

NUTRI NEWS

The Department of Nutrition

June 2017

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NUTRITION IN THE NEWS!



Replacing Saturated Fats with Unsaturated Fats Will Lower Incidence of Cardiovascular Disease

The American Heart Association (AHA) concluded in a new advisory that in order to lower incidence of cardiovascular disease, people should replace saturated fats with unsaturated fats. **Professor Frank Sacks** of the Nutrition Department was lead author of that Presidential Advisory of the AHA.

Sacks points out that many Americans become confused when misleading studies that contain methodological and other errors receive major headlines in the press. Even when conclusions from those studies are later found to contain serious flaws, they are not followed up by the press. Thus, the rationale for the new AHA advisory is to emphasize why scientific studies that are well-conducted will overwhelmingly support limiting saturated fat in the diet for preventing diseases of the heart and blood vessels.

Dr. Sacks cites coconut oil as an example because it is often touted as being healthy. However, this is not backed up by the science which shows that coconut oil, which mostly contains saturated fatty acids, will raise LDL cholesterol. This is linked with an increased risk for heart disease. Thus, the role of the AHA Presidential Advisory is to set the record straight in cases like this.

Sacks and his colleagues also point out that it is not enough to simply substitute saturated fats with something else in the diet, such as unhealthy (junk food) carbohydrates. Rather, saturated fats should be replaced by unsaturated fats or healthy carbohydrate-rich foods, such as whole wheat bread or whole fruits. He suggests that people look at nutritional guidelines on major websites such as the AHA or the American Diabetes Association to better learn about what is really a healthy diet to pursue.

To learn more: <https://www.hsph.harvard.edu/news/features/frank-sacks-swap-saturated-fats-for-healthier-fats/>

COMPREHENSIVE COMMUNITY-WIDE APPROACHES TOWARDS REDUCING CHILDHOOD OBESITY SHOW PROMISE

A large-scale effort to reduce childhood obesity in two low-income Massachusetts communities resulted in some modest improvements among schoolchildren over a relatively short period of time. This suggests that such a comprehensive approach holds promise for the future, according to a new study from Harvard T.H. Chan School of Public Health. **Dr. Rebecca Franckle**, postdoctoral research fellow in the Department of Nutrition at The Harvard T.H. Chan School of Public Health, is lead author of the study.



Obesity remains a major public health issue in the U.S. In order to better address this, researchers have looked increasingly at multisectoral, multilevel approaches to the problem. **Franckle et al.** evaluated the effectiveness of one such project—the Massachusetts Childhood Obesity Research Demonstration Project (MA-CORD)—through which elementary and middle school students in two low-income Massachusetts communities received interventions from 2012-2014 aimed at reducing obesity and encouraging healthy behaviors, including eating more fruits and vegetables, drinking less sugar-sweetened beverages, increasing physical activity and sleep duration, and decreasing screen time. The project's interventions were implemented across different sectors—including schools, after-school programs, and health centers—and ranged from the individual level, such as individual or family counseling, to the community level, such as providing physical activity equipment to schools.

The two communities that received the interventions were compared with nine similar communities that did not receive them. Results showed a modest decrease in the prevalence of obesity among some schoolchildren. Some students drank less sugar-sweetened beverages and more water, and some spent less time in front of screens. The changes observed in the study indicate that such comprehensive approaches are promising, given the challenges inherent in implementing community-wide efforts to reduce childhood obesity.

This study, by Franckle and several others from the department will be published in the July 2017 issue of *Obesity*:

"Student Obesity Prevalence and Behavioral Outcomes for the Massachusetts Childhood Obesity Research Demonstration Project," Rebecca L. Franckle, Jennifer Falbe, Steven Gortmaker, Jessica L. Barrett, Catherine Giles, Claudia Ganter, Rachel E. Blaine, James Buszkiewicz, Elsie M. Taveras, Jo-Ann Kwass, Thomas Land, and Kirsten K. Davison, *Obesity*, June 27, 2017, doi: 10.1002/oby.21867

For more news, visit the Harvard Chan School website.

NEW PREDIMAR TRIAL LAUNCHED!



PREDIMAR Team (from left): Jesus Almendral, MD; M. Teresa Barrio-Lopez, MD; Miguel Ruiz-Canela Pharm D; Miguel A. Martinez-Gonzalez, MD

NEW PREDIMAR TRIAL

A secondary prevention trial will study whether atrial fibrillation relapses after ablation can be prevented with the Mediterranean diet and extra virgin olive oil. The trial has been initiated in Spain, and some Centers in the US may eventually be included as well. **Dr. Miguel Martinez-Gonzalez**, Adjunct Professor of the Nutrition Department, is promoting this new trial.

Last March 22nd the first patient with atrial fibrillation treated with ablation was enrolled in this secondary prevention trial. Three hospitals in Spain are already randomizing patients with the goal of recruiting >640 participants, and eventually this study may be extended to some centers in the US. The nutritional intervention is being conducted by nutritionists previously experienced in this type of intervention (from the large PREDIMED trial); however, they will now use remote contacts with the patients every 2 months. This new approach will allow them to extend the intervention to patients living away from the ablation centers. **Miguel A. Martinez-González** and **Miguel Ruiz-Canela** from the University of Navarra are in charge of the design and the intervention, and **Teresa Barrio-López** and **Jesús Almendral**, cardiologists at Montepíncipe Hospital (Madrid) are responsible for patient enrollment and ascertainment of atrial fibrillation recurrences. The benefits of the Mediterranean diet on atrial fibrillation were shown in primary prevention in the PREDIMED study but the mechanisms and their potential benefits when the disease is already present are still unknown. The PREDIMAR trial will address these questions.

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NEW APPROACHES TO HELP REDUCE CURRENT OBESITY EPIDEMIC

A special report by Madeline Drexler in the Spring 2017 edition of *Harvard Public Health* focused on the unprecedented obesity epidemic that has overtaken this country. The report attributed this obesity problem to a radical and toxic change in our food environment, and suggested that a new, more activist approach towards fighting this epidemic may now be in order: Public health advocates should begin to mobilize around this issue in the same manner as similar social justice activists have mobilized around other issues in the past. Several of our Nutrition faculty members were quoted in the report.

The first step suggested in the report would be prevention, and that preventing obesity in childhood is key to stopping the epidemic. Nevertheless, the bulk of obesity is still in adults. According to **Frank Hu**, chair of the Harvard Chan Department of Nutrition, "Most people gain weight during young and middle adulthood. The weight-gain trajectory is less than 1 pound per year, but it creeps up steadily from age 18 to age 55. During this time, people gain fat mass, not muscle mass. When they reach age 55 or so, they begin to lose their existing muscle mass and gain even more fat mass. That's when all the metabolic problems appear: insulin resistance, high cholesterol, high blood pressure."

Adds **Walter Willett**, Frederick John Stare Professor of Epidemiology and Nutrition at Harvard Chan, "The first 5 pounds of weight gain at age 25—that's the time to be taking action. Because someone is on a trajectory to end up being 30 pounds overweight by the time they're age 50. We can't blame industry for this. It was a bandwagon effect in the scientific community, despite the lack of evidence—even with evidence to the contrary," says Willett. "Farmers have known for thousands of years that if you put animals in a pen, don't let them run around, and load them up with grains, they get fat. That's basically what has been happening to people: We created the great American feedlot. And we added in sugar, coloring, and seductive promotion for low-fat junk food."

Another approach towards reducing obesity is to level the playing field through taxes and regulation. For example, should recipients of federal Supplemental Nutrition Assistance Program (SNAP) benefits (formerly known as food stamps) be restricted from buying sodas or junk food? **Eric Rimm**, a professor in the Departments of Epidemiology and Nutrition at the Harvard Chan School, frames the issue differently. In a 2017 study in the *American Journal of Preventive Medicine*, he and his colleagues asked SNAP participants whether they would prefer the standard benefits package or a "SNAP-plus" that prohibited the purchase of sugary beverages but offered 50 percent more money for buying fruits and vegetables. Sixty-eight percent of the participants chose the healthy SNAP-plus option." Thus, it is important to reach out to the beneficiaries themselves to hear what they have to say.

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HARVARD CHAN SCHOOL RECEIVES \$4.9 MILLION AWARD TO CREATE MICROBIOME BIOBANK



Amanda Spickard, assistant dean for research strategy and development, Eric Rimm, professor of epidemiology and nutrition, Dean Michelle Williams, Wendy Garrett, professor of immunology and infectious diseases, and Sherry Sawyer, director of the BWH/Harvard Cohorts Biorepository

Recently, Drs. Shelley Tworoger, **Eric Rimm**, Wendy Garrett, and Curtis Huttenhower with other faculty from the Harvard Chan School, received a Capital Program award from the Massachusetts Life Sciences Center to build the Biobank for Microbiome Research in Massachusetts (BIOM-Mass). BIOM-Mass will: (a) create the world's largest prospective collection of microbiome specimens from 25,000 individuals in the Nurses' Health Study II; (b) leverage cutting edge laboratory automation to collect and store biospecimens for this and many future studies; and c) deploy a novel analysis and bioinformatics data portal to support microbiome research and development. The primary goal is to build an integrated microbiome research platform allowing collection, use, and analysis of microbiome-targeted biospecimens accessible to all investigators at the Harvard Chan School that complements existing microbiome resources at the School.

NEW FACES IN NUTRITION



Aarohee Fulay, Research Assistant

Aarohee Fulay is a research assistant working with **Dr. Eric Rimm** in the Department of Nutrition. She will be assisting primarily with his EVERGREEN (Evidence-Based Research Group to Evaluate Nutrition Policy) research group as well as with other related projects.

In 2015, Aarohee received her B.A. in Biology and Psychology from Cornell University in Ithaca, NY. She also recently obtained her MPH in Nutritional Sciences from the University of Michigan School of Public Health in Ann Arbor, MI. Aarohee has previously performed research in the area of nutritional epidemiology at the University of Michigan School of Public Health, and also has also obtained field experience through her time at the Michigan Department of Education School Nutrition Programs. Outside of work, Aarohee enjoys going for walks, reading, and spending time with friends and family.

Aarohee looks forward to working with the faculty and staff at the Harvard School of Public Health Department of Nutrition, and is very excited to be here!

Elena Hemler, Program Coordinator

Elena Hemler grew up in Newton, MA and studied Biopsychology and Community Health at Tufts University. She loves traveling and before going to school at Tufts, spent a year backpacking and working in Tanzania, India and China. While an undergraduate, she worked as a health coach for overweight patients at Boston Children's Hospital and taught health education in Boston Public Schools. Additionally, she completed a senior honors thesis with the Tufts Friedman School of Nutrition studying the effects of an educational intervention on caretakers of malnourished children in USAID's Title II Supplementary Feeding Program in Malawi. For the past two years, Elena has been working as a project manager at Epic, an electronic health records company in Madison, WI. At Epic, she implemented healthcare technology solutions in hospitals around the world and led a project to improve Epic's nutrition clinical documentation content. Elena is passionate about nutrition and is especially interested in the prevention and treatment of malnutrition and obesity in underserved populations. She now joins the department as a Program Coordinator and will be assisting **Dr. Frank Hu** with his research, managing his calendar, and working on other projects such as the MPH in Nutrition program. In her spare time, Elena loves swimming, distance biking and planning her next international adventure.



MORE NEWS FROM AROUND THE DEPARTMENT

Laila Al-Shaar, MS, MPH, doctoral student (Mentor: **Dr. Walter Willett**), has been awarded a 2-year predoctoral fellowship by the American Heart Association for her proposal entitled: *"BMI and physical activity in relation to outcomes after myocardial infarction: Analysis of two prospective cohort studies"*.

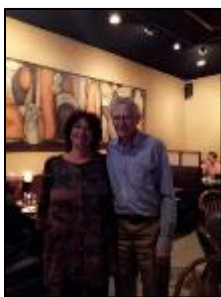
Nathalie Marchand (doctoral student) has had the following paper published with **Professor Majken Jensen**:

Marchand NE, Jensen MK. The Role of Dietary and Lifestyle Factors in Maintaining Cognitive Health. *The American Journal of Lifestyle Medicine*. 2017;1-18.

Amanda McClain, Postdoctoral Fellow, received an Early Career Researcher award for her poster titled **"Cultural and Life Course Influences on Food Provisioning among Low-income, Mexican-Origin Mothers with Young Children in the U.S."**, which formed part of her dissertation research at Cornell University, at the 2017 International Society of Behavioral Nutrition and Physical Activity annual meeting in Victoria, BC, Canada.

Rebecca Franckle, Postdoctoral Research Fellow, also received an Early Career Researcher award at the 2017 International Society of Behavioral Nutrition and Physical Activity annual meeting in Victoria, BC, Canada for the best oral presentation. The title of her talk was **"The impact of the monthly SNAP issuance cycle on consumer shopping behaviors in a large Northeastern supermarket chain"**.

Professor Donna Spiegelman gave an invited talk on June 6, 2017 at the National Institute of Environmental Health Sciences Advisory Council meeting, titled **"The NIH Director's Pioneer Award Meets Biostatistics: Next Up, the Meeting of Environmental Health and Implementation Science?"**



On May 1st, **Dr. Donna Spiegelman** delivered the Fuller Lecture at Iowa State University. Her talk was titled, "***Measurement error: from Fuller to the future.***" (Pictured to the left: Dr. Spiegelman with Dr. Wayne Fuller, Iowa State University Distinguished Professor Emeritus in Statistics and Economics.)

On May 9th, **Dr. Donna Spiegelman** presented on the "***Implementation Science: the what, why and how?***" at the Instituto Nacional de Salud Pública (INSP) in Cuernavaca, Mexico.

On May 11th, **Dr. Donna Spiegelman** presented on the "***Design of cluster randomized and stepped wedge trials***" at the Instituto Nacional de Salud Pública (INSP) in Mexico City, Mexico.

Dr. Donna Spiegelman also had the following papers published:

Spiegelman D, VanderWeele TJ. Evaluating Public Health Interventions: 6. Modeling Ratios or Differences? Let the Data Tell Us. Am J Public Health. 2017 Jul;107(7):1087-1091. doi: 10.2105/AJPH.2017.303810. PMID:28590865

Glymour MM, **Spiegelman D**. Evaluating Public Health Interventions: 5. Causal Inference in Public Health Research-Do Sex, Race, and Biological Factors Cause Health Outcomes? Am J Public Health. 2017; 107(1):81-85.

RECIPE CORNER

Watermelon, Feta & Mint Salad

(Contributed by **Katrina Soriano**, Director of Administration & Finance)

Katrina recommends this as her favorite all-time summer potluck dish, suitable for any occasion. It's not only easy, it's also very delicious and popular with everyone. If you happen to be pressed for time, Katrina suggests just whisking balsamic vinegar with a touch of honey and drizzle it over the celery.



Ingredients

- 1/3 cup extra-virgin olive oil
- 3 tablespoons fresh lemon juice
- 2 teaspoons kosher salt
- 1 teaspoon Tabasco
- 1/2 teaspoon freshly ground pepper
- One 8-pound seedless watermelon, scooped into balls with a melon baller or cut into 1 1/2-inch chunks (10 cups), chilled
- 1/2 pound feta cheese, crumbled (2 cups)
- 1 1/4 cups pitted kalamata olives, coarsely chopped (optional)
- 1 small sweet onion, cut into 1/2-inch dice
- 1 cup coarsely chopped mint leaves

How to make this recipe

1. In a large bowl, whisk the oil, lemon juice, salt, Tabasco and pepper. Add the watermelon, feta, olives and onion and toss gently. Garnish with the mint and serve.

Notes

Although you can cut a small, seedless watermelon into rounds with a melon baller (adding the trimmings to the salad, too, so as not to waste them), you can also chop the watermelon into cubes.

From: <http://www.foodandwine.com/recipes/watermelon-salad-feta-and-mint>

Contributed by [Jacques Pépin](#)

MONDAY NUTRITION SEMINARS

There will be no Monday Nutrition Seminars during the summer months. Our regular **Monday Nutrition Seminar Series** will resume in the fall, beginning August 28, 2017. In the meantime, we will still be holding an occasional Special Nutrition Seminar.

The Department of Nutrition is currently seeking candidates for the position of Assistant or Associate Professor in Public Health Nutrition. Please feel free to share this with your colleagues!

For more information: <http://academicpositions.harvard.edu/postings/7477>

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The Department of Nutrition has posted a call for applications for an Assistant/Associate Professor of Nutrition and Planetary Health. The job posting can be accessed via the link below. Please share this with your colleagues!

<http://academicpositions.harvard.edu/postings/7660>

There will be an upcoming seminar by the **Academy of Nutrition and Dietetics, Food and Nutrition Conference and Expo 2017**, McCormick Place Chicago. *For more information and to register:* <http://eatrightfnce.org/>

SAVE THE DATE ANNOUNCEMENTS!

On November 1, 2017, the Nutrition Department at the Harvard T.H. Chan School of Public Health will be celebrating its **75th year!** At the same time we will also be having our **13th Annual Stare-Hegsted Lecture.** Dr Lawrence J Appel, of The Johns Hopkins University, will be this year's speaker. The two events will be combined that afternoon. The Department will be celebrating its 75 years with a symposium starting at 1:00 pm and the Stare-Hegsted Lecture will be at 4:30 pm, with a reception afterwards. Both events will take place at the NRB in the Rotunda Room. More details will follow later.