

The Yale-Griffin Prevention Research Center

Newsflash

Winter 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

Our next Community Committee meeting will take place on **Thursday, January 14th from 10:00 to 11:30 a.m. in the conference room of the hospital's Center for Cancer Care**, located at 350 Seymour Ave. (across and just down the street from Griffin Hospital). We plan to provide an update on our current CDC-funded core research project (Community Health Opportunities Organized with Schools at the Epicenter, or CHOOSE) (see "Current Projects" below for more details). We will include time to discuss the next steps of one component of this project: a set of community-based cooking classes to be pilot-tested in the spring (see "Current Projects"). In addition to the Community Committee, we are inviting others who are interested in providing input on the planning process to take part in this discussion.

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 Gina Smith: Gina.Smith@yalegriffinprc.org.

- **Physical Activity Videos for Secondary Schools**

A team of VITAHLS representatives has been formed to plan and produce a set of 10 videos to promote physical activity in middle school classrooms. Two physical education teachers (one from Derby and one from Seymour) will oversee the production of the videos, which will feature classroom-based fitness breaks led by high school students from Derby and Seymour. They expect to complete the filming and editing of the videos by the end of April.

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 respective 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 will add a new school district with similar demographics to serve as a control/delayed intervention group. For more information, contact VITAHLS Coordinator Gina Smith: Gina.Smith@yalegriffinprc.org.

- ***CHOOSE data collection:*** With assistance from the Griffin Hospital Parish Nurses, we began collecting baseline data this fall from a subset of students from grades 4, 6, and 8 in the 4 VITAHLS school districts, along with 1 parent/guardian of each student. The data includes diet quality, body mass index (BMI), waist circumference, and blood pressure of the students and parents, along with self-reported physical activity levels of the parents. In addition, we invited the parents to complete a survey to indicate their level of interest in healthy cooking classes, healthy meal demonstrations, supermarket tours, and/or family fitness programs, and provide suggestions for other ideas to motivate families to adopt a healthful lifestyle. As a thank-you for their time, parent/child pairs of participants received a healthy meal from the Griffin Hospital cafeteria and a \$50 VISA gift card.
- ***Community Cooking Project:*** As a part of CHOOSE, the PRC plans to develop a cooking program that will teach residents of Ansonia, Derby, Seymour, and Shelton to create easy, affordable, nutritious meals. Results of a parent opinion survey conducted this fall (see *CHOOSE data collection* above) indicate a high degree of interest among the parents who took part in our fall data collection, with 63% saying they would be “very interested” and 33% “somewhat interested” in attending a healthy cooking class if offered at a convenient location and time in a community setting. Amy Bethge, an MPH student from Southern CT State University, has conducted a literature review will assist with the development of a pilot program that will likely be offered in Ansonia. To help guide the process, we will use findings from a literature review done by Amy, along with our own experience in offering and evaluating a 2014 pilot cooking program in a church kitchen in Seymour. We will also reach out to VITAHLS partners to seek their input during the program development process. For more information, contact PRC Research Associate Judy Treu by email at judy.treu@yalegriffinprc.org.

Project Findings

Exploring Massage Benefits for Arthritis of the Knee (EMBARK)

- ***Background / Purpose:*** The National Institutes of Health (NIH) awarded a \$2.75 million shared grant to Duke Integrative Medicine, the Yale-Griffin PRC, and Rutgers University to investigate the impact of massage therapy on adults with osteoarthritis (OA) of the knee. OA, a slowly progressive, degenerative disease of the joints that afflicts up to 40 million Americans, can lead to chronic pain and disability. Conventional treatments are often associated with incomplete pain relief and/or side effects of pharmacological treatments, and surgery requires a long recovery period. A 2004 pilot study done by the PRC showed massage to be feasible and effective in treating OA of the knee, leading to improved flexibility, less pain, and improved range of motion lasting several weeks after treatment ended. A follow-up PRC study (2009-2011) to seek an optimal “dose” found that 8 weekly 60-minute massages were most effective and practical, compared to 60 minutes twice a week, or 30 minutes once or twice a week.

The purpose of the EMBARK study was to verify the efficacy of an 8-week course of Swedish massage, at an optimized dose, as well as to assess a maintenance dose, for reducing pain and increasing function compared to an active (light touch bodywork) control, and passive (usual care) control, in adults with OA of the knee.

- ***Intervention:*** The combined research team conducted a randomized controlled trial to evaluate the impacts of an 8-week course of once-weekly Swedish massage on pain, stiffness, and physical

function in adults with OA of the knee, and how long any effects would last over a one-year period. They recruited 222 participants with OA of the knee at all three sites combined (66 at the PRC). Participants were over 35 years of age, had radiographically diagnosed OA of the knee, met the American College of Rheumatology criteria for OA, and were experiencing moderate pain (40-90 on the Visual Analog Pain Scale). For those who qualified, treatments were available at Griffin Hospital, Barnabas Health Ambulatory Care Center in Livingston, NJ, and Duke University in Durham, NC. Participants were randomly assigned to 8 weeks of either total-body Swedish massage therapy (1-hour treatment, once per week), light touch bodywork (1-hour treatment, once per week), or usual care (control group). At the end of their 8-week treatment period, participants in the massage and light touch groups were randomly assigned to either maintenance doses (60-minute sessions of their respective treatments every 2 weeks), or to usual care, for the remainder of their 1-year involvement in the study. Those in the usual care group were randomly assigned at 24 weeks to receive a delayed intervention (Swedish massage once weekly for 8 weeks, followed by random assignment to either a maintenance dose of massage (60 minutes once every 2 weeks) or usual care, for the remainder of their 1-year involvement in the study.

- ***Outcome Measures:*** Validated instruments, including standardized questionnaires known as the Western Ontario and McMaster Universities Arthritis Index (WOMAC), were used to assess pain, stiffness, flexibility, and physical function of the joints. Outcome measures were collected at baseline, and at 8, 16, 24, 36, and 52 weeks after baseline.
- ***Results:*** The study sample consisted of 222 patients aged 35 to 89 years with a mean age of 63 years, generally obese, non-Hispanic white, and female. All groups improved with regard to the outcome measures, with the massage group showing greater improvement than the other groups. At 8 weeks, subjects in the Swedish massage group saw a significantly greater reduction in WOMAC global scores than did the light touch and usual care groups, reaffirming the results of our prior studies. In the massage group, large initial improvements were maintained among those who received maintenance treatment and partially lost in the usual care group (those who had received weekly massages for the first 8 weeks, until it was discontinued). In the light touch group, modest initial improvements were furthered among those who received maintenance treatment and maintained in the usual care group. By 52 weeks, improvement was seen in all groups, but any differences in improvement between the groups were no longer statistically significant. In other words, all groups showed comparable improvement in the long run.
- ***Next steps:*** Further study of the role of maintenance massage therapy past 8 weeks is warranted.
- ***For more information:*** Contact **Dr. Valentine Njike, MD, MPH**, PRC Assistant Director of Research and Evaluation, email valentine.njike@yalegriffinprc.org, phone 203-732-1265, ext. 304.

Grant Proposals and Awards

UPCOMING SUBMISSION

- ***True Health Initiative to the Wellcome Trust***

In late January, we plan to submit a preliminary application to the Wellcome Trust (an independent global charitable foundation dedicated to improving health) for a funding opportunity recently announced by the Trust on the theme of “Our Planet, Our Health.” PRC Director Dr. David Katz has recently been assembling a global coalition of leading experts and influencers in health-related fields (lifestyle medicine, preventive medicine, public health, health journalism, environmentalism, sustainable agriculture, conservation, nutrition, and health care) - known as the True Health Initiative - to agree upon, and disseminate, a set of unified messages about healthful, sustainable dietary patterns to target populations around the world. He would like to propose that exposure to these

messages will change public awareness, perceptions, and attitudes, and convince the public to change their dietary behaviors (i.e., to make more healthful and sustainable dietary changes than they would otherwise do if exposed to the usual discordant messages from competing sources about what foods to eat). The proposed study, if funded, will seek to demonstrate that resulting behavioral changes in dietary intake: (1) will lead to measurable changes in diet quality and clinical measures such as body mass index, blood lipids, glucose levels, and insulin sensitivity, which in turn will lead to a reduced prevalence of chronic diseases (i.e., obesity and Type 2 diabetes); and (2) will have a measureable impact on climate and the environment, as measured by water utilization and carbon footprint. If the preliminary application is accepted, the next step will be to submit a full proposal by August.

Presentations

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

- *Lifestyle is the Medicine: What is the Spoon?* keynote presentation on September 22nd at the Foxboro Worksite Wellness Council of Massachusetts Conference in Foxboro, MA.
- *From Science to Sound Bites: Using Nutrition Research to Inspire Behavior Change* on October 5th at the Academy of Nutrition and Dietetics Food & Nutrition Conference & Expo™ (FNCE) in Nashville, Nashville, TN.
- *Forks in the Road to Health*, keynote presentation on October 23rd at the Healthy by Design conference in Waterbury, CT sponsored by the Connecticut Public Health Association.
- *Modern Epidemiology: Dark Wood, GLIMMER of Hope* on November 9th at the Innovations in Cancer Prevention and Research Conference in Austin, TX, sponsored by the Cancer Prevention and Research Institute of Texas (CPRIT).
- Presentation on November 12th at the Helm Society Roundtable in New York, NY.
- *Would Horton Hear Us?* on November 13th at Northwest VEG in New York, NY.
- *Lifestyle is the Medicine: What is the Spoon?* on November 14th at a Designs for Health educational event in New York, NY.

Gina Smith, MA, CHES, PRC VITAHLS Coordinator and **Judy Treu, MS, RD**, PRC Research Associate, delivered two presentations:

- *Designing a School-Based Childhood Obesity Prevention Initiative* on October 23rd at the CT Public Health Association Annual Meeting in at the CoCo Key Convention Center in Waterbury, CT.
- *Motivating Your School Community to Adopt a Healthy Lifestyle* on November 3rd at a CT State Department of Education professional development session for physical education and health education teachers.

Publications

- Ali A, **Katz DL**. *Disease Prevention and Health Promotion: How Integrative Medicine Fits*. Am J Prev Med. 2015 Nov;49(5 Suppl 3):S230-40.
- Epstein LH, Finkelstein EA, **Katz DL**, Jankowiak N, Pudlewski C, Paluch RA. *Effects of Nutrient Profiling and Price Changes Based on NuVal® Scores on Food Purchasing in an Online Experimental Supermarket*. Public Health Nutr. 2015 Oct 23:1-8. [Epub ahead of print]
- **Katz DL**. *Preventive Medicine Training: The Case for Integrating Integrative Medicine*. Am J Prev Med. 2015 Nov;49(5 Suppl 3):S219-21.

- **Njike VY, Ayettey R, Petraro P, Treu JA, Katz DL.** *Walnut Ingestion in Adults at Risk for Diabetes: Effects on Body Composition, Diet Quality, and Cardiac Risk Measures.* BMJ Open Diabetes Research and Care 2015;3:e000115.
- **Njike VY, Kavak Y, Treu JA, Doughty K, Katz DL.** *Snacking, Satiety, and Weight: A Randomized, Controlled Trial.* Am J Health Promot. 2015 Nov 11. [Epub ahead of print].
- Shuval K, Finley CE, Barlow CE, Nguyen BT, **Njike VY**, Pettee Gabriel K. *Independent and Joint Effects of Sedentary Time and Cardiorespiratory Fitness on All-Cause Mortality: The Cooper Center Longitudinal Study.* BMJ Open. 2015 Nov 1;5(10):e008956.
- **Treu JA, Doughty K, Reynolds JS, Njike VY, Katz DL.** *Advancing School and Community Engagement Now for Disease Prevention (ASCEND): A Quasi-experimental Trial of School-Based Interventions to Prevent Childhood Obesity.* Am J Health Promot. 2015 Nov 11. [Epub ahead of print].

In-Service / Training Opportunities

You are invited to join us at our **Journal Club meetings**, 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.

The next Journal Club meeting will be held at the PRC on the second floor of Griffin Hospital.

- **Tuesday, January 12th from 1:00 to 2:00 p.m.**

Hung LS, Tidwell DK, Hall ME, et al. *A Meta-Analysis of School-Based Obesity Prevention Programs Demonstrates Limited Efficacy of Decreasing Childhood Obesity.* Nutr Res. 2015 Mar;35(3):229-40.

If you have questions or want to receive a PDF version of the article by email, 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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