

# NUTRI NEWS

## The Department of Nutrition

**May 2018**

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### FIVE STUDENTS GRADUATE AT 2018 COMMENCEMENT

The following students in our Department received their doctorates at the Harvard Commencement activities on May 23-24, 2018. These students came from diverse backgrounds and their research goals were varied. But one common thread unites them all: Each of them is highly dedicated towards improving nutrition and public health both globally and nationally. Their Harvard education has made these students well poised to tackle tomorrow's challenges. Please be sure to congratulate them on their hard work and achievements!



**Ahmed Alhassani**

Ahmed holds a Dental Degree from King Abdulaziz University (KAU), Jeddah, Saudi Arabia. Prior to coming to the Harvard Chan School, he worked as a general dentist in the Saudi National Guard and as a clinical instructor at the School of Dentistry (KAU). Ahmed was awarded a postdoctoral scholarship from KAU, where he received a Certificate of Advanced Education in Periodontology and a Master of Science (MS) degree at Tufts University School of Dental Medicine in Boston.

Ahmed is also a Diplomate, American Board of Periodontology. His main research interests have been nutritional intake and chronic illnesses, and the relationship between oral and systemic health. His advisor has been **Dr. Frank Hu**, and his dissertation was titled "The Associations between Dietary Intake and Incidence of Periodontal Disease". After graduation he will be working as a dental school assistant professor, where he can teach, practice, and continue his research. Even in Ahmed's busiest days, however, he has always managed to find an hour to work out!

## **Sabri Bromage**

My dissertation focused on the epidemiology of dietary and micronutrient deficiencies in Mongolia (Committee members: **Drs Wafaie Fawzi, Ganmaa Davaasambuu, Janet Rich-Edwards, Bernard Rosner**). I find Mongolia to be an important case study in nutrition, given many extreme characteristics of the country's diet (e.g. extremely high consumption of red and processed meats and processed flour products) and their relation to chronic disease risk.

Outside my dissertation, I am grateful to have had opportunities as a student to collaborate on a range of studies with colleagues in nutrition, environmental health, and global health working in different countries around the world. While I gained useful skills during my coursework, the experience of honing these skills as part of these collaborations was even more valuable.

After graduation, I will work with my colleagues in central Asia to expand our studies on the nutritional epidemiology of tuberculosis, food fortification monitoring, and drivers of food choice among economic migrants. My long-term career goals involve applied research to improve assessment of individual and household food consumption in low- and middle-income countries.

Fun fact: I cook an excellent chicken parmesan by making my own sauce, using thighs (I de-bone them myself if I have to . . . I never use breasts), and keeping the skin on them. (Fun fact #2: other than the occasional indulgence of eating cheesy, fried and breaded, skin-on chicken, I'd say my diet is pretty good).



## **Alyssa Moran**

Alyssa Moran will be graduating from the ScD program in Public Health Nutrition with a concentration in Social & Behavioral Research Methods and Obesity Epidemiology & Prevention. Her dissertation, "Healthier Restaurant Environments as a Child Obesity Prevention Strategy" focused on restaurant self-regulatory initiatives and policies for improving nutrition in kids' meals. She has also done research on other policy initiatives to promote healthy diets, including food procurement, food labeling, and federal food assistance programs like SNAP and WIC, and

frequently consults with state and local governments on research to inform policy. She can say without a doubt that the best part of her experience at Harvard was the chance to work with the most wonderfully kind, creative, and interesting faculty, staff, and students throughout the University. She is particularly grateful to her dissertation advisor, **Dr Eric Rimm**, who has not only guided her through new ways of thinking about data and public health problems, but who has been the most encouraging, thoughtful, and enthusiastic mentor, with whom she hopes to continue working for many years to come! Other highlights have included the opportunity to design and test a behavioral intervention in a supermarket, spending time in Guatemala researching sugary drink warning labels, teaching in **Frank's [Dr Frank Sacks]** course and at the Showa Institute, and daily conversations (or long hours at IQSS) with her friends and mentors at HSPH.

This summer, Alyssa is looking forward to spending as much time outdoors as possible with the many people who she has not seen enough of over the past four years, and without whom she probably would not have made it to graduation! She plans to spend time sailing with her parents in New Hampshire, visiting her siblings in California, backpacking with friends in the White Mountains, and taking weekend trips to Jacob's Pillow in the Berkshires and the Cape with Joe. In between, she hopes to continue running, yoga, and improving her pub trivia skills. She's looking forward to starting a new position as an Assistant Professor of Health & Social Policy at the Johns Hopkins Bloomberg School of Public Health in the fall.



### ***Allyson M. Morton***

I was born and grew up in Kernersville, North Carolina and spent my childhood climbing trees and exploring the woods around my house. I did my undergrad at Duke University and majored in cell and molecular biology with a minor in chemistry. At Duke, I did basic science research in a cancer signaling lab, but I wanted to shift my focus elsewhere for graduate school. One of my favorite classes was biochemistry, especially regarding nutrient signaling. My plans to get a Ph.D. in nutritional biochemistry were solidified when I did a summer internship in Biological Sciences in Public Health at HSPH in summer 2011, right before my senior year of college. I worked in **Dr Marianne Wessling-Resnick's** lab doing research on iron metabolism.

I arrived at HSPH for graduate school in summer 2012. I did my first lab rotation with **Dr. Chih-Hao Lee** studying the interplay of metabolism and inflammation. In the fall, I rotated with **Dr. Frank Sacks** and joined the lab in January 2013. For the next five or so years, I studied how diet affects human lipoprotein metabolism and lipoprotein speciation. We were able to show for the first time that proteins on HDL interact to influence its metabolism, and that dietary intervention can activate certain HDL subspecies to make them more proficient in reverse cholesterol transport. During graduate school, I was heavily involved in extracurricular activities. I served as the Vice President of Student Life for the 2015-16 school year (which meant I planned all the parties), and have been the student representative on the Committee on Educational Policy since January 2016. I'm also a group fitness instructor and recently learned how to scuba dive! For my future plans, I'm sticking around to finish up my last paper, and also doing pharmacovigilance consulting.

Allyson will also receive the **Student Recognition Award**, at the Awards presentation on Tuesday, May 22 at 4:00 pm in the Kresge Courtyard. The Awards Presentation will be followed by a reception from 5:00-7:00 pm.

*You can read more about Allyson on the Harvard Chan website: <https://www.hsph.harvard.edu/news/features/social-scientist-allyson-morton/>*

## **Joshua Petimar**

My interest in nutrition started while working in a primate nutritional ecology laboratory at Hunter College (where I earned my BA in Biology), and I gravitated toward public health so as to apply this interest to humans and nutritional diseases. Soon after graduating college, I pursued my ScM in Epidemiology at HSPH, where I studied the nutritional epidemiology of cancer with my advisor, **Dr Stephanie Smith-Warner**. After completing my ScM, I immediately began working on my ScD in Nutrition & Epidemiology, where I continued my study of nutrition and cancer (with a focus on colorectal cancer). I specifically worked within the Nurses' Health Study and Health Professionals Follow-up Study to examine adherence to various dietary and lifestyle patterns and risk of colorectal cancer, as well as how associations between adiposity and colorectal cancer are potentially mediated by biomarkers of inflammation and insulin response. I am extremely grateful to my committee members (**Drs Stephanie Smith-Warner, Ed Giovannucci, Bernie Rosner, and Andy Chan**), co-authors, and peers for their guidance and support throughout this process.

After graduating, I will be doing a postdoctoral fellowship at HSPH/Harvard Pilgrim Healthcare under the mentorship of **Dr Jason Block**. My postdoctoral work will largely focus on questions related to nutrition policy, and I look forward to expanding my knowledge and skillset into this exciting area of study.



## **NEWS AROUND THE NUTRITION DEPARTMENT**

**Dr Yanping Li** received one of the Harvard Chan Research Scientist Association Inaugural Travel Awards. She will travel to Beijing this May to work with **Dr Yuna He** for one week to finalize her analysis of dietary pattern transition in China from 1982-2012.

In total, seven research scientists at the Harvard Chan School received the awards and three of them are from the Department of Nutrition! The other two recipients of this Award are **Drs Sylvia Ley** and **Maryam Farvid**. The Research Scientist Award will be used to support an oral presentation by Dr Ley, entitled "Lactation Duration and Progression to Type 2 Diabetes among Women with a History of Gestational Diabetes", at the American Society for Nutrition Conference June 9-12, Hynes Convention Center, Boston. Dr Farvid will also attend this conference.

**The following Nutrition students and postdocs participated in the 2018 Harvard Chan Poster Day:**

**Jacob Beckerman** – “Environmental and Economic Costs and Opportunities of Shelf-Stable Dairy and Soy Milk in School Meals.”

**Roger Figueroa** – “Differences between Mother-adolescent and Father-adolescent Dyads.”

**Begum Kalyoncu** – “Assessing Dietary Acculturation among First Generation Immigrants: A Scoping Review.”

**Gang Liu** – “Meat Cooking Methods and Risk of Hypertension.”

**Amanda McClain** – “Childhood Food Insufficiency and Adulthood Cardiometabolic Health Conditions among a Population-based Sample of Elderly Adults in Puerto Rico.”

**Feiby Nassan** – “DNA Integrity and Reproductive Hormones among Men from a Fertility Center.”

**Martha Tamez** – “Changes in Diet, Lifestyle Behaviors, and Body Weight over Two Years in Mexican Women.”

**Ming-Chieh Li** – “Waist Circumference in Relation to Outcomes of Infertility Treatment with Assisted Reproductive Technologies.”

**Claire Cadeau** – “Dietary and Supplemental Vitamin C and Risk of Breast Cancer: Evidence from the Nurses’ Health Study.”

**Dr. Walter Willett**, Professor of Epidemiology and Nutrition, appeared on the show “New England Authors with Kameel Nasr” on April 18<sup>th</sup>. Recorded in Central Square, the show was later aired on local stations around New England. It was produced with the help of **Dr. Elizabeth Wahl**, a research fellow at the Harvard Medical School. Dr. Willett talked about his latest book that just came out, *Eat, Drink and Be Healthy: The Harvard Medical School Guide to Healthy Eating*. When the book first came out in 2000, it became the standard nutrition text. Almost two decades later, after a mountain of research and new science, Dr. Willett updated the text. To view this discussion, just click on the link below. Find out what has changed, what is now considered healthy, the different fats, how to control weight, and a host of other useful, detailed information.

<https://www.youtube.com/watch?v=PES-L6r42Fo>

On February 21 **Dr. Guy Crosby**, *Adjunct Associate Professor of Nutrition*, traveled to NYC to record an episode for the TV program “StarTalk” with Neil deGrasse Tyson. The program will air in mid-October on the National Geographic Channel. The program is about food and was recorded at the American Museum of Natural History.



Neil deGrasse Tyson and Guy Crosby

**Dr Guy Crosby's** paper on "The Island of Conclusions: Trying to Make Sense Out of Genetically Engineered Food" has just been published in the Harvard student publication "*Harvard Public Health Review*". Please click on this link to read his paper:

<http://harvardpublichealthreview.org/crosby/>

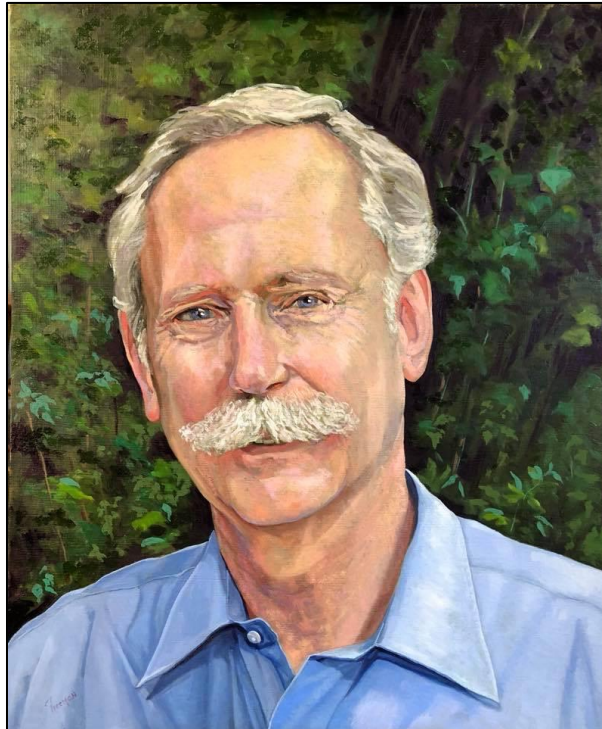
**Dr Guy Crosby** also authored another paper, titled "Do Cooking Oils Present a Health Risk?", which will appear in the May 2018 issue of the journal *Food Technology* published by the Institute of Food Technologists (IFT).

"Do Cooking Oils Present a Health Risk?" *Food Technology* 2018; 72(5): 50-56.



## PORTRAIT OF WALTER WILLETT UNVEILED ON MAY 8, 2018

A new portrait was commissioned to commemorate **Dr. Walter Willett's** 25 years as chairman of the Nutrition Department. It will hang in the Nutrition Department library alongside those of other former chairs. Dr. Willett's portrait was painted by *Debra Freeman-Highberger*.



To improve the safety of biking to the Longwood Medical Area (LMA), **Anne Lusk, Ph.D.**, Research Scientist, requested funding to distribute surveys on which bicyclists mark their bike route on a map to identify sections that are: 1) safe; 2) less safe; and 3) unsafe. These surveys, placed in plastic wall bins tied to the bike cage's chain link wall or set on tables, have been and are being placed at bike parking locations including: Children's Hospital, Dana Farber, Harvard Medical School (Harvard T.H. Chan School of Public Health), Beth Israel Deaconess, Brigham and Woman's Hospital, and MassArt. Individuals at MASCO have approved this effort. The focus is on identifying nine of the safest bike routes to the LMA and improving unsafe sections in those routes quickly.

## Faculty and Research Scientist Appointments

**Dr Dong (Daniel) Wang** has been appointed as Research Scientist.

## MONDAY NUTRITION SEMINARS

There will be no Monday Nutrition Seminars during the summer months. Our regular seminar series will resume in early September. In the meantime, we will offer an occasional Special Nutrition Seminar.

## MORE NUTRITION IN THE NEWS

### Following five healthy lifestyle habits may increase life expectancy by at least 10 years

According to a new study led by **Dr Yanping Li**, Research Scientist, maintaining five healthy habits—eating a healthy diet, exercising regularly, keeping a healthy body weight, not drinking too much alcohol, and not smoking during adulthood may add more than a decade to life expectancy. This study is the first comprehensive analysis of the impact of adopting low-risk lifestyle factors on life expectancy in the U.S. It also found that U.S. women and men who maintained the healthiest lifestyles were 82% less likely to die from cardiovascular disease and 65% less likely to die from cancer when compared with those with the least healthy lifestyles over the course of the roughly 30-year study period.

In 2015 the U.S. ranked 31<sup>st</sup> in the world for life expectancy, with Americans having a shorter average life expectancy—79.3 years—than almost all other high-income countries. Li's study aimed to quantify how much healthy lifestyle factors might be able to boost longevity in the U.S. The researchers looked at 34 years of data from 78,865 women and 27 years of data from 44,354 men participating in, respectively, the Nurses' Health Study and the Health Professionals Follow-up Study. They looked at how five low-risk lifestyle factors—not smoking, low body mass index (18.5-24.9 kg/m<sup>2</sup>), at least 30 minutes or more per day of moderate to vigorous physical activity, moderate alcohol intake (for example, up to about one 5-ounce glass of wine per day for women, or up to two glasses for men), and a healthy diet—might impact mortality.

Li and colleagues estimated that life expectancy at age 50 was 29 years for women and 25.5 years for men for study participants who didn't adopt any of the low-risk lifestyle factors. However, life expectancy at age 50 was projected to be 43.1 years for women and 37.6 years for men for those who adopted all five low-risk factors. In other words, women who maintained all five healthy habits gained, on average, 14 years of life, and men who did so gained 12 years, compared with those who didn't maintain healthy habits. Those participants who followed all five were 74% less likely to die during the study period.

"This study underscores the importance of following healthy lifestyle habits for improving longevity in the U.S. population," said **Dr Frank Hu**, chair of the Department of Nutrition at Harvard Chan School and senior author of the study. "However, adherence to healthy lifestyle habits is very low. Therefore, public policies should put more emphasis on creating healthy food, built and social environments to support and promote healthy diet and lifestyles."

Other Harvard Chan School study authors included **Yanping Li, Dong Wang, Xiaoran Liu, Klodian Dhana, Meir Stampfer**, and **Walter Willett**.



“The Impact of Healthy Lifestyle Factors on Life Expectancies in the US Population,” Yanping Li, An Pan, Dong D. Wang, Xiaoran Liu, Klodian Dhana, Oscar H. Franco, Stephen Kaptoge, Emanuele Di Angelantonio, Meir Stampfer, Walter C. Willett, Frank B. Hu, *Circulation*, April 30, 2018, doi: 10.1161/CIRCULATIONAHA.117.032047

## Eating Fish Twice a Week Recommended by New AHA Guidelines to Improve Heart Health

A new scientific advisory of The American Heart Association has published new guidelines in *Circulation* recommending that people eat one to two meals of non-fried fish or shellfish per week for better cardiovascular health. **Dr Eric Rimm**, Professor in the Departments of Epidemiology and Nutrition and Director of the Program in Cardiovascular Epidemiology at Harvard T.H. Chan School of Public Health chaired the group that wrote the AHA’s new advisory. In a May 17, 2018 article in *Consumer Reports* Rimm explained that the group examined several more CVD-related endpoints, such as stroke, congestive heart failure, and hypertension that were not included in the previous advisory.

According to Rimm, “There is substantially more evidence now pointing to seafood intake and lower risk of coronary heart disease and sudden cardiac death—especially when the seafood replaces less healthy main dishes such as beef or pork.”

**From:** <https://www.hsph.harvard.edu/news/hsph-in-the-news/seafood-eating-guidelines-heart-health/>

## WHO Calls for Elimination of Trans Fat by 2023

The World Health Organization has called on governments around the world to eliminate the use of trans fats by 2023. According to the group’s new guidelines, eradicating trans fats from food supplies could save 10 million lives.

Based on decades of research, **Dr Walter Willett**, Professor of Epidemiology and Nutrition at Harvard T.H. Chan School of Public Health, applauded WHO’s move. Willett’s research has helped determine that trans fats were associated with greater risk of heart disease. In a recent *Los Angeles Times* article, Willett explained that the cost of treating cardiovascular disease is very high compared with the cost of transitioning to healthier fats.

**From:** <https://www.hsph.harvard.edu/news/hsph-in-the-news/who-elimination-trans-fat-2023/>

## Better to Swap Saturated Fats with Unsaturated Fats Instead of Carbohydrates

An April 2018 article in *Women’s Health* weighed in on the ongoing debate over saturated fat and heart health. Although some recent studies have suggested that eating foods containing saturated fat such as butter may not be as harmful as previously thought, **Dr Walter Willett**, Professor of Epidemiology and

Nutrition, suggests that “replacing saturated fat with unsaturated fat as much as reasonably possible” is still better to reduce heart disease risk.

Dr David Ludwig, Professor in the Department of Nutrition, sees saturated fat as less of a problem than processed carbohydrates—a food many turn to when adopting a low-fat diet. “When you consider white bread and butter, the bread is the less healthful component,” he told *Women’s Health*.

**From:** <https://www.hsph.harvard.edu/news/hsph-in-the-news/fats-carbs-heart-health/>

## Fruits Pack a Nutritious Punch to a Healthy Diet

**Dr Eric Rimm**, Professor in the Departments of Epidemiology and Nutrition at Harvard T.H. Chan School of Public Health, recommended eating fruits in their whole form, including the skin, to get the most antioxidants possible.

Rimm added that eating fruit can help lower the risks of high blood pressure and obesity, which are associated with heart diseases.

**From:** <https://www.hsph.harvard.edu/news/hsph-in-the-news/fruits-for-healthy-diet/>

## Fermented Foods Thought to Improve Gut Health

In a May 16, 2018 article on the *Harvard Health Blog*, **Dr David Ludwig**, Professor in the Department of Nutrition, discussed the benefits of eating fermented foods, particularly with regard to the gut microbiome. Ludwig explained that fermented foods, such as yogurt or Korean pickled vegetables called kimchi, deliver healthy probiotics and recommended that consumers choose products that are naturally fermented.

**From:** <https://www.hsph.harvard.edu/news/hsph-in-the-news/fermented-foods-gut-health/>

Visit the *Harvard Chan School* website for the [latest news](#), [press releases](#), and [multimedia offerings](#).

## Two Nutrition Postdocs Will Now Utilize Their Newfound Research Expertise in New Positions

**Dr Geng Zong** began a new position in March as Principal Investigator at the Shanghai Institute of Nutrition and Health, Chinese Academy of Sciences.

While here in the department as postdoctoral research fellow from 2014-2018, Dr Zong work in **Dr Frank Hu’s** and **Dr Qi Sun’s** group. He worked on several projects in the following areas: Dietary fats and risk of type 2 diabetes, CHD, and mortality; persistent organ pollutants and type 2 diabetes risk; and impacts of weight changes after smoking cessation on risks of cardiometabolic disorders and mortality.





**Dr. Klodian Dhana** obtained a Ph.D. degree in Epidemiology from Erasmus MC in Rotterdam, the Netherlands, and in September 2016 he joined the research group of **Dr. Qi Sun** as a postdoctoral fellow. His work in the Department of Nutrition has focused on the role of maternal lifestyle in the development of offspring obesity using data from the Nurses' Health Study II and Growing Up Today Study. Dr. Dhana's recent research here was accepted for publication by the BMJ. In July 2018, Dr. Dhana will begin his new appointment as an Assistant Professor in the Department of Internal Medicine at Rush Medical College, Rush University in Chicago IL.

Evergreen Updates: <https://sites.sph.harvard.edu/evergreen/about/>

## Traffic-light labeling and financial incentives found to reduce unhealthy beverage purchases by low-income Latino families

**Drs. Rebecca Franckle, Eric Rimm, and Anne Thorndike**, along with co-authors, recently published an article in the journal *Public Health Nutrition* about the utilization of traffic-light labels and financial incentives to decrease unhealthy beverage purchasing in an urban, low-income Latino community. In a randomized control trial one group of participants received a traffic-light label intervention and monthly \$25 gift card financial incentive if they did not purchase the unhealthy drinks. There were no interventions for the control group. Unhealthy beverages in this study received a red "traffic light" label, less healthy ones received a yellow light, and healthy beverages received a green light. There were 148 participants in the study who were tracked across the span of seven months, and who were all customers of a supermarket in Chelsea, MA.

Franckle et al. found that on average, participants who were exposed to the traffic-light labels and the financial incentive purchased 9% fewer unhealthy beverages and also reported consuming fewer unhealthy beverages when compared to the control group. Therefore, the intervention had a net positive impact on observed purchasing and consumption behaviors. To conclude, Franckle et al. found that a financial incentive, paired with traffic-light labels, was an effective intervention to reduce unhealthy beverage purchasing in an urban, low-income, Latino community in Chelsea, MA.

Franckle, R.L., Levy, D.E., Macias-Navarro, L., Rimm, E.B., & Thorndike, A.N. (2018). Traffic-light labels and financial incentives to reduce sugar-sweetened beverage purchases by low-income Latino families: A randomized controlled trial. *Public Health Nutrition*, 1-9. doi:10.1017/S1368980018000319

From: <https://sites.sph.harvard.edu/evergreen/2018/04/10/summary-traffic-light-labels-and-financial-incentives-to-reduce-sugar-sweetened-beverage-purchases-by-low-income-latino-families/>

## Trends in Sodium Content of Menu Items in Large Chain Restaurants in U.S.

Recently, EVERGREEN members **Drs. Sara Bleich and Allysa Moran** (along with coauthors) published an article in the *American Journal of Preventive Medicine* providing the latest information on sodium trends in large U.S. restaurants. Using data from the MenuStat project (2012-2016), the researchers assessed the sodium content of 21,557 menu items from 66 of the 100 largest U.S. chain restaurants. The

researchers looked at items consistently on the menu for all four years of the study as well as newly introduced menu items.

The researchers found that the overall sodium content in large chain restaurants is high, but that over the study period restaurants have introduced new, lower-sodium items that have an average of 104 mg less sodium. These reductions in sodium among new menu items differed based on the type of restaurant chain as well as the type of menu item. Additionally, newly introduced main course items added in 2016 had 124 mg of sodium less on average in comparison to menu items only sold in 2012. Side and appetizer items introduced to the menu in 2016 contained on average 266 mg of sodium more than their 2012 counterparts. To conclude, the sodium content of menu items from large chain restaurants in the United States has improved, but more progress is needed.<sup>3</sup>

Wolfson JA, Moran AJ, Jarlenski MP, & Bleich SN (2018). Trends in Sodium Content of Menu Items in Large Chain Restaurants in the U.S. *American Journal of Preventive Medicine*, 54(1), 28-36.  
doi:10.1016/j.amepre.2017.08.018

<https://sites.sph.harvard.edu/evergreen/2018/04/11/summary-trends-in-sodium-content-of-menu-items-in-large-chain-restaurants-in-the-u-s/>

**Contact Us!** Email: [EVERGREEN@hsph.harvard.edu](mailto:EVERGREEN@hsph.harvard.edu)

## Nutrition Source Updates

### The Nutrition Source

#### A Healthier Picnic:

Whether you're planning a backyard cookout or a picnic on the go, tips and recipes for warm weather meals:

<https://www.hsph.harvard.edu/nutritionsource/2017/06/29/healthy-summer-picnic/>

#### Food Feature: Almonds

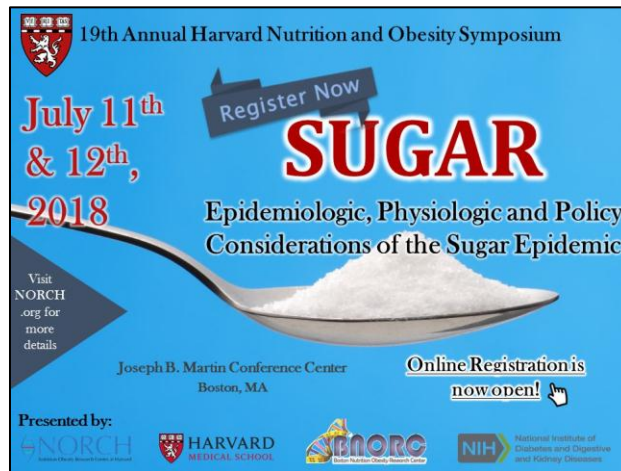
Although native to the Mediterranean region, 80% of the world's almond supply is now grown in California. Learn more about this popular tree nut:

<https://www.hsph.harvard.edu/nutritionsource/food-features/almonds/>

***If you would like to remain current as to what is happening in the field of nutrition, please be sure to view our Nutrition Source website for the latest updates!***

(See: <https://www.hsph.harvard.edu/nutritionsource/>)

## NUTRITION HAPPENINGS AROUND HARVARD



To register: <http://www.norch.org/center-events/2018-sugar/>

For more information, please contact: [cfredrickson@mgd.harvard.edu](mailto:cfredrickson@mgd.harvard.edu)