

NUTRI NEWS

The Department of Nutrition

February 2024

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Food insecurity a rising concern for students and postdocs



A growing concern on university campuses, including at Harvard Chan, is food insecurity. As a result, academic and administrative leaders are working to understand the scope of the problem—and to find solutions to ensure that all students and postdocs have adequate access to a healthy diet.

To address this, several new initiatives were started to help meet students' needs, including the Student Hardship Fund, which provides short-term financial assistance for unforeseen or emergency situations, and the popular Daily Dollar Deals at Sebastian's Café.

Last year, a study of food insecurity across the three Harvard schools in the Longwood Medical Area, led by **Nour Hammad**, a PhD student at the Harvard Kenneth C. Griffin School of Arts and Sciences studying public health nutrition at Harvard Chan School, and **Cindy Leung**, Assistant Professor of Public Health Nutrition, was funded by the Dean's Office. The study was recently published in <u>JAMA Network Open</u>.

The study contained a sample of 1,287 graduate students and 458 postdoctoral trainees. Results indicate that 17% of graduate students and 13% of postdocs reported experiencing food insecurity at some point during the 2022-2023 academic year. These percentages were higher than federally reported average levels for the U.S. (12.8%) and for Massachusetts (8.5%).

Leading indicators of food insecurity at Harvard Chan School included not being able to afford balanced meals, worries about food running out, and skipped meals or not eating full meals. Those reporting food insecurity rated their health as poor or fair and had more severe levels of mental health concerns. Food insecurity was highest among international students, whose visas often limit their ability to work.

According to Hammad, "The prevalence of food insecurity on campus was stark. The results showed that food insecurity is related to numerous complex factors, which need to be addressed simultaneously. It's hard enough being a student or a postdoc, [and] experiencing food insecurity makes it even harder".

These findings were presented by Leung at a recent School-wide faculty meeting, and they have amplified concern among Harvard Chan leadership. The problem is exacerbated by the fact that much of the School's endowment is restricted, so there is little room in the budget to expand financial aid.

To address this, Harvard's three Longwood campuses are working together to consider establishing a food cupboard at Countway Library. In the meantime, the Office for Student Affairs maintains a <u>page of resources</u> for students facing food insecurity, and students have organized a WhatsApp group sharing information about events on campus that offer free food. Also, in the coming weeks, Leung and **Howard Koh**, Harvey V. Fineberg Professor of the Practice of Public Health Leadership, will offer a workshop to help faculty learn how to identify students who are struggling and to offer help in a way that feels respectful and safe, to counteract any stigma associated with seeking help.

From: https://www.hsph.harvard.edu/news/features/addressing-food-insecurity-students-postdocs/

Hammad NM, Leung CW. Food Insecurity Among Graduate Students and Postdoctoral Trainees. *JAMA Netw Open.* 2024;7(2):e2356894. doi:10.1001/jamanetworkopen.2023.56894

PRESENTATIONS

Adjunct Professor Jerold Mande Questions Whether Our Junk Food Addiction Is Killing Us?



In a recent WGBH/Cambridge Forum discussion of the underbelly of the typical American diet, it was found that an astounding 60% of it is made up of ultraprocessed foods, such as cereals, breads, yogurts and frozen dinners, in addition to sweets and soda. Mounting scientific evidence indicates that UPFs are

not just potentially addictive but also linked to our rocketing rates of obesity, Type 2 diabetes, heart disease and cancer. How, then, can we better recognize "junk" food and make better eating choices?

The three discussants, **Jerry Mande**, CEO of Nourish Science and Adjunct Professor of Nutrition, **Tera Fazzino**, Assistant Professor of Psychology and Associate Director of the Cofrin Logan Center for Addiction Research and Treatment at the University of Kansas, and **Larissa Zimberoff**, freelance journalist who covers the intersection of food, technology and business, examine the links between diet and disease. In particular, they zoned in on the addictive alchemy of certain combinations that make up HPF (hyperpalatable foods) which are irresistible to our taste buds.

Join the discussion about who is responsible for the food environment we find ourselves in and whether the FDA should do more to regulate the labelling of highly addictive foodstuffs with health warnings.

From: https://www.wgbh.org/forum-network/lectures/is-our-junk-food-addiction-killing-us

Photo: Adobe stock

NEW FACES IN THE DEPARTMENT



Alessandra Uriarte Research Assistant

Hello everyone! My name is Alessandra Uriarte and I have recently joined **Dr Cindy Leung's** research team as the study coordinator. I will be helping to coordinate her research study that is investigating the implementation and de-implementation of pandemic-era SNAP expansion policies on health outcomes in adults.

I hold a Bachelor of Science (BS) degree in Psychology from St. Lawrence University and a Master of Science in Public Health (MSPH) from the Johns Hopkins Bloomberg School of Public Health. My work has focused on implementing community-based programming to educate underserved populations about nutrition and culinary skills, and researching intervention strategies to improve food environments making it easier for individuals to access and afford nutritious food.

I grew up in a loud multi-cultural (Cuban, Argentine, Chinese) fun family in Connecticut and love to connect with others to learn about what drives

them, their favorite recipes, and traditions. I also love coffee, so please stop by anytime if you too want to grab a coffee! I am in room 310. I am looking forward to meeting everyone.

MORE NUTRITION NEWS

Panelists discuss how cancer risk can be reduced by diets high in plant-based foods and low in processed foods

In a recent live Harvard Chan Studio panel discussion recognizing World Cancer Day, Harvard experts debunked cancer misinformation and offered science-based dietary tips.

First on the table was a discussion of the components of a healthy diet. **Edward Giovannucci**, Professor of Nutrition and Epidemiology, suggested that people who want to make dietary changes focus at first on consuming healthier proteins, fats, and carbohydrates. He defined these as lean meats and plant-based proteins like legumes; plant-based fats such as avocados and olive oil; and whole grains, vegetables, and fruits. All of the panelists recommended avoiding highly processed foods.

Giovannucci said that this type of dietary pattern helps manage blood lipids, cholesterol, and glucose, in addition to helping keep weight at a healthy level. Further, these are also the mechanisms by which healthy diets help reduce heart disease and type 2 diabetes risk, adding that while there has been less research on diet and cancer, risk is likely affected by some of the same mechanisms.

Giovannucci and another panelist *Timothy Rebbeck*, Vincent L. Gregory, Jr. Professor of Cancer Prevention at Harvard Chan School and director of the Zhu Family Center for Global Cancer Prevention, also suggest that chronic inflammation may be another important way that diet impacts cancer risk. For example, diets high in sugar, refined carbs, and processed foods can trigger chronic inflammation throughout the body. This can affect levels of insulin and a hormone called insulin-like growth factor (IGF). Giovannucci explained that IGF "tells the cells that there's a lot of nutrients around, so they keep growing." This increases cell proliferation—and the chance of a mutation that will lead to a cancer.

With regard to taking vitamin supplements to help fill in dietary gaps, Giovannucci said that there is some evidence that multivitamins may help reduce cancer risk, in particular folate, folic acid, and vitamin D. However, he cautioned, people should avoid taking vitamins in very high doses.

From: https://www.hsph.harvard.edu/news/features/diet-nutrition-cancer-risk-reduction/

Read Harvard Gazette coverage:

https://news.harvard.edu/gazette/story/2024/02/how-to-shrink-the-cancer-risk-in-your-diet/

Read Harvard Magazine coverage (including recipes):

https://www.harvardmagazine.com/2024/02/cancer-prevention-nutrition

Is dark chocolate good for you?



Photo: Runners World

Can chocolate be healthy? Cocoa powder contains flavonoids, substances that are full of antioxidants and may help lower the risk of some chronic diseases and improve mood and cognition. In the long-running trial, the Cocoa Supplement and Multivitamin Outcomes Study (COSMOS), researchers found that while cocoa supplements didn't reduce heart attacks, they did reduce deaths related to heart disease.

In addition, the darker the chocolate is, the more likely it is to be high in flavonoids and low in sugar, and less likely to contain added fats. Since white chocolate contains no cocoa and is high in fats and sugar, it is the least healthy variety.

The COSMOS study used pure cocoa supplements. The researchers in the study agreed that small daily amounts of dark chocolate—and occasional pieces of other types of chocolate—can be part of a healthy diet, but it shouldn't be considered a health food.

According to *Eric Rimm*, Professor in the Departments of Epidemiology and Nutrition, "It would be a shame to turn chocolate into medicine when there are other acute pleasures that occur from its consumption, whether it triggers great memories or just reminds someone of a connection". Of the need for more long-term studies of chocolate, he added, "It's a tough job, but I am happy to volunteer."

From: https://www.hsph.harvard.edu/news/hsph-in-the-news/dark-chocolate-health-flavonoids/

Read the Washington Post article:

https://www.washingtonpost.com/wellness/2024/02/13/chocolate-health-benefits/

Regardless of how much you exercise, SSBs increase risk of CVD

According to a new study led by **Lorena Pacheco**, Research Scientist, daily consumption of sugar-sweetened beverages (SSBs) may heighten the risk of developing cardiovascular disease. This includes people who engage in above-average physical activity levels.

Although it is well known that SSBs contain adverse health effects, it is less clear whether exercise can offset these effects. To investigate this question in terms of risk of CVD, the researchers used data from the Nurses' Health Study and Health Professionals Follow-Up Study to examine the health outcomes of more than 100,000 Americans over the course of 30 years.

Results indicate that adding one sugary drink per day was associated with a roughly 18% increased risk of CVD—regardless of how much a person exercised. Consuming two or more SSBs per day and meeting the CDC-recommended 150 minutes of moderate physical activity per week led to a 21% higher risk of developing CVD compared to those who rarely or never consumed SSBs.

According to Pacheco, [the findings] "provide further support for public health recommendations and policies to limit people's intake of sugar-sweetened beverages, as well as to encourage people to meet and maintain adequate physical activity levels".

Lorena S Pacheco, Deirdre K Tobias, Yanping Li, Shilpa N Bhupathiraju, Walter C Willett, David S Ludwig, Cara B Ebbeling, Danielle E Haslam, Jean-Philippe Drouin-Chartier, Frank B Hu, Marta Guasch-Ferré. Sugar-sweetened or artificially-sweetened beverage consumption, physical activity, and risk of cardiovascular disease in adults: a prospective cohort study. Published: January 05, 2024DOI:https://doi.org/10.1016/j.ajcnut.2024.01.001

From: https://www.hsph.harvard.edu/news/hsph-in-the-news/sugary-drinks-increase-risk-of-cardiovascular-disease-regardless-of-how-much-you-exercise/

Read the HealthDay article: https://www.healthday.com/health-news/exercise-and-fitness/you-probably-cant-exercise-away-the-calories-in-sodas-study

Read an article in The Healthy: https://www.thehealthy.com/heart-disease/news-sugar-drinks-heart-disease-january-2024-study/

Does seafood have the potential to reduce global hunger and improve health?



Photo: Wikipedia

According to *Christopher Golden*, Associate Professor of Nutrition and Planetary Health, with the right investments and protections, "blue foods"—seafood including fish, mollusks, and aquatic plants—can reduce hunger and improve nutrition globally. Golden recently spoke about blue foods on *Nature's* "How to Save Humanity in 17 Goals" podcast. He also recently co-authored a study offering insights into how to protect blue foods-based food systems amid climate change.

In the *Nature* podcast, Golden discussed the reasons why he believes blue foods can help the world achieve United Nations Sustainable Development Goal number two, Zero Hunger. He believes that blue foods are nutritionally richer and more environmentally sustainable than those foods grown on land. For example, blue foods can provide essential micronutrients, such as iron, zinc, vitamins A and B12, and fatty acids, that many populations don't have access to. An added benefit of blue foods is that they can wean people away from red and processed meats. This would be better for both human and planetary health alike; it can also compensate for diminishing land on which to cultivate food for growing populations.

Golden said that "Although blue foods have been neglected historically, because they have been viewed more as a wild food resource, farming them and creating innovative technologies to help produce aquatic foods has really been instrumental in creating healthy and sustainable diets in many regions across the world".

In his *PNAS* study, Golden and colleagues tackled the issue of access to seafood among vulnerable populations. The study examined how people in the small island state of Kiribati obtain their seafood. Findings indicate that although people primarily buy blue foods at local markets, households with less access to markets tended to eat the most blue foods. This is likely because families either fish on their own or are gifted seafood by their neighbors. These findings provide new insights into how people obtain blue foods, suggesting possibilities for policy changes that could help improve households' access to these foods through changing environmental conditions.

From: https://www.hsph.harvard.edu/news/hsph-in-the-news/assessing-seafoods-potential-to-reduce-global-hunger-improve-health/

Listen to the Nature podcast:

https://www.nature.com/articles/d41586-024-00209-2

Read the PNAS study:

Seto KL, Friedman WR, Eurich JG, et al. Characterizing pathways of seafood access in small island developing states. *Proc Natl Acad Sci U S A* 2024; **121**(7): e2305424121.

HHS Hosts First-Ever 'Food is Medicine' Summit, Launches Three Public-Private Partnerships



From Left: *Drs David Eisenberg* (Harvard Chan), *Jennifer Trilk*, (U South Carolina Medical School, Greenville), *Stephen Devries* (Harvard Chan) and *Caree Jackson Cotwright* (USDA)

On Tuesday, January 31, the U.S. Department of Health and Human Services (HHS) hosted its first-ever Food is Medicine summit in Washington, D.C., an all-day summit for stakeholders at the intersection between food and health. Secretary Xavier Becerra opened the summit by announcing three new public-private partnerships with Instacart, Rockefeller Foundation, and Feeding America. All three partnerships will support HHS's nutrition goals.

Dr Devries and **Dr Eisenberg** spoke at the session "Building Food is Medicine into Education Across the Health Continuum". The event had over 470 in-person attendees and 2,170 livestream participants. that the This number will continue to expand after the recording goes live.

In addition to the three new public-private partnerships, HHS released five Food is Medicine principles that will guide the Department's work when it comes to educating the public, changing public policies, and integrating nutrition in the services it provides. These principles include:

- Recognizing that nourishment is essential for good health, wellbeing, and resilience.
- Facilitating easy access to healthy food across the health continuum in the community.
- Cultivating understanding of the relationship between nutrition and health.
- Uniting partners with diverse assets to build sustained and integrated solutions.
- Investing in the capacity of under-resourced communities.

"Food is Medicine" is just one part of HHS's work to make progress on commitments made in the White House National Strategy on Hunger, Nutrition, and Health to reduce the prevalence of chronic disease in the

United States. Similarly, this event reflects Secretary Becerra's vision of moving our country from an illness-care system to a wellness-care system through HHS's broader <u>Food is Medicine initiative</u> and other related government initiatives.

Thanks to an appropriation in fiscal year 2023, HHS, led by the Office of the Assistant Secretary for Health (OASH), is in the process of developing the first federal tool kit and implementation guidance, as well as other federal resources, to help advance Food is Medicine. This congressional action, directed the Secretary of HHS in consultation with other federal agencies, aims to develop and implement a federal strategy to reduce nutrition-related chronic diseases and food insecurity to improve health, wellbeing, and racial equity in the United States. This includes diet-related research and programmatic efforts that will increase access to Food is Medicine interventions.

The Biden Administration has committed to a broad range of initiatives aimed at making healthy food more affordable and accessible. Now new private public partnerships with the Rockefeller Foundation, Instacart, and Feeding America aim to advance policies that put food and nutrition at the forefront of efforts to help Americans live healthier lives.

From: HHS Hosts First-Ever 'Food is Medicine' Summit, Launches Three Public-Private Partnerships | HHS.gov

NEW FACULTY APPOINTMENTS

Deirdre Tobias, ScD has been reappointed as Assistant Professor in the Department of Nutrition.

NEWS FROM THE THICH NHAT HANH CENTER FOR MINDFULNESS PUBLIC HEALTH





Save The Date for the "**Mindful Actions for Climate Change**" symposium which aims to explore the connection between mindfulness and climate change. Hosted by the <u>Thich Nhat Hanh Center for Mindfulness in Public Health</u>, the symposium will focus on evidence-based approaches to improving climate change, health, and wellbeing through mindfulness. The symposium will feature engaging discussions, including panel sessions led by individuals actively working to create a healthier and

sustainable world at both scientific and community levels. The overarching vision is to inspire global action and cultivate mindfulness in individuals, fostering a deeper connection with others and the planet.

In an era where the impact of human activities on the planet has reached critical levels, we come together to explore and promote mindful actions for climate change mitigation and adaptation. This symposium aims to bridge the gap between research, policy, and public awareness, fostering collaboration and inspiring actionable steps toward a sustainable future. As the urgency to address climate change intensifies, this symposium serves as a platform for interdisciplinary discussions, innovative solutions, and collective mindfulness towards sustainable practices and individual behavior change.

The day-long symposium will bring together leading academics, community leaders and activists, practitioners of mindfulness, and monastics who studied under Thich Nhat Hanh.

Join us for an inspiring and informative day of discussion, networking, and mindfulness. **This event is** free and open to the public through an online webinar. Please register here.

Date: April 16th, 2024, 8 a.m. to 4:30 p.m., in-person and livestreamed.

Location: Joseph B Martin Center, Rotunda Room, 77 Avenue Louis Pasteur, Boston, MA 02115

Livestream on Zoom: Please register here to attend the livestreamed event.

Please visit our <u>website</u> to learn more about the event and participating presenters and speakers.

SOME PERSONAL REFLECTIONS ON MINDFULNESS

By Dawn DeCosta



Sister Dang Nghiem, MD "Sister D" of Deer Park Monastery

^{*}Department of Nutrition students, staff, or faculty interested in attending in person, please email Dawn DeCosta at ddecosta@hsph.harvard.edu

This past September, I was fortunate to visit Deer Park Monastery wedged high in the Chaparral Mountains of Escondido, California. As part of my new position at the Thich Nhat Hanh Center for Mindfulness in Public Health at the Harvard T.H. Chan School of Public Health, I was fortunate to visit the monastery for 2.5 weeks this past September. With apprehension and excitement, I was eager to leave my life in Boston, but unsure what to expect in terms of communication. I knew the monastery had at least had one laptop as I have Zoomed with my monastic colleagues. I also knew at least one monk that had a cell phone. To be safe, I packed a plethora of phone chargers, back up batteries and various laptop cables.

As I entered the unpaved road leading up to the monastery, I noticed carved, calligraphic signs scattered throughout the grounds. These contemplative messages... "peace in every step", "just be", and "enjoy being" were camouflaged in the natural landscape yet stood out like beacon reminders. On my first day, I was sitting by a koi pond and said to a monk, "how can I 'just be'?" and he replied, "you will know in a few days." I ruminated on that reply, but still felt anxious whether I would have cell service, or decent WIFI. How would I log onto Monday's departmental Zoom meeting? I was struggling with the juxtaposition of this tranquil place and the grind of my daily life.

Days passed and my apprehension dissipated like the morning fog burning off the mountainside. As day 17 arrived, I reluctantly packed my bags and unused phone chargers and back up batteries and left for the airport. I felt more relaxed than ever but knew the stressors of academia and an inflated inbox were awaiting. Despite this trepidation, I departed with a sense of mindfulness, now understanding what deep stillness is and how to exist in that coveted space. Unplugging during this time cleared my head and allowed me to "just be."

I see myself as a student on the path of mindfulness. The lessons learned at the monastery will last a lifetime and allow me to "just be" for there is freedom in simplicity . . . "get offline and get on life."

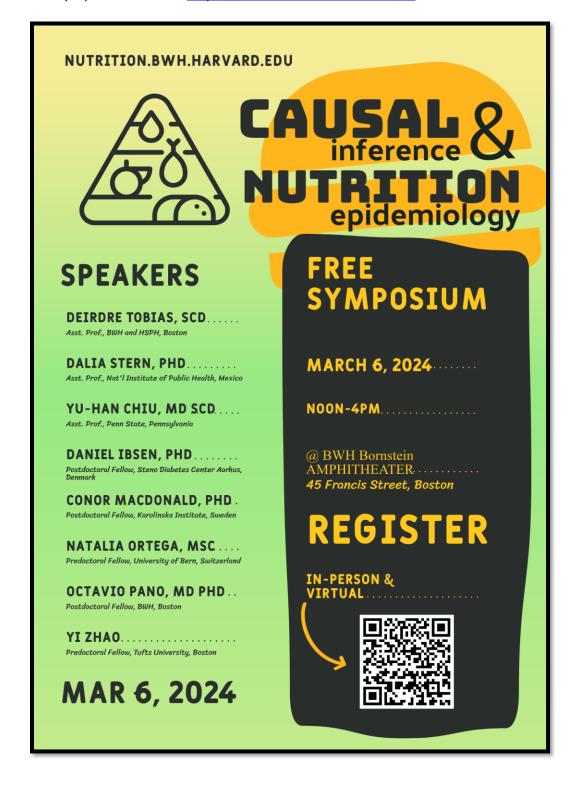
MONDAY NUTRITION SEMINARS

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, planetary nutrition, public health 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, most of the seminars have been presented via Zoom since March of 2020. Beginning this fall and continuing into the spring, our seminars will be in more of a hybrid mix, with some in-person and others still virtual. The in-person seminars will also be on Zoom for those unable to attend. During the fall and spring semesters, live seminars will be held in Kresge 502. zoom link for viewing will be available one week prior to each seminar.

Our March speakers will be:

- Mar 4 Dr Katherine Semrau, PhD MPH, Director, BetterBirth Program-Ariadne Labs & Associate Professor, Harvard Medical School; and Dr Linda Vesel, PhD, MPH, Scientific Lead, Vulnerable Infant Feeding Portfolio, BetterBirth Program-Ariadne Labs & Senior Research Scientist, Harvard Chan "Global Recommendations for Small Vulnerable Newborn Feeding: Moving recommendations to research and practice" NGHP
- Mar 11 SPRING RECESS
- Mar 18 Dr Mingyang Song, Associate Professor of Clinical Epidemiology & Nutrition TBD
- **Mar 25 Dr Iris Shai**, Professor of Nutrition & Epidemiology, Faculty of Health Sciences *BGU*, *Israel*; Adjunct Professor, Dept of Nutrition, HSPH TBD

To register for the symposium below: https://nutrition.bwh.harvard.edu





Technology-driven solutions to advance Precision Medicine

Welcome to Precision Nutrition Forum 2024!

Precision Nutrition Forum 2024 will bring together researchers at all career levels interested in nutrition research and related disciplines to discuss the latest science in precision nutrition.

The conference takes place in the Maersk Tower at the University of Copenhagen on April 16-17, 2024.

A limited number of **travel awards** are available for early career scientists, PhD students, or postdocs.

For program and registration visit: https://cbmr.ku.dk/events/pnf-2024/

Celebrating Dr. Frank Sacks' Career Accomplishments and Emeritus Professorship New Research Building 77 Avenue Louis Pasteur Boston, MA March 26, 2024

Rotunda Room 2-:2:30 pm

Opening Remarks:

Frank Hu, MD, PhD

Fredrick J. Stare Professor of Nutrillon and Epidemiology and Chair of Department of Nutrillon Harvard T.H. Chan School of Public Health and Professor of Medicine, Harvard Medical School and Brigham and Women's Hospital

➤ Walter Willet, MD, DrPH

Professor of Epidemiology and Nutri2on, Harvard T.H. Chan School of Public Health

2:30-2:45 pm

Dr. Frank Sacks Reflects on His Career:

Frank Sacks, MD

Professor of Cardiovascular Disease Prevention and Medicine, Emeritus, Harvard T.H. Chan School of Public Health

2:45-5:30 pm

Speakers Share Their Experiences and Research Working with Dr. Frank Sacks

Bernard Rosner, PhD

Professor of Medicine, Brigham and Women's Hospital, Professor in Department of Biostalscs, Harvard T.H. Chan School of Public Health

Masanori Aikawa, MD, PhD

Professor of Medicine, Harvard Medical School and Brigham and Women's Hospital Director of the Center for Interdisciplinary Cardiovascular Sciences (CICS), Brigham and Women's Hospital

Break 3:15-3:30

> Lawrence Appel, MD

David Molina Professor of Medicine and Director of the Welch Center for Preven②on, Epidemiology and Clinical Research at Johns Hopkins University, a joint program of the Johns Hopkins University School of Medicine and the Bloomberg School of Public Health

Allison Andraski, PhD

Research Consultant and Founder at BioMedical Research Consulting LLC

Kathy McManus, MS, RD, LRN

Director of the Department of Nutrillon and Director of the Dietello Internship at the Brigham and Women's Hospital, Teaching Affiliate of Harvard Medical School, Director for Nutrillon at Dana Farber Cancer Insetute, and Director of Nutrillon and Behavior Modificallon Programs for the Program for Weight Management at the Brigham and Women's Hospital

Break 4:15-4:30 pm

Marc Pfeffer, MD, PhD

Victor J. Dzau Professor of Medicine, Harvard Medical School and Brigham and Women's Hospital

Majken Jensen, PhD

Professor of Epidemiology, University of Copenhagen Adjunct Professor of Nutrillon, Harvard T.H. Chan School of Public Health

Closing Remarks

Drs. Frank Hu and Frank Sacks

5:30 pm

Recep2on, First Floor Lobby

6:30 pm

Dinner, Elements Café