

# The Yale-Griffin Prevention Research Center

## *Newsflash*

Spring 2016 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. It serves as a communication tool for our Community Committee members, and our colleagues in academia, education, clinical settings, and social service agencies. 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 <http://www.yalegriffinprc.org>

### *PRC Updates*

**Happy 30<sup>th</sup> anniversary to the National Prevention Research Center Program!** In 1984, Congress authorized the selection of academic health centers across the U.S. to conduct community-based public health research, with oversight from the Centers for Disease and Control (CDC). For 30 years, building healthier communities has been a goal for all Prevention Research Centers (PRCs) in this network. There currently are 26 PRCs across the U.S., including our own, which has been in operation since 1998. For more information about the national program, visit the website <http://www.cdc.gov/prc/index.htm>.

**Goodbye and best wishes to:** **Gina Smith, MA, CHES**, who served as our VITAHLS Coordinator from 2013-2015. During her time here, Gina was instrumental in advancing the VITAHLS agenda and expanding programming - including promoting staff wellness in Seymour in partnership with the YMCA, launching our Healthy Cooking Challenges, and setting up school gardens in partnership with Massaro Community Farm, among many other things! Gina recently accepted a position as Community Health Improvement Coordinator for Yale New Haven Health Systems and will serve as Coordinator for Get Healthy CT, a coalition serving the greater Bridgeport and New Haven areas. We wish her well in her new role, and thank her for her valuable contributions to the VITAHLS initiative!

**Welcome to our new VITAHLS Coordinator:** **Amy Bethge**, who has a bachelor's degree in Health Science from Keene State College in NH, and expects to receive an MPH degree from Southern CT State University in May. Amy has already spent several months at the PRC for a public health internship, and has already created an ABC for Fitness teacher training presentation, VITAHLS newsletters and social media messages, and a cookbook with recipes from our VITAHLS Healthy Cooking Challenges. She has also reviewed the literature on community cooking classes for our CHOOSE core research project. We are thrilled to have Amy transition to her new role at the PRC!

**Welcome to PRC public health intern:** **Kristina Brower**, who has a bachelor's degree in Public Health from Southern CT State University and expects to receive an MPH degree from SCSU in May. Kristina has prior experience in community health promotion and research, and recently spent 2 weeks in Guatemala as part of an international field study. At the PRC, she has been contributing to the CHOOSE data collection process; creating VITAHLS newsletters and website updates; and assisting in planning our CHOOSE community health promotion projects.

### *Current Projects*

### **UPDATE - Valley Initiative to Advance Health & Learning in Schools (VITAHLS)**

This initiative, led by the PRC and Griffin Hospital in partnership with 4 school districts, involves developing, implementing, evaluating and sustaining a comprehensive Valley-wide school-based program focusing on nutrition and physical activity for PreK-12 students. Our partners are the Ansonia, Derby, Seymour, and Shelton school districts, and Emmett O'Brien Regional Technical School. For more information, contact VITAHLS Coordinator Amy Bethge by email at [amy.bethge@yalegriffinprc.org](mailto:amy.bethge@yalegriffinprc.org).

- **New School District Partner:** We welcome the Naugatuck Public Schools, located in the upper Naugatuck Valley, to the VITAHLS initiative, and look forward to having their district representatives join the discussions at our monthly working group meetings.
- **Healthy Cooking Challenge:** Planning for our third annual Healthy Cooking Challenge is underway. Middle school students have been invited to create and submit recipes – this year's topic is healthy breakfasts – with each district selecting finalists who compete within their district. District winners will compete in the overall challenge scheduled to take place on Tuesday, May 17<sup>th</sup> in the Griffin Hospital cafeteria. The students' families are invited to watch the contest and sample the food.

### **UPDATE – Community Health Opportunities Organized with Schools at the Epicenter (CHOOSE)**

The PRC's core research project for this 5-year CDC funding cycle (October 2014 through September 2019) will compare the impact of 4 levels of interventions in 5 communities, with school districts serving as epicenters, and expanding within/beyond schools to other "portals" in their communities. The Valley Initiative to Advance Health and Learning in Schools (VITAHLS) is one component of CHOOSE. CHOOSE will use a multilevel approach to improve diet quality and physical activity in children and adults. Potential portals include schools, worksites, clinical settings, faith-based settings, and supermarkets. We will continue to develop/expand the VITAHLS initiative in Ansonia, Derby, Seymour, and Shelton schools, and have added the Naugatuck Public Schools to serve as a control/delayed intervention district. For more information, contact VITAHLS Coordinator Amy Bethge, email [amy.bethge@yalegriffinprc.org](mailto:amy.bethge@yalegriffinprc.org).

- **CHOOSE Data Collection:** With assistance from the Griffin Hospital Parish Nurses and physicians, we have collected baseline data from a subset of students from grades 4, 6, and 8 in the 4 VITAHLS districts, along with 1 parent/guardian of each student. The data included diet quality, body mass index, waist circumference, and blood pressure of students and parents, along with parents' physical activity levels. We also asked parents to complete a survey to indicate their level of interest in cooking classes and other health programs. Each of the 172 parent/child pairs who took part in the data collection received a healthy meal in the Griffin Hospital cafeteria and a \$50 gift card.
- **Community Cooking Projects:** We are planning 2 pilot community cooking projects intended to benefit residents of Naugatuck Valley communities, starting first with those who live in Ansonia. Each project will focus on healthful food preparation, but will be targeted to a different age group. The first will be offered starting this summer to adults in partnership with the Ansonia Public Schools and other community partners, at a location to be determined. It will start as a weekly set of classes, to be followed by other classes offered on a seasonal basis. The second project will be offered this summer in partnership with the Valley YMCA in Ansonia as part of its summer camp for children. We will provide more details on each project in our summer issue of the Newsflash.
- **Fruit and Vegetable Prescription Program** – We have been meeting with Griffin Faculty Practice Plan (GFP) staff and other Griffin Hospital employees to plan a pilot test of a Fruit and Vegetable Prescription program with Valley residents who are patients of the Ansonia GFP office. This program has been developed by Wholesome Wave, a nonprofit organization based in Bridgeport. Wholesome Wave works to build sustainable food systems and make fresh, locally grown fruits and vegetables available for underserved community members. As part of the prescription program,

healthcare providers meet with participating patients to assess their health and nutritional status, offer advice and tips to consume more fruits and vegetables, and provide financial incentives to buy more fruits and vegetables. Changes in purchases and intake of fruits and vegetables, along with changes in health outcome measures, are assessed during the intervention period. We will keep you posted on our plans for this pilot program. For more information, contact PRC Research Associate Judy Treu, email [judy.treu@yalegriffinprc.org](mailto:judy.treu@yalegriffinprc.org), phone 203-732-1371.

## Project Findings

### *Egg Ingestion in Adults with Type 2 Diabetes: Effects on Glycemic Control, Anthropometry, Diet Quality and Cardiometabolic Status. A Randomized, Controlled Trial*

- **Purpose:** Eggs are low in fat and a low-cost source of protein and micronutrients. However, for many years, healthcare providers have advised patients at risk for cardiovascular disease (CVD), including those with diabetes, to limit intake of eggs due to their cholesterol content. The prevailing view has been that dietary cholesterol could lead to elevated serum cholesterol, which could raise CVD risk. However, results of early studies that seemed to show a linear relationship between cholesterol intake and CVD risk are now being questioned due to study design flaws. More recent studies have found no association between egg intake and CVD. The PRC's own prior studies have found no adverse effects of egg intake by healthy adults, adults at risk for CVD, or adults with coronary artery disease. Excluding eggs from the diets of diabetes patients could potentially lead them to eat other foods high in starch and sugar, which could increase CVD risk due to the effects of elevated blood glucose on blood vessels over time. We conducted this study to see if adults with diabetes could safely include eggs in their diets.
- **Intervention:** This randomized controlled study, funded by the Egg Nutrition Center, compared the effects of two ad libitum diets (one including 10-14 eggs per week for 12 weeks vs. one excluding eggs for 12 weeks) on diet quality and health outcomes in adults with diabetes. Each participant was assigned to the intervention diet and the control diet at different time points during the study. We enrolled 34 overweight adults (men at least 35 years of age, and post-menopausal women who were not on hormone replacement therapy) who had been diagnosed with Type 2 diabetes in the last 1 to 10 years and had no advanced complications from diabetes. We expected to find that including eggs in their diets would lead to improved diet quality and health outcomes, compared to when they excluded eggs.
- **Outcome Measures:** Pre/post measures included hemoglobin A1C (a measure of blood glucose control over several weeks), fasting blood glucose, insulin levels, insulin resistance (HOMA), body composition, body mass index (BMI), weight, waist circumference, and diet quality.
- **Results:**
  - Of the 34 enrolled adults, 32 completed the study. They were mostly male (59%) and white (76%), with a mean age of 64.5 years. Nearly all (97%) were taking diabetes medicines, 82% were on lipid-lowering medicines, and 71% were on blood pressure medicines.
  - Including 2 eggs per day for 12 weeks in the habitual diet of these adults:
    - Did not lead to improved diet quality, as measured by the Healthy Eating Index 2010.
    - Had no significant effects on hemoglobin A1C levels compared to the start of the study (baseline) and compared to the egg exclusion phase.
    - Did not improve insulin resistance compared to the egg exclusion phase.
    - Did not improve systolic or diastolic blood pressure compared to the egg exclusion phase, but led to a small significant improvement in systolic blood pressure compared to baseline.
    - Significantly reduced body weight, waist circumference, BMI, visceral fat, and percent body fat, compared to the egg exclusion phase.

- Excluding eggs for 12 weeks from the habitual diet of these adults:
  - Significantly increased insulin resistance compared to baseline.
- **Conclusions:** Our data suggest that short-term daily inclusion of eggs in the habitual diet of adults with Type 2 diabetes can lead to improvements in blood glucose control, systolic blood pressure, and body composition measures. Eggs can be recommended as part of a healthful diet for adults with diabetes.
- **Next steps:** A larger multisite trial is needed to see if these findings can be replicated.
- **For more information:** Contact Dr. Valentine Njike, MD, MPH, PRC Assistant Director of Research and Evaluation, email [valentine.njike@yalegriffinprc.org](mailto:valentine.njike@yalegriffinprc.org), phone 203-732-1265, ext. 304.

**CARE Releases Results of 2015 New Haven Health Survey** - The Community Alliance for Research and Engagement (CARE) a partnership between the New Haven community and the Yale School of Public Health, is working in tandem with the PRC in taking action against chronic diseases and other challenges that threaten the health of community members. Currently, the PRC is primarily focusing its preventive health efforts in the Naugatuck Valley, while CARE is carrying out the same mission in New Haven.

Since 2009, CARE has been conducting a survey every 3 years to track neighborhood health in New Haven.

- **In 2015, CARE surveyed nearly 1200 residents** of 6 low-income neighborhoods in New Haven, and trained other local residents to collect the survey responses. Over all 3 time points, 70% of residents approached by CARE representatives responded to the survey, which included questions about their health, diet, exercise, smoking habits, and neighborhood safety.
- **The 2015 findings** reveal that residents of New Haven’s low-income neighborhoods continue to face challenges to their health and well-being. For example, 66% of respondents are currently overweight or obese, and 73% of respondents have heard gunshots at least once in their neighborhoods. However, in comparison to the prior surveys, the 2015 survey results do show some improvements. For example, (1) 65% of 2015 survey respondents reported meeting recommendations to exercise at least 150 minutes per week (up from 59% in 2009 and 2012); (2) 34% reported experiencing food insecurity (down from 39% in 2012); and (3) 51% reported feeling unsafe walking at night (down from 65% in 2012). **A full report of the 2015 findings** is posted at <http://goo.gl/grBcX2>
- **A community forum** will be held on Saturday, May 7<sup>th</sup> at 9:30 a.m. to discuss the survey results. The forum will take place at the Connecticut Center for Arts & Technology (ConnCAT), located at 4 Science Park in New Haven. As part of the forum, New Haven residents will be encouraged to create action plans for their own neighborhoods that will be shared with city officials. For more information on the forum, contact CARE Program Coordinator Letitia Charles by email at [letitia.charles@yale.edu](mailto:letitia.charles@yale.edu), or by phone at 203-737-5270.

## *Grant Proposals and Awards*

### **UPCOMING SUBMISSION**

- **Making Eating More Optional (MEMO)**

In late January, we were invited to submit a preliminary application to the Wellcome Trust (a global foundation dedicated to improving health) for a funding opportunity on the theme of “Our Planet, Our Health.” PRC Director Dr. David Katz has established the True Health Initiative, a coalition of leading experts and influencers in nutrition, public health, lifestyle medicine, health literacy, health communications, health policy, marketing, behavior change, economics, environmentalism, sustainable agriculture, and conservation to agree upon, and disseminate, a set of unified messages about healthful, sustainable dietary patterns to target populations. This proposal will support

exposure to targeted educational interventions in sites in at least 3 to 5 countries and is designed to change awareness, perceptions, and attitudes among those exposed to the interventions, and convince them to make more healthful and sustainable dietary changes than they would otherwise do if exposed to typically discordant messages from competing sources about what foods to eat. The connection with sustainability is the relationship between dietary patterns and environmental impact (e.g., the carbon footprint of meat consumption greatly exceeds that of plant-based protein consumption), and the idea that a mostly plant-based diet that is good for human health is also good for the planet. If funded, the proposed 5-year project will seek to show that changes in dietary intake resulting from the intervention: (1) will lead to measurable improvements in diet quality, body mass index, blood lipids, glucose levels, and insulin sensitivity, which in turn will lead to a reduced prevalence of obesity and Type 2 diabetes; and (2) will have an impact on climate and the environment, measured by water use and carbon footprint. If our initial application is accepted in April, the next step will be to submit a full proposal by August.

## *Presentations*

**David Katz, MD, MPH, FACPM, FACP**, PRC Director, delivered several presentations:

- Lecture on January 19<sup>th</sup> at the Yale New Haven Hospital Pediatric Dentistry Grand Rounds in New Haven, CT.
- *Knowing What to Eat: Refusing to Swallow It* on January 27<sup>th</sup> at the Farm Tech Conference in Edmonton, Canada
- Lecture on chronic disease prevention on February 3<sup>rd</sup> at the Yale Affiliated Hospitals Program at Danbury Hospital in Danbury, CT.
- *Lifestyle is he Medicine: What is the Spoon?* on February 8<sup>th</sup> at the Horan Conference in Cincinnati, OH.
- Workshops on February 24<sup>th</sup>-26<sup>th</sup> at the Lake Nona Institute Impact Forum in Orlando, FL.

## *Publications*

- Katz DL. *Energy Drink Consumption in Israeli Youth: Public Health & the Perils of Energetic Marketing*. Isr J Health Policy Res. 2016 Mar 10;5:9.
- Meldrum H, **Katz DL**, Egger G. *Letter to the Editor: Lifestyle Medicine in Expert Review of Cardiovascular Therapy*. Expert Rev Cardiovasc Ther. 2016 Mar; 14(3):263. Epub 2016 Feb 17.
- Adams ML, **Katz DL**, Shenson D. *A Healthy Lifestyle Composite Measure: Significance and Potential Uses*. Prev Med. 2016 Mar;84:41-7. Epub 2015 Dec 24.

## *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 the findings from our own studies.

- **Wednesday, April 13<sup>th</sup> from 10:30 to 11:30 a.m.:** Review of findings from a recent PRC research study *Effects of ISOThrive Supplement on Body Weight, Body Composition, Hunger/Satiety, and Cardiac Risk Measures in Overweight Adults.* This study examined the effects of daily use of a dietary prebiotic supplement for a 3-month period on weight and other health measures in overweight adults.

If you have questions, please contact Dr. Valentine Njike by email at [valentine.njike@yalegriffinprc.org](mailto: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](mailto: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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