

"Past, Present and Future of SNAP: Evaluating Effectiveness and Outcomes in SNAP-Ed"

Testimony of

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Chairman Conaway, Ranking Member Peterson, members of the Committee, good morning. And thank you for the opportunity to testify at today's hearing on SNAP-Ed. My name is Dr. Shreela Sharma. I am a professor of epidemiology at the University of Texas School of Public Health, and the Co-Founder of Brighter Bites non-profit organization and I have spent the last ten years contributing to childhood obesity prevention and control program efforts in Texas.

Over the past 30 years, obesity in children has doubled in the United States with 34% of 6 to 11 year olds being overweight or obese, and quadrupled among adolescents¹. Most children in the United States do not meet the recommended intakes of healthy foods including fruits and vegetables, putting them at risk for chronic diseases including obesity in childhood and adulthood. Recent reports from the Centers for Disease Control and Prevention (CDC) using data from 2003-2010, indicate a 12% per year increase in intake of fruit among children ages 6 to 11 years, and among those from low-income families; however, there were no increases in intake of vegetables or whole grain foods². About 60% of children consume fewer fruits than recommended, and 93% of children consume fewer vegetables than recommended. In Texas, child consumption rates of fruits and vegetables is among the lowest as compared to other states with over 50% of the children consuming fruits and vegetables less than once per day³.

In 2012 I was approached by Lisa Helfman, a mom and an attorney, who had an idea to help solve the lack of access to fresh produce that exists in underserved neighborhoods, where childhood obesity rates are high and health problems are an epidemic. Back in 2011, Lisa was participating in a produce co-op where she received a box of fruits and vegetables every week, and over time she watched her children's eating habits change as a result of this consistent access to fresh produce. She described this moment when she was with her 5 year old son at a birthday party and he called her over to ask if he had to eat the cake. He said it was too sweet and he would rather have fruit instead. At that moment, she thought she may be on to something and wondered if she could replicate the same behavior change that she saw in her young son in underserved neighborhoods. And today, 5 years later, I am here to tell you that you can and we did.

¹ 1.Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of childhood and adult obesity in the United States, 2011-2012. *Journal of the American Medical Association* 2014;311(8):806-814.

² Centers for Disease Control and Prevention. *Morbidity and Mortality Weekly Report. Vital Signs: Fruit and Vegetable Intake Among Children — United States, 2003–2010, 2014*; 63(31);671-676/

³ Centers for Disease Control and Prevention. *State Indicator Report on Fruits and Vegetables, 2013*. Available at <http://www.cdc.gov/nutrition/downloads/state-indicator-report-fruits-vegetables-2013.pdf>.

Together we built a program called Brighter Bites with the purpose of providing fresh fruits and vegetables combined with hands-on nutrition education in schools and to families in underserved neighborhoods and food desert areas. Our formula is simple. Produce Distribution (50-60 servings per family per week) + Nutrition Education in school and for parents + Fun Food Experience consisting of a healthy recipe tasting, all done on a consistent basis for 16 weeks during the school year and 8 weeks during the summer. The program uses a food co-op model to engage parents and families where they participate in the bagging and distribution of the produce at the schools.

In 2012, we implemented the formula with 150 kids at one Knowledge is Power Program (KIPP) charter elementary school in Houston, Texas that was 93% low-income. We distributed 50 servings (~30 lbs) of 8-12 different produce items a week, trained the school to teach CATCH, a Texas Education Agency-approved evidence-based coordinated school health program, in the classroom and provided corresponding nutrition education and recipes to parents⁴. When the parents came to pick up their children from school, each family received two bags of beautiful, fresh produce at no cost and a fun food experience – they tasted a sample of the recipe of the week made from a hard-to-use item in the bag. Parents tried kale smoothies with their child and received the recipe and the ingredients to make it at home! Parents also received two nutrition handbooks consisting of information on food preparation, food storage, how to use nutrition facts labels to make food purchases, MyPlate, easy menu planning and recipe ideas, and other tips and tools on how to enhance the home nutrition environment. Children who had never eaten an orange were now chasing us for kale smoothies! And parents were volunteering at our co-ops and engaging in our communities of health.

Thanks to the funding of the USDA SNAP Ed program, as of 2016, we have expanded this same formula in Houston, Dallas and Austin and distributed more than 8 million pounds of produce to over 20,000 low-income children and their families across more than 90 schools, Head Starts, YMCAs and community centers in these three cities.

Brighter Bites is giving parents living on a limited income, who have traditionally been afraid of buying fruits and vegetables because they either don't know how to prepare it or can't manage the financial risk that their children won't eat it, a "risk free trial" to practice cooking and

⁴ Sharma SV., Markham C., Helfman, L., Albus K., Pomeroy M, Chuang RJ. Feasibility and acceptability of Brighter Bites: A food co-op in schools to increase access, continuity and education of fruits and vegetables among low-income populations. *Journal of Primary Prevention*. 2015, Volume 36, Issue 4, pp 281-286.

eating healthy foods with their children. And our research shows that these trials are creating lasting behavior change.

As a behavioral epidemiologist and registered dietitian, I have focused on building a strong research and data infrastructure for Brighter Bites. We have collected data consistently for the last four years on program effectiveness, dosage, reach and fidelity on all our families. Data collection happens several ways. Each week Brighter Bites coordinators complete surveys to provide data on produce distribution (what was distributed and how much), and education implementation at each site. Attendance rosters provide data on weekly produce pick up by each family; parents complete surveys two times a year on acceptability, usage and effectiveness of Brighter Bites program components; and cost of providing produce per family per week is obtained from the food banks who aggregate and deliver the produce to the Brighter Bites sites. We have a centralized database that aggregates data from all three cities (Houston, Dallas, and Austin) on an ongoing basis. Qualitative and quantitative data in the form of focus groups with the parents and systems-level surveys with the food banks, and schools further informs program development and evaluation.

These data points have not only informed our program, but also helped further the scientific dialogue to understand how our children and families eat. Our results are compelling. We know that 98% of the families participating in Brighter Bites are eating more produce during the program, and what's more compelling is that 74% are maintaining the same levels by buying it on their own even after the Brighter Bites season ends. Also, 93% of the families reported that they ate all or more of the vegetables, and 96% said they ate all or most of the fruit that was provided to them through Brighter Bites. Brighter Bites families also reported saving on average \$34.40 on their weekly grocery bill while in the program. And, parent engagement is high with between 4 to 10 parents volunteering each week in the Brighter Bites co-ops at schools to assist with the bagging and distribution of the produce.

Recently we completed a two-year rigorous study among 760 first grade children and their parents in 2013-2015⁵. At baseline, 42% of the first grade children ages 5 to 7 in our study were overweight or obese, which is higher than the national average for this age, and they were consuming only 1 serving of fruit and 0.5 servings of vegetables per day. Results of our study showed that both, children and their parents receiving Brighter Bites had a significant increase in

⁵ Sharma SV, Markham C., Chow J., Ranjit N, Pomeroy M, Raber M. Evaluating a school-based fruit and vegetable co-op in low-income children: a quasi-experimental study. Under review.

the intake of fruits and vegetables and reported consuming fewer calories from added sugars as compared to those who did not receive the program. Moreover, we saw promising improvements in the home environment. Brighter Bites parents reported a two-fold increase in cooking at home, using nutrition facts labels to make purchasing decisions, eating more meals together as a family, and having more fruits and vegetables available at home during meals as compared to those who did not receive the program.

You might wonder how we have grown such a transformative program so quickly and so effectively?

Brighter Bites is leveraging the support of corporations like H-E-B Grocery Company and Sysco Foods. Sysco, with 9,000 trucks running daily, is collecting produce that would otherwise be discarded directly from farmers across the country and then sending it to local food banks. We are partnering with the local food banks in Houston, Dallas and Austin who are aggregating the food from Sysco and other sources, and then distributing it to our Brighter Bites locations. We are also collaborating with the Produce Marketing Association, which is committed to advancing kids' consumption of fruits and vegetables. Our cooperation with such industry experts aims to determine how to tackle food waste by finding more produce that might otherwise be tilled under or go uneaten. Brighter Bites also has a partnership with Feeding Texas, a statewide association representing 21 Texas food banks, in efforts to develop a statewide model for nutrition education. Finally, Brighter Bites has a strong academic partnership with the Michael and Susan Dell Center for Healthy Living at the University of Texas School of Public Health, an internationally-recognized leading research center in child health, and the CATCH Global Foundation to further the educational, evaluation, metrics and scientific rigor of the program. Through these partnerships, we are able to conquer the last mile of delivering the produce directly and consistently to our underserved families while teaching them how to use it. And, we are creating opportunities for the children to practice these healthy behaviors while at school. We are also successfully linking the school and the home – the two environments where children spend a majority of their time. Thus, we are creating communities of health through fresh food, and we look forward to bringing this impact to more cities across the country.

In summary we have found the results of our program effectively address multiple key concerns related to promoting healthy eating behaviors, and our food chain including:

- educating children and their parents, how to eat healthier, in school and at home,

- tracking the impact of the program with regards to health, shopping/eating habits, and parent participation in schools,
- addressing the last mile by actually delivering a substantial amount of fresh, healthy food to underprivileged children to take home and practice healthy eating,
- taking advantage of partnering with private corporations and non-profit food banks for distribution, and
- addressing food waste by working with farmers to utilize overgrown crops.

I would like to end with a couple of quotes from our Brighter Bites parents who said the following in one of our focus groups:

"Brighter Bites made me cook things I wouldn't have bought for fear of wasting money if my children didn't like it."

"Brighter Bites is a huge support for my budget as it helps me save around \$140 a month. Although the cost of fruits and vegetables [in grocery stores] is high, as a single mother it is hard but I try to maintain a healthy diet based on what Brighter Bites has taught me."

We plan to continue to use SNAP-Ed funding, couple it with corporate and private sponsors with both expertise and dollars, to expand Brighter Bites and our research to push the dialogue forward on how to healthfully feed our families. We have the ability to spread Brighter Bites throughout the country to build demand for fresh produce, empower people to achieve better health and tackle food waste all at the same time. Our metrics show that this approach can work. Thank you for the opportunity to present and I look forward to your questions.

CURRICULUM VITAE

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- 1996 B.Sc. Physical Therapy
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- 2013 - present **Associate Professor**, Division of Epidemiology, Human Genetics and Environmental Sciences, The University of Texas School of Public Health, Houston.
- 2007–2013 **Assistant Professor**, Division of Epidemiology, Human Genetics and Environmental Sciences, The University of Texas School of Public Health, Houston.
- 2007–present **Assistant Director**, Dietetic Internship Program, The University of Texas School of Public Health, Houston.