



# NUTRI NEWS

## The Department of Nutrition

October 2017

### DRS. FRANK HU AND BERNARD LOWN SHARE VIEWS ON ROLE OF NUTRITION IN PUBLIC HEALTH

(By Katrina Soriano, Director of Administration)



**Dr. Frank Hu** visited former Department of Nutrition faculty member, **Dr. Bernard Lown** at his home in Chestnut Hill to conduct a filmed interview for the Department's 75<sup>th</sup> Anniversary Symposium. Dr. Lown is well-known for receiving the 1985 Nobel Peace Prize for his work with International Physicians for the Prevention of Nuclear War and being the original developer of the DC defibrillator and the cardioverter. Dr. Lown fondly remembers his over four decades of time in the Department of Nutrition as being filled with intellectual freedom and generous support from **Dr. Frederick Stare**.

During the course of their interview Drs. Hu and Lown discussed the importance of prevention in tackling some of the important problems in the world. Dr. Lown shared memories and highlights regarding his extensive research accomplishments in the area of cardiovascular diseases, noting, "If we are curing we have failed." Drs. Hu and Lown then went on to discuss the integral role proper nutrition plays in prevention and the need for more robust nutrition education in medical schools. Dr. Hu was very

interested in Dr. Lown's views on the most pressing issues in the world today and their relation to public health and nutrition. Dr. Lown offered that poverty along with climate change need urgent attention. He felt strongly these issues were central to public health today and related closely to challenges facing researchers in nutrition.

These views aligned well with Dr. Hu's thoughts and vision for the Department. At 96 years-old, Dr. Lown continues to keep abreast with advances in the medical and public health arenas. The Department of Nutrition is fortunate to include him as one of its many accomplished faculty members. For more information and to view the interview between Drs. Hu and Lown we hope you will join our 75<sup>th</sup> Anniversary Symposium starting at 1 pm on 11/1/17 in the Rotunda Room of the Joseph B. Martin Conference Center in Boston, MA.

\* \* \* \* \*

## ADJUNCT PROFESSOR GUY CROSBY JOINS CHRISTOPHER KIMBALL'S MILK STREET KITCHEN AS SCIENCE EDITOR

**Guy Crosby, Ph. D., CFS**, is one of the leading experts in cooking science. Since 2005 he has been an adjunct associate professor with the Department of Nutrition in the Harvard T H Chan School of Public Health where he is currently the primary instructor for **Nutrition 209, Seminars in Food Science, Technology and Sustainability**, along with co-instructor assistant professor **Gary Adamkiewicz**. After more than 12 years as the science editor for America's Test Kitchen Guy recently joined Christopher Kimball's latest venture Milk Street Kitchen as science editor, where he helps explain how food ingredients function, and why some recipes work well and others do not. As an example, he suggested a simple new foolproof method for making non-sticky pie dough that bakes into a tender flaky pie crust. To be fair, it was the excellent test cooks at Milk Street Kitchen who made the concept work.

After completing his Ph. D. degree in organic chemistry many decades ago at Brown University, Guy spent two years as a research associate in the Department of Chemistry at Stanford University. It was at Stanford that Guy became interested in food chemistry and cooking. He and his wife Christine joined a small group of students who regularly got together for potluck dinners and exchanged information about food, wine and cooking. He then spent the following 30 years working in research and development for a small number of companies involved in the manufacture of agricultural products and food ingredients. This experience exposed Guy to the science of taste, the function of food ingredients, how food is processed on a commercial scale, how agriculture is practiced around the world, and the risks and benefits of genetically modified crops. Most of the ingredients he was involved with provide the structure, texture, and stability of processed foods, while also serving as sources of dietary fiber, including resistant starch, now recognized as a very important prebiotic component of the diet.



In 2002 Guy retired as vice president of R & D for a local food ingredients company and immediately started pursuing his interests in nutrition, cooking science and teaching. Guy says there are some great benefits to becoming a "retired" senior citizen. As an example, he was allowed to take tuition-free courses in human nutrition and nutritional biochemistry at Boston University and Tufts University. In 2003 professor **Walter Willett** invited Guy to teach Nutrition 209 along with co-instructor **P. K. Newby** (a HSPH graduate), and primary instructor professor **Clifford Lo**. Approximately 160-175 HSPH students have taken Nutrition 209 since 2003. Soon after in 2005 he was appointed an associate professor in the

Department of Chemistry and Food Science at Framingham State University, as well as an adjunct

associate professor with the Harvard Chan School of Public Health. That same year he started working with America's Test Kitchen as science consultant, and then science editor. Guy retired from fulltime teaching at FSU in 2011 after teaching food science to more than 350 students. In 2013 The Institute of Food Technologists recognized Guy among its first group of Certified Food Scientists (CFS certificate). Later the following year he organized a symposium on **"Trends in Cooking Science"** for the American Chemical Society meeting in San Francisco. The first-of- its-kind symposium brought together the world's leading experts in cooking science. During 2015 and 2016 Guy mentored a postdoctoral food science student, **Adriana Fabbri**, from Sao Paulo, Brazil, resulting in two publications on the effects of cooking on nutrients and resistant starch in food. Finally, in September of this year Guy moved to Milk Street Kitchen to continue his involvement with cooking science.

A list of recent publications follows, including two books published with America's Test Kitchen on "The Science of Good Cooking" (2012) (listed on the New York Times best sellers list for eight weeks), and "Cook's Science" (2016) (nominated for a James Beard cookbook Award), and contributions to Harvard's "Nutrition Source". To learn more about Guy go to: [www.cookingscienceguy.com](http://www.cookingscienceguy.com).

The Editors of America's Test Kitchen and Guy Crosby, Ph. D., CFS, "Cook's Science", published by America's Test Kitchen, Brookline, MA October 4, 2016.

Adriana D. T. Fabbri and Guy A. Crosby, "A Review of the Impact of Preparation and Cooking on the Nutritional Quality of Vegetables and Legumes", *International Journal of Gastronomy and Food Science* 2016; 3:2-11.

Adriana D. T. Fabbri, Raymond W. Schacht and Guy A. Crosby, "Evaluation of Resistant Starch Content of Cooked Black Beans, Pinto Beans and Chickpeas", *NFS Journal* 2016; 3:8-12.

Crosby, G. (2016, May 31). "Super-Tasters and Non-Tasters: Is it Better to Be Average?" *The Nutrition Source; Harvard T.H. Chan School of Public Health*. Retrieved from <https://www.hsph.harvard.edu/nutritionsource/2016/05/31/super-tasters-non-tasters-is-it-better-to-be-average>.

Crosby, G. (2015, November 16). "Ask the Expert: Legumes and Resistant Starch." *The Nutrition Source; Harvard T.H. Chan School of Public Health*. Retrieved from <https://www.hsph.harvard.edu/nutritionsource/2015/11/16/ask-the-expert-legumes-and-resistant-starch>.

Crosby, G. (2015, April 13). "Ask the Expert: Concerns about Canola Oil." *The Nutrition Source; Harvard T.H. Chan School of Public Health*. Retrieved from <https://www.hsph.harvard.edu/nutritionsource/2015/04/13/ask-the-expert-concerns-about-canola-oil>.

The Editors of America's Test Kitchen and Guy Crosby, Ph. D., "The Science of Good Cooking", published by America's Test Kitchen, Brookline, MA, October 2012.

# New EVERGREEN Study Works Towards Preventing Global Childhood Overweight and Obesity

(By Kelsey Vercammen, MSc)

## Why is this study important?

- Since the 1980s, the prevalence of childhood overweight and obesity has risen by 47% across the world.<sup>1</sup>
- While there is evidence that the prevalence of childhood overweight and obesity may be leveling in high-income countries, it has continued to increase rapidly in low- and middle-income countries.<sup>2</sup>
- Childhood obesity is associated with chronic diseases (e.g., type 2 diabetes),<sup>3</sup> cardiovascular risk factors (e.g., high blood pressure)<sup>4</sup> and poor mental health (e.g., depression).<sup>5</sup> There is also consistent evidence that childhood obesity persists into adulthood, increasing the lifetime risk of disease and premature death.<sup>6</sup>
- There is a strong need for effective interventions to prevent excess weight gain in children and adolescents globally.

## What does the evidence say?

Led by **Dr. Sara Bleich** and including EVERGREEN members **Kelsey Vercammen** (MSc student), **Laura Zatz** (PhD student) and **Johannah Frelier** (Research & Program Assistant), this systematic review compiled childhood obesity prevention studies from around the world that were published between January 2013 and May 2017. All studies included in the review were categorized into settings (school, preschool, community, or home) based on where they were primarily implemented, with some studies also including a secondary setting. Components of the intervention for each study (i.e., diet and/or physical activity) were also identified. Bleich and her research team found the strongest evidence for school-based studies, particularly those with both diet and physical activity components and with the home as a secondary setting. The evidence for preschool, community and home interventions was weaker and limited by a small number of studies. Despite the substantial rises in childhood obesity observed in low- and middle-income countries, the majority of studies were implemented in high-income countries, highlighting a gap in the current literature. Bleich et al. concluded that while there is promising evidence for the effectiveness of school-based interventions, more research is needed in non-school settings and within low- and middle-income countries. They also concluded that the most effective efforts to prevent or reduce childhood obesity worldwide will likely require interventions which simultaneously span multiple settings and address multiple components. Interested in learning more?

Click here for the link to the full-text article: [http://www.thelancet.com/journals/landia/article/PIIS2213-8587\(17\)30358-3/fulltext](http://www.thelancet.com/journals/landia/article/PIIS2213-8587(17)30358-3/fulltext)

Click here for the link to EVERGREEN post:

<https://sites.sph.harvard.edu/evergreen/2017/10/21/preventing-global-childhood-overweight-and-obesity/>

**Publication:** Bleich, S.N., Vercammen, K.A., Zatz, L.Y., Frelier, J.M., Ebbeling, C.B., & Peeters, A. (2017). Interventions to prevent global childhood overweight and obesity: a systematic review. *The Lancet*.

## Sources:

<sup>1</sup> Ng, M., Fleming, T., Robinson, M., Thomson, B., Graetz, N., Margono, C., & Abraham, J. P. (2014). Global, regional, and national prevalence of overweight and obesity in children and adults during 1980–2013: a systematic analysis for the Global Burden of Disease Study 2013. *The Lancet*, 384(9945), 766-781.

<sup>2</sup> NCD Risk Factor Collaboration. (2017). Worldwide trends in body-mass index, underweight, overweight, and obesity from 1975 to 2016: a pooled analysis of 2416 population-based measurement studies in 128· 9 million children, adolescents, and adults. *The Lancet*.

<sup>3</sup> Goran, M. I., Ball, G. D., & Cruz, M. L. (2003). Obesity and risk of type 2 diabetes and cardiovascular disease in children and adolescents. *The Journal of Clinical Endocrinology & Metabolism*, 88(4), 1417-1427.

<sup>4</sup> Freedman, D. S., Mei, Z., Srinivasan, S. R., Berenson, G. S., & Dietz, W. H. (2007). Cardiovascular risk factors and excess adiposity among overweight children and adolescents: the Bogalusa Heart Study. *The Journal of Pediatrics*, 150(1), 12-17.

<sup>5</sup> Griffiths, L. J., Parsons, T. J., & Hill, A. J. (2010). Self-esteem and quality of life in obese children and adolescents: A systematic review. *Pediatric Obesity*, 5(4), 282-304.

<sup>6</sup> Reilly, J. J., & Kelly, J. (2011). Long-term impact of overweight and obesity in childhood and adolescence on morbidity and premature mortality in adulthood: systematic review. *International Journal of Obesity*, 35(7), 891.



## MEET PATRICE BROWN, MANAGER OF ADMINISTRATION!

(By Hilary Farmer)

The secret to the success of any workplace is its people. And one of the Nutrition Department's major assets right now is **Patrice Brown, Manager of Administration**. Everybody in the department knows Patrice. Ever friendly and cheerful, she has turned out to be the main go-to person in the department. Patrice loves her job and she gets things done. Because she's always willing to troubleshoot, Patrice has made the transition of newcomers to the department a much easier one. If you have a question or need to know where to go to solve a problem, Patrice will always help you. And her vibrant personality always brightens up the department. Let's meet Patrice now!



**NN:** *Patrice, you've become a central figure in our Nutrition Department. Everyone knows who you are, and a lot of people think of you as our primary "go to" person here. Although you're quite well known, I think many people would like to know more about you and what you do here. Can you tell us what brought you to Harvard?*

**PB:** I had graduated with a degree in Recreation and Sports Management with 5 years of experience in game day operations at Coastal Carolina University Athletic Dept. I had planned to move back up North to be closer to family and my expectations were high to land a job working with the Patriots or Celtics. Then reality set in and I needed to start making money and internships were not an option for being able to afford living expenses in Boston. It wasn't easy finding a job during the "workforce depression of 2009". I applied to PSG (Professional Staffing Group) to try to get my foot in the door anywhere. Soon after my initial interview, I started a short-term 2-week gig with **Dr. Wafaie Fawzi's** group at 1633 Tremont Street reorganizing all of their files and office space. This was before GHP was a separate department and they were still affiliated with Nutrition. A few weeks later I was invited back to interview for another temp position in the same department, Nutrition! My new role was staff assistant in the front office. I loved

being in the front office and got the chance to get to know the faculty, staff, postdocs, and students. After 3 months, this temp position became permanent and I have been working in the department for 7 years now. I cannot believe it has almost been a decade! I'm so happy to have a job that I truly enjoy, and more importantly, to work with such wonderful and caring people.

**NN:** *You always look so busy! What are some of the things you do in your job here?*

**PB:** My current role as *Manager of Administration* is primarily being responsible for personnel administration. I work closely with the faculty processing academic hires. This includes initiating and guiding foreign scholars through the visa application. I provide information and support to assist invited researchers with planning for their relocation to Boston (health insurance, housing, etc.). You may see me pop my head in your office from time to time as I closely monitor desk space. A shortage of space can limit and possibly freeze new hires so it is important I know where everyone is seated. I also assist with staff hiring, reclasses, and promotions. We currently have two ongoing faculty searches for Public Health Nutrition and Planetary Health & Nutrition, which has consumed much of my workload the past few months. Besides visas, payroll, academic appointments, space management, and faculty search administration, there is always a lot of behind-the-scenes work that keeps me busy.

**NN:** *I understand you also work with another department on Visa issues?*

**PB:** I work part-time as the *Visa Coordinator* in the Department of Genetics and Complex Diseases. I really enjoy being-affiliated with two departments, especially since our faculty and research overlap. This idea of staffing across departments actually started out as a pilot project. Since I had 5 years of experience working with visas, **Angela Epshtein**, the Director of Administration, asked me to join their group to specialize in this field. I've been working with GCD for a little over 2 years and we've found this pilot to be extremely productive.



**NN:** *People often see you in workout clothes at the end of the day. Are you active in sports?*

**PB:** My current passion is spin/cycle classes. I often go to Flywheel or Turnstyle on my way home from work in the Back Bay. The picture shown to the left is of a spin class I took this summer on the roof of the Prudential Building.

That was quite an experience!

**NN:** *What do you like to do to relax?*

**PB:** On the weekends I usually meet up with friends for a morning workout followed by brunch. I live on the south shore, so when the weather is nice I'll often go to the beach to chill out.

Oh—and obviously—I love to spend time with my fur-baby, Bella (pictured above)

**NN:** *So many exciting trips! What has been your favorite trip and where do you plan to go next?*

**PB:** I went to South Africa in April, which was by far the trip of a lifetime! The picture below is of my girlfriends and I on a safari. (That's us in the cart behind the lion!) Part of our trip was spent at Hluhluwe–Imfolozi Park, which consists of 237,000 acres of preserved land. This was my favorite adventure. I absolutely love wildlife, so I'm hoping to plan a trip somewhere such as Alaska, Australia, or Tanzania where I can see more animals in their natural habitat.

*All travel suggestions are welcome!*



## NEW MEMBERS OF THE DEPARTMENT

*We would like to welcome the following to the Department of Nutrition!*



### **Ming-Chieh Li, Postdoctoral Fellow**

Hello there, I am Ming-Chieh Li from Taiwan. I am currently a postdoc working with **Dr. Jorge Chavarro**. My background is in environmental epidemiology with a focus on endocrine disruptors. In addition, I have a law degree with a major in health law. In 1979, approximately 2,000 people were accidentally exposed to polychlorinated biphenyls and dibenzofurans due to ingestion of contaminated cooking oil. This incident was called *Yucheng*. During my PhD studies, I studied the health effects of the victims of the *Yucheng* incident. After completing my PhD, I worked as a postdoc in National Institute of Environmental Health Sciences at National Health Research Institutes in Taiwan, studying the health effects after phthalate exposure. I like watching movies, cooking, and travelling, and getting to know new people.

## 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 **1:00-1:20 pm in Kresge 502** at the Harvard T.H. Chan School of Public Health. The seminars are free and open to the public.

*The following speakers will discuss their work in November:*

- |             |  |
|-------------|--|
| November 6  | NGHP conference at MRB Center: <b><i>Agriculture, Nutrition, Health &amp; the Environment in Africa</i></b>  |
| November 13 | <b><i>Miguel Alonso-Alonso MD, PhD</i></b> , Director, Laboratory of Bariatric and Nutritional Neuroscience; Assistant Professor of Surgery, Harvard Medical School Center for the Study of Nutrition Medicine, Beth Israel Deaconess Medical Center |
| November 20 | <b><i>Dr. Josiemer Mattei</i></b> (HSPH), Assistant Professor of Nutrition   |
| November 27 | <b><i>Dr. Allan Walker</i></b> (MGH & HSPH), Professor in the Department of Nutrition  |



## RECIPE CORNER

(Contributed by Guy Crosby, Ph. D., CFS, "the cooking science guy")\*

### White Bean and Roasted Chicken Chili



#### Ingredients using one can of beans (makes three servings):

- 1 medium onion peeled and coarsely chopped
- 1 clove of garlic, peeled and finely chopped
- 1 tablespoon of extra virgin olive oil
- 6 ounces of chopped white meat from left over roasted chicken
- 2.5 cups of chicken stock (made as above)
- 2 ounces of coarsely ground corn tortilla chips
- 1.5 Tablespoons of cumin
- 2-2.5 total ounces of Jalapeno and Serrano, or Poblano chilies sliced in half with the pith and seeds carefully removed. Char the peppers on the grill (or under the broiler), cool and remove most of the blackened skin and cut into ½-inch pieces.
- 1-15.5 ounce can of navy beans, or great northern beans, drained and thoroughly rinsed
- 1 tablespoon of light sour cream per serving
- A few sprigs of fresh cilantro leaves and several tortilla chips.

#### Procedure:

- In a large 3-quart saucepan heat one tablespoon of extra virgin olive oil, the prepared peppers, and one coarsely chopped medium onion until the onion is translucent (about 5 minutes). Add the chopped garlic and heat for another 30 seconds (do not overcook the garlic or it will become bitter).
- Meanwhile drain and thoroughly rise the canned beans.
- Add the chicken stock, chicken, and rinsed beans to the saucepan, followed by the ground tortilla chips. Add the cumin and mix all the ingredients. Simmer the mixture for about 20 minutes until most of the tortilla chips have disintegrated and the liquid has thickened.
- Taste and season with additional salt and ground black pepper, if needed. If the chili is not spicy enough add a small amount of red pepper flakes and simmer for an additional few minutes.
- Serve each bowl of chili with a dollop of sour cream, a few sprigs of cilantro, along with a few tortilla chips on top.

One serving (one-third recipe) contains about 374 Kcal and 572 mg sodium.



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>

## First TKC Research Day to Be Launched in February 2018!

(By Hilary Farmer and Emily Baron)



**TEACHING KITCHEN COLLABORATIVE RESEARCH DAY**  
**WEDNESDAY, FEBRUARY 7, 2018 | NAPA VALLEY, CA**  
**WWW.TKCRESEARCHDAY.ORG**

On February 7, 2018 **Dr David Eisenberg, MD**, Director of Culinary Nutrition and Adjunct Associate Professor in the Department of Nutrition, together with the Harvard T.H. Chan School of Public Health will officially launch the Research Day on Teaching Kitchens and Related Self-care Practices in Napa Valley, California.

Innovative strategies are needed to help individuals improve the way they eat, move, and think. “Teaching kitchens” are an emerging model based in this translational thinking, where skill-building curricula typically include (1) nutrition education, (2) hands-on culinary instruction, (3) enhanced movement and exercise, (4) optimal use of web-based technologies, (5) mindfulness training, and (6) personalized coaching.





The **2018 Research Day on Teaching Kitchens and Related Self-Care Practices** is the first scientific meeting to enable researchers to present original findings on teaching kitchen curricula and models, with the purpose of advancing the design, methodology, implementation, and evaluation of replicable programs for individuals with increased cardiovascular risk, e.g. obesity, diabetes, pre-diabetes, along with other populations seeking to enhance their health and wellness. This conference is a natural extension of the annual Healthy Kitchens, Healthy Lives conference for health professionals ([www.HealthyKitchens.org](http://www.HealthyKitchens.org)) and the Teaching Kitchen Collaborative ([www.TKCollaborative.org](http://www.TKCollaborative.org)), a network of 32 organizations, including Google, with prototype teaching kitchens worldwide.



At this research meeting, investigators will share descriptions of prototype teaching kitchens in addition to original research involving emerging Teaching Kitchen Models. Featured speakers will include **Dr Frank Hu**, Chairman, Department of Nutrition at the Harvard Chan School of Public Health, and leaders from the Google Food Team (where teaching kitchens have been used by more than 25,000 employees to date).

Dr Eisenberg's program is aimed not only at researchers, but also chefs, MDs, RDs, RNs and other health professionals who are interested in using teaching kitchens as learning labs. Food service directors from various institutions and administrators are also welcome. Physicians who attend will be able to receive CME credits.



*To register for this event or to submit an abstract:*

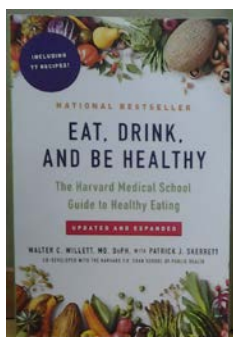
<http://www.tkcresearchday.org/Registration>

*Abstract submission deadline is 11/6/17*

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/>)

## Departmental Research Updates & News Clips



On October 12, 2017 **Dr Walter Willett** was featured in a **Harvard Chan: This Week in Health** podcast that discussed two decades of nutrition science. Dr Willett spoke about the updated version of his new book: **Eat Drink, and Be Healthy—** which compiles decades' worth of evidence about the components of a healthy diet. In this podcast Willett also weighs in on the issues that will dominate the nutrition field in the years to come—including obesity—and how climate change will force us to change how we eat.

Willett WC. Eat, Drink, and Be Healthy, 3<sup>rd</sup> Edition. New York: Simon and Schuster 2017

To view this podcast: <https://www.hsph.harvard.edu/news/multimedia-article/nutrition-healthy-eating-walter-willett/>

## SAVE THE DATE ANNOUNCEMENTS!

### Registration is now open!

Register to attend [\*Agriculture, Nutrition, Health and the Environment in Africa\*](#) taking place in Boston and Cambridge, MA, on Monday and Tuesday, Nov 6-7, 2017. This event is a collaboration between Harvard T.H. Chan School of Public Health, the Harvard Kennedy School Belfer Center for Science and International Affairs, Harvard University Center for African Studies, and Africa Academy for Public Health.

Click here to [learn more and register](#).

To subscribe to *NutriNews*, please contact Hilary Farmer, Editor: [hfarmer@hsph.harvard.edu](mailto:hfarmer@hsph.harvard.edu).