Valley Health District, the Naugatuck Valley Council of Governments (NVCOG), the Naugatuck River Greenway Committee, and the Valley YMCA. The NVCOG has contributed in-kind staffing and access to ESRI Story Map, a customized web app hosted in the ArcGIS Online Cloud that can be viewed on web browsers on computers, tablets and mobile phones. We are now conducting dissemination activities to promote awareness of this resource. For more information, contact Judy Treu at judy.treu@yalegriffinprc.org.



Grant Proposals and Awards

[RECENTLY-SUBMITTED PROPOSALS](#)

[The Impact of Consumption of Eggs in the Context of Plant-Based Diets on Diet Quality and Cardio-Metabolic Risk Factors in Adults at Risk for Type 2 Diabetes](#)

In May, we submitted a proposal to the Egg Nutrition Center for a randomized controlled study with 28 adults at risk for type 2 diabetes. It will compare the impact of including 2 eggs daily for 6 weeks in a plant-based diet, vs. excluding eggs from a plant-based diet, on diet quality, nutrient intake, and cardio-metabolic risk. Plant-based diets are recommended to reduce type 2 diabetes risk, as long as intake of protein and other nutrients such as Vitamin B12, iron, zinc, copper and selenium is adequate. Eggs are rich in high-quality protein, vitamins, and minerals, and are satiating, with the potential to regulate calorie intake, reduce body weight, and lead to improved diet quality.

[Relationships between Egg Intake in Infancy and Allergy, Growth, and Cognitive Disorders in Childhood](#)

In May, we submitted a proposal to the Egg Nutrition Center for a secondary analysis of data collected by other researchers from 2000 mother/child pairs across the U.S. from late pregnancy through the child's age of 12 months, and through age 6 years. It will investigate associations between frequency of egg consumption in infancy and growth and atopic disease (egg allergy, other food allergy, asthma, and/or eczema) at age 12 months and 6 years; and measures of cognitive disorder or impairment at 6 years. Benefits of egg intake for adults include increased satiety and neutral-to-protective effects on cardio-metabolic health. Less is known about the role of eggs in the diets of infants and young children. Egg consumption at ages 6-24 months has been associated with increased intake of choline, lutein and zeaxanthin, alpha-linolenic acid, vitamin B12, phosphorus, and selenium; and lower intake of added sugar. Many of these nutrients have implications for cognitive development.

UPCOMING SUBMISSION

Effects of Pecan Consumption on Endothelial Function and Cardio-metabolic Risk Factors in Adults at Risk for Type 2 Diabetes

In late June, we will submit a proposal to the American Pecan Council for a randomized crossover controlled trial to assess the impact of pecans on cardio-metabolic risk factors and diet quality in 28 adults at risk for Type 2 diabetes. Prior research attests to health benefits of consuming nuts. Pecans are rich in nutrients, minerals, antioxidants and vitamins that can help improve cardio-metabolic risk factors in people at risk for Type 2 diabetes. The study will include: (1) an acute phase to compare the effects of 2 similar meals (one without pecans, one with 60 grams of pecans); and (2) a control phase to compare the effects of 8 weeks of an ad libitum diet without nuts vs. an ad libitum diet that includes 60 grams of pecans each day. We hypothesize that including pecan nuts in the diet will result in net improvements in endothelial function, satiety, serum lipids, inflammation, body composition, body weight, waist circumference, insulin sensitivity, and diet quality in adults at risk for diabetes.

Impact of Full-Fat Dairy Consumption in the Context of Dietary Patterns on Endothelial Function and Cardio-Metabolic Risk in Adults at Risk for Type 2 Diabetes

At the invitation of the National Dairy Council, we are preparing a proposal for July submission. Our proposed randomized controlled parallel design study will compare the impact of including vs. excluding full-fat dairy products as part of the widely-endorsed Dietary Approaches to Stop Hypertension (DASH) diet. The DASH diet includes dairy products as part of its recommendations, but only those that are non-fat or low-fat, despite a lack of substantial evidence linking higher-fat dairy or saturated fat intake to cardio-metabolic risk. We plan to recruit 60 adults at risk for type 2 diabetes, and randomly assigned them to either include or exclude 3 daily servings of full-fat dairy foods as part of either their habitual diet or the DASH diet for an 8-week period. We will examine the impact of each treatment assignment on several markers of cardio-metabolic risk: endothelial function of the brachial artery; fasting glucose and insulin levels; waist circumference; body composition; satiety; lipid profile; blood pressure; C-reactive protein; diet quality; and physical activity.

Presentations

David Katz, MD, MPH, FACPM, FACP, PRC Director, delivered the following presentations:

- April 1-5: Served as emcee at the Art and Science of Health Promotion conference in Hilton Head, SC.
- April 15: *The Truth About Food: Overall Pattern of Chronic Diseases in Modern Societies*, 2019 Kosuna Distinguished Lecture Series at University of California at Davis, CA.
- April 22: Keynote presentation: *Digital Delivery of Lifestyle Medicine and Preventive Medicine* at the 2019 Asian Society of Lifestyle Medicine Conference in Seoul, South Korea.

- April 23: *Lifestyle IS Medicine, Lifestyle AS Medicine* at the 2019 Asian Society of Lifestyle Medicine Conference in Seoul, South Korea.
- May 7: *The Truth about Food: Why Pandas Eat Bamboo and People Get Bamboozled*, National Speaker Series sponsored by Lee Health Healthy Life Centers, Fort Myers, FL.
- May 13: *Debate: Are Vegetarians Healthier Than Omnivores?* The Soho Forum, Manhattan.
- May 16: Keynote presentation: *Food for Our Future: Taking Responsibility at the Crossroads of Personal and Planetary Health* at the *inVIVO* Planetary Health 8th Annual Conference, Detroit, MI.
- May 22: Keynote presentation at the Virgin Pulse Thrive Summit in New Orleans, LA.

Kim Doughty, MPH, PhD, VITAHLS Coordinator, presented findings of our Fruit and Vegetable prescription study on June 10th at the American Society for Nutrition's annual conference in Baltimore, MD.

Publications

- **Katz DL, Doughty KN**, Geagan K, Jenkins DA, Gardner CD. *Perspective: The Public Health Case for Modernizing the Definition of Protein Quality*. Adv Nutr. 2019 May 8. pii: nmz023. doi: 10.1093/advances/nmz023. [Epub ahead of print]
- **Njike VY**, Costales VC, Petraro P, Annam R, Yarandi N, **Katz DL**. *The Resulting Variation in Nutrient Intake With the Inclusion of Walnuts in the Diets of Adults at Risk for Type 2 Diabetes: A Randomized, Controlled, Crossover Trial*. Am J Health Promot. 2019 Mar;33(3):430-438.

In-Service / Training Opportunities

You are invited to join us at our **Journal Club meetings or other professional development sessions**, usually held every other month. We review and critique publications on topics such as community-based research, clinical research, and public health. This helps us stay up-to-date on research findings. It also allows us to examine publications (for the research questions, study design, results and conclusions) so we can apply the knowledge gained and lessons learned to the design of our own projects. Occasionally, we devote these sessions to reviewing recent findings from our own studies.

Our next meeting will be held at the PRC on the second floor of Griffin Hospital.

- **Wednesday, July 3 from 1:00 to 2:00 p.m.**
Chen F, Su W, Becker SH, Payne M, Castro Sweet CM, Peters AL, Dall TM. *Clinical and Economic Impact of a Digital, Remotely-Delivered Intensive Behavioral Counseling Program on Medicare Beneficiaries at Risk for Diabetes and Cardiovascular Disease*. PLoS One. 2016 Oct 5;11(10):e0163627.

If you have questions, please contact Dr. Valentine Njike by email at valentine.njike@yalegriffinprc.org, or by phone at 203-732-1265 ext. 304.

Let's Stay in Touch

We want to hear from you – let us know what you are doing and how our research might assist you in your work. Please contact Beth Comerford, MS, Deputy Director (beth.comerford@yalegriffinprc.org) or any of the staff listed in this **Newsflash**.

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The Yale-Griffin PRC is a member of the Prevention Research Centers Program.



Healthier Communities Together

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