The Department of Nutrition held its 16th Annual Stare-Hegsted Lecture on November 2nd this year. Although the event was a virtual one due to lingering COVID concerns, it still attracted the largest virtual turnout for our lecture series ever! This annual Lecture is meant to honor Drs. Fredrick Stare and Mark Hegsted, who were the founders of our Department of Nutrition in 1942, when it became the first department of nutrition in any medical center or school of public health in the U.S. **Dr Shiriki Kumanyika**, a global leader in obesity prevention, food policy, and health disparity, was this year’s distinguished speaker. **Dean Michelle Williams**, Dean of the Faculty, Angelopoulos Professor of Public Health and International Development, and Professor of Epidemiology, kicked off the event with a warm
welcome to the audience and brief description of the lives of Drs Fredrick Stare and Mark Hegsted and why this event honors them every year. Dean Williams was followed by Dr Frank Hu, Fredrick J. Stare Professor of Nutrition and Epidemiology, Professor of Medicine, and Chair, Department of Nutrition, who then introduced our distinguished speaker, Dr Shiriki Kumanyika.

As a bit of background, Dr Fredrick Stare became the first Chair of Nutrition in 1942 and held this post until he retired at the then mandatory age of 65 in 1975. Immediately after World War II, Dr Stare recognized that coronary heart disease was emerging as a major epidemic in the U.S. and focused the Department on understanding and preventing this disease. He established the Irish Brothers Study, which was one of the earliest studies of diet and physical activity. Even after stepping down as Chair, Dr Stare remained active and strongly supportive of the Department of Nutrition until his death in 2002.

Dr Mark Hegsted focused his efforts on understanding the effects of diet on lipid metabolism, and published a famous equation predicting serum cholesterol, summarizing many dozens of controlled feeding studies. He was later appointed Director of Human Nutrition at the U.S. Department of Agriculture and developed Dietary Goals for United States, the precursor to the Dietary Guidelines for Americans. Dr Hegsted continued to write, publish, and attend national meetings and this Lecture until his death in 2009 at age 95. A brand new portrait of Drs Stare and Hegsted now hangs in the Nutrition Conference Room. Be sure to stop to take a look at it the next time you are passing by Room #317!

Dr Shiriki K. Kumanyika, PhD, MS, MPH, Research Professor, Community Health and Prevention, Drexel University, was this year’s speaker. She is Founder and Chair of the Council on Black Health (formerly the African American Collaborative Obesity Research Network (AACORN). CBH is a national network that seeks to have a significant impact on health in Black communities through collaboration, discovery, and innovation. In addition to her Drexel affiliation, Dr. Kumanyika retains an appointment as an Emeritus Professor of Epidemiology at the University of Pennsylvania (Penn). She was the founding director of Penn’s Master of Public Health program.

Dr. Kumanyika’s research has focused on identifying effective strategies to reduce nutrition-related chronic disease risks, with a particular emphasis on achieving health equity for Black Americans. Over more than three decades, she led or collaborated on single- or multi-center randomized clinical trials or observational studies related to obesity, sodium intake, and other aspects of diet and lifestyle. Several of these studies evaluated interventions to promote healthy eating and physical activity in Black children or adults in clinical or community-based settings. Her recent research with her Council on Black Health colleagues has included studies of the targeted marketing of unhealthy foods and beverages to Black children and adults and food price influences on food purchases of Black household food shoppers.
Dr Kumanyika was also Vice-Chair of the HHS Secretary’s Advisory Committee on Healthy People 2020 objectives and is also involved in efforts to develop Healthy People 2030. She is a past president of the American Public Health Association and a member of the National Academy of Medicine (NAM, formerly known as the Institute of Medicine (IOM)). Dr Kumanyika has extensive experience in advisory roles related to public health and nutrition policy in the US and abroad. She is currently chair of the NAM Food and Nutrition Board, a member of the CDC Task Force on Community Preventive Services, Co-chair of the Policy and Prevention Section of the World Obesity Federation, a member of the Lancet Commission on Obesity, and a nutrition policy advisor to the World Health Organization and the World Cancer Research Fund.

Dr Kumanyika’s talk titled *“The Syndemic Perspective on Obesity: Opening the Doors to New Solutions”* focused primarily on the 2019 Lancet report titled *“The Global Syndemic of Obesity, Undernutrition, and Climate Change: The Lancet Commission’s Report”*. Kumanyika noted that modern researchers are not starting from scratch; rather, much of this report was based on what researchers already know. Instead, it’s now more of a question of a stalemate concerning questions such as sustainable development goals. These goals are all related, but Zero Hunger, Good Health and Wellbeing, Sustainable Cities and Communities, Climate Action, and Life on Land were those most relevant to the Commission on Obesity’s report. She suggests that the new narrative should put the 5 key themes above in one place. She also stressed the importance of nutrition as being relevant to all of these goals, with the prevailing narrative being that it is a risk factor for many chronic diseases. However, the global syndemic represents the paramount challenge for humans, the environment, and the planet in the 21st century.

Dr Kumanyika noted that some factors contributing to lack of progress in this area are industry opposition to governments implementing WHO-recommended policies; governments themselves being reluctant to implement regulatory policies; and the lack of demand for government action from civil society and the public.

Dr Kumanyika further stated that malnutrition in all of its forms, including obesity, undernutrition, and dietary risk for NCDs is the largest cause of health loss globally, and she stressed that malnutrition does not equal undernutrition. She then offers some recommendations for counteracting this global syndemic, including to reduce poverty and those inequities that disproportionately impact poor people; to fully implement human rights obligations that protect socially disadvantaged populations and mobilize actions to create healthy and active environments for all people; and to reduce the influence of large commercial interests in policy development processes, among others. She then recommended actions for nations,
civil society, funders, and international agencies. Dr Kumanyika lamented the lack of progress to date from US governmental agencies.

In summary, Dr Kumanyika gave a wonderful synthesis of the actions taken so far to help mitigate the global syndemic and she offered many potential solutions towards making further progress in this direction. Her talk took a very holistic approach and was highly enlightening, offering some good pathways for workable progress in the coming years ahead.

To read more: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32822-8/fulltext

NEWS IN THE DEPARTMENT

AWARDS

Dr Fenglei Wang, Research Fellow, has been selected as a 2021 Paul Dudley White International Scholar for an abstract submitted to AHA Scientific Sessions 2021. The conference will take place as an interactive virtual event on November 13-15, 2021. As one of the founders of the American Heart Association, Paul Dudley White was also a champion for global cardiovascular health strategies.

Dr Wang was the primary author of the highest ranked abstract submitted from the United States. His stellar work chosen by his peers reflects Dr White’s vision for global excellence in cardiovascular science and medicine and recognizes authors that contributed to the highest ranked accepted abstract from each country.

The abstract is titled "Dietary Fat Intake and the Risk of Stroke: Results from Two Prospective Cohort Studies".

Abrania Marrero, PhD Candidate in Population Health Sciences, Department of Nutrition; and Graduate Fellow, Abigail Adams Institute, has been selected as a finalist in the overall Harvard Chan decision round for the Harvard Chan School’s Bloom Fellowship, representing Population Health Sciences. Multiple winners are chosen from all of the potential finalists from across the Chan School degree programs to share in the Bloom Fellowship award.

Abrania is a G-4 PhD student in Nutrition who shows a proven potential to be a leader in public health. She has a near perfect GPA at the Chan School and is leading projects on diet, sustainability and community health in her native Puerto Rico for her thesis. In addition to her prolific publication record she is also a leader within the Chan school, serving as teaching fellow for several courses and also leading an impactful pedagogical fellowship last year.

She was ultimately chosen as the candidate that best matched the objectives of the Bloom Fellowship – to help support that trainee with academic merit, leadership potential, and commitment to improving public health.

GRANTS

Dr Kassandra Munger, Senior Research Scientist, has received a 2-year grant from the National Multiple Sclerosis Society titled "Expanding our understanding of the MS prodrome phenotype—a prospective study in two large cohorts of women". Start date of this grant is 10/1/21.
PUBLICATIONS

The following paper was published by members of the Nutrition Department. Several students are co-authors:


MONDAY NUTRITION SEMINARS

The Department of Nutrition holds its weekly Monday Nutrition Seminar Series every Monday throughout the academic year. The talks are varied, but they highlight the many different aspects of cutting-edge research that is currently being conducted in the fields of nutrition and global public health. These seminars are held from 1:00-1:50 pm and are free and open to the public. Because of COVID-19, the seminars have been presented via Zoom since March of 2020, and this zoom format will continue for now. A zoom link for viewing will be available one week prior to each seminar.

Our December 2021 speakers will be:

Dec 6  Dr Donald Bundy, Professor of Epidemiology and Development, London School of Hygiene and Tropical Medicine – “How the COVID pandemic has changed how countries care for the world’s schoolchildren: Rethinking the “next 7000 days” in a young person’s life” – NGPH

Dec 13  Dr Shilpa Bhupathiraju, Assistant Professor in the Department of Nutrition, HSPH - TBD

THIS ENDS OUR FALL 2021 MONDAY NUTRITION/GLOBAL HEALTH SEMINAR SERIES. OUR MONDAY SEMINARS WILL RESUME ON JANUARY 24, 2022.

NEW FACULTY APPOINTMENTS

Dr Kana Wu has been reappointed as Principal Research Scientist.

Dr Luc Djousse has been appointed as Associate Professor in the Department of Nutrition. Dr Djousse leads the Nutrition Core within the Million Veteran Program where researchers collect 400,000+ food frequency questionnaires in collaboration with HSPH faculty and scientists. His data have generated nutrients in order to complete major projects focused on nutritional epidemiology, nutrigenomics, gene-environmental studies, and he has developed and validated novel tools for data visualization and other analytic tools. Dr Djousse serves as mentor to several people in the Department of Nutrition. He has also made himself and his resources available for student dissertation projects, and has shared his research experience so that HSPH students can have access to databases (i.e., MVP data, PHS, CHS, or Jackson Heart Study data sets where he has ancillary studies); these opportunities include opportunities for a student to lead a manuscript, prepare and work on a thesis or dissertation.

Dr Kerry L Ivey has been reappointed as Research Scientist.
NEW FACES IN THE DEPARTMENT

Jill Adams was hired as a Senior Grants and Contracts Manager in the Department of Nutrition in late August. She earned her degree in Journalism at San Jose State University. Jill got her start in Research Administration at Tufts University, in the USDA Human Nutrition Research Center on Aging, in 2018. She is looking forward to supporting the Department of Nutrition by submitting sponsored and non-sponsored research proposals and managing active research portfolios. Jill is originally from New Hampshire, and currently lives in Danvers, MA with her husband, David; 4-year-old daughter, Matilda; super senior dog, Garfunkel (15); and cat, Boo Bear. When she manages to find some spare time, she jogs along the Danvers Rail Trail, tends her tiny herb garden, and reads the latest fiction bestsellers.

Hi folks! My name is Sydnee Kay (she/her), but most people call me Syd. I've just been hired as the faculty assistant for Drs Eric Rimm, Ed Giovannucci, and Jorge Chavarro. I'm a recent graduate from the University of Utah in Political Science and International Studies. I hope to someday pursue graduate school either by getting my MPA or JD.

I was born and raised in Utah, but I've loved the East Coast since I was a teenager and have always wanted to move here. I'm so happy I could finally make it! In my free time, I love gardening and cooking - I especially love growing herbs to use in my recipes. I also love getting civically engaged in my community and I look forward to entering that world here in Boston.

Thank you all for the many warm welcomes!
Regla Soto, financial associate, is originally from the Dominican Republic and moved to Boston with her dad and siblings in the mid 90’s. She returns often to her country, though, as many relatives still live there and she wants her daughter (Laisha/14 years old) to be able to relate to her mother’s background. Regla graduated from Bunker Hill Community College and earned a Banking Certificate from the New England College of Finance (way long ago). She is looking to take advantage of Harvard courses in the near future, however.

Regla’s whole career has been working within the banking industry. For her last two jobs she worked at State Street Corporation for many years as a fund accountant (recons/processing wire transfers/booking trades and check disbursements). She arrived recently from Harvard University Employees Credit Union where she worked as Consumer lending assistant by processing credit cards, personal and vehicle loan applications. Regla will work as PA between Nutrition and Epidemiology Departments. She is currently on phase one, processing invoices and non-employee reimbursements and soon will be moving to Corporate Card reconciliation process. She is still taking training courses and learning our daily systems here.

In her spare time, Regla enjoys walking, going out to eat, spending time with friends and relatives, and taking her daughter out shopping.

Hello hello! My name is Maggie Bristol, and I am a new (ish) Research Assistant with the Health Professionals Follow-Up Study! I graduated from Lehigh University with a double major in Public Health and Psychology in May 2020 amidst the beginnings of the COVID-19 pandemic. I hope to eventually get my master’s degree in public health and in the future, I would love to be involved in community nutrition, sustainable agriculture, and public health education. I am from a small town in Maine where I lived and worked as a temp for HPFS before moving down to Boston permanently this summer. I love seeing all of the new faces coming into the office more and more and meeting people outside of my tiny zoom screen! In my free time I love to try out new vegan and vegetarian recipes, read all kinds of books, and be outside! I’m looking forward to trying out the new skating rink at 401 park and exploring Boston in the snow!

Siobhan Saint-Surin, Assistant Program Manager of the HPFS, adds that "Maggie is a great addition to our group and we are so fortunate to have her working with us.”
MORE RESEARCH NEWS

Study finds that eating fat—but only the right kinds of fat—can lower risk of stroke

According to a study presentation given this month at the American Heart Association Scientific Sessions 2021, the type of fat, not the amount, appears to be the culprit when it comes to stroke. For example, eating plant-based fats lowers stroke risk. However, eating too much of the wrong types of fat can raise cholesterol, clog arteries, and contribute to the risk of stroke and other forms of heart disease -- not to mention obesity, diabetes, cancer and a host of other conditions.

The study’s findings indicate that people who ate the most vegetable-based fats were 12% less likely to experience a stroke compared to those who ate the least. On the other hand, people who ate the highest levels of animal-based saturated fat were 16% more likely to experience a stroke than those who ate the least fat of that kind. According to Dr Fenglei Wang, Postdoctoral Fellow and lead author, "Our findings indicate the type of fat and different food sources of fat are more important than the total amount of dietary fat in the prevention of cardiovascular disease including stroke".

Many vegetable oils, such as extra-virgin olive oil, sunflower oil and soybean oil are considered "healthy fats." However, it’s the unsaturated fats that come from vegetables, nuts, and fatty fish that can lower your cholesterol level and help keep you healthy.

Saturated and trans fats are generally not as healthy. Saturated fats typically come from red and processed meats, and tend to be solid at room temperature. In Wang’s study, those included beef, pork, lamb, bacon, sausage, bologna, hot dogs, salami and other processed meats. According to Dr Frank Hu, Chair of the Nutrition Department and one of the authors of the study, "A moderate reduction in red and processed meat consumption within a healthy eating pattern can reduce total mortality by 13%, heart disease mortality by 14%, cancer mortality by 11% and type 2 diabetes risk by 24%".
Of interest, the study found that dairy fat, including cheese, butter, milk, ice cream and cream, was not associated with a higher risk of stroke. Wang’s study analyzed 27 years of data from nearly 120,000 nurses and health care professionals who are part of two of the longest running nutritional studies in the United States: the Nurses' Health Study and the Health Professionals Follow-Up Study.


Risk of CVD may be lowered by reducing sodium and increasing potassium

According to a new study published in New England Journal of Medicine and led by first author Dr Yuan Ma, a research scientist in the Department of Epidemiology, lower sodium consumption and higher potassium intake is linked with lower risk of cardiovascular disease (CVD) in most people. Ma states that “Our study combined high-quality individual participant data from six cohort studies where sodium was measured by the currently most reliable method, namely, multiple 24-hour urine samples. Our results should help clarify sodium’s role in CVD—that lower consumption is associated with lower risk of CVD in most populations, including in the U.S.” Dr Ma shared her findings at the November 22, 2021 Monday Nutrition Seminar.

Sodium, one of the components of table salt, is naturally found in some foods, but high amounts of sodium are frequently added to commercially processed, packaged, and prepared foods. However, potassium has an opposite effect in the body—it can help relax blood vessels and increase sodium excretion while decreasing blood pressure. Rich sources of potassium include fruits, leafy greens, beans, nuts, dairy foods, and starchy vegetables like winter squash.

The relationship between sodium consumption and the risk of CVD has been controversial, according to the study authors. Comprehensive data, including those from randomized trials, have consistently shown that as daily sodium intake increases, so does blood pressure, and as blood pressure increases, so does the risk of CVD. A few cohort studies suggested that lower sodium intake is associated with increased risk of CVD. However, those studies assessed sodium intake using methods prone to measurement errors, such as spot urine or single 24-hour samples that are unreliable for estimating individual usual sodium intake.

In Ma’s study, the researchers conducted a pooled analysis of six prospective cohort studies: the Health Professionals Follow-up Study, the Nurses’ Health Study, the Nurses’ Health Study II, the Prevention of REnal and Vascular ENd-stage Disease study, and the Trials of Hypertension Prevention Follow-up studies. The researchers analyzed the individual sodium and potassium excretion data and the incidence of CVD—which includes coronary heart disease or stroke. The data came from multiple 24-hour urine samples—the most reliable method for assessing sodium intake—that were taken from more than 10,000 generally healthy adults with a study follow-up of CVD events for an average of nearly nine years. A total of 571 cardiovascular events were documented during the cohort studies.

After accounting for a wide range of cardiovascular risk factors, the researchers determined that higher sodium intake, as measured by multiple 24-hour urine samples, was significantly associated with higher cardiovascular risk in a dose-response manner with a daily sodium intake of approximately 2,000 to 6,000 mg. These associations were consistent across subgroups defined according to age, sex, baseline hypertension, weight status, and years of follow-up.

Dr Frank Hu, Fredrick J. Stare Professor of Nutrition and Epidemiology, Chair of Department of Nutrition and senior author of this paper states that “This study underscores the importance of using a reliable biomarker to measure habitual sodium intake and assess its relationship with cardiovascular risk. The
findings provide further support for public health strategies including regulations, food labeling, and promoting healthy dietary patterns to reduce sodium intake and increase potassium intake."


To check out the major food sources of sodium and potassium, please visit Nutrition Source website https://www.hsph.harvard.edu/nutritionsource/salt-and-sodium/

UPDATES FROM THE DEPARTMENT’S DIB COMMITTEE

(By Bristian Justice, Departmental Liaison Committee Member)

Welcome to the second of monthly updates regarding Diversity, inclusion and Belonging within the Department of Nutrition! This column will provide updates regarding NUT-DIB committee efforts along with departmental wide updates for newest developments, changes, and initiatives. While we are currently establishing useful forms of communication to/from the committee, please feel free to submit anonymously via our Qualtrics form https://harvard.az1.qualtrics.com/jfe/form/SV_8D642fDG6wcRNUG

Happy Holidays to all. The NUT-DIB Committee is happy to confirm we have new recruits and more importantly more voices added to the NUT-DIB Committee. Thank you to all who have shown interest in becoming a member. Recently we confirmed ODI trainings will be in December 2021, department-wide. Please be sure to look out for email notifications from our Departmental mailing list regarding specific times and zoom details. We have also been working with the ODI office providing them with action plan items for the upcoming calendar year 2022. Exciting updates to come. Have a wonderful holiday season!

NUTRITION SOURCE UPDATES

High intensity interval training
High intensity interval training, or HIIT, can be an effective exercise option to increase endurance and strength in those who have limited time to exercise. Learn more about this type of physical activity: https://www.hsph.harvard.edu/nutritionsource/high-intensity-interval-training/

Workout supplements
Widely-promoted workout supplements are sold in a variety of forms, from pills to powders and ready-to-drink shakes. But are they necessary—or in some cases, safe? Learn more about common ingredients in pre- and post-workout supplements: https://www.hsph.harvard.edu/nutritionsource/workout-supplements/

Holiday cooking
Hearty and delicious dishes that feature a variety of vegetables, so you can wow your guests with a display of vibrant colors, textures, and flavors: https://www.hsph.harvard.edu/nutritionsource/healthy-holiday-cooking_recipes/
Winter squash
Pumpkins may attract much attention as an official sign of cooler weather, but they are just one of dozens of seasonal squash varieties in the Cucurbitaceae (gourd) family. Explore the variety of winter squashes:
https://www.hsph.harvard.edu/nutritionsource/food-features/winter-squash/

*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/)