

No sugar-coating the crusade against obesity



When Barry Popkin, PhD, advocates for a national tax on sugar-sweetened beverages, soft-drink makers and food-industry groups attack. “Everybody comes after me,” he says.

But Popkin, an internationally recognized expert in nutrition and obesity, is unfazed.

Savvy, passionate and eager to speak out, he says, “I want to have an impact.”

The Carla Smith Chamblee Distinguished Professor of Global Nutrition in the University of North Carolina’s Gillings School of Global Public Health and director of the UNC interdisciplinary obesity program makes an impact *often*.

You may have seen his comments in *The New York Times* or *Time* magazine or heard him on National Public Radio or Al Jazeera. He’s such a seasoned media source that he might show up for a satellite interview at the UNC television studios in a shirt and tie—and shorts and sandals. He knows he’ll be visible only from the waist up.

Now 66, Popkin was among the first researchers to start tracking the effects of diet and activity. His data are based on four decades of observation of individuals, households and communities, from Russia to Mexico and China to Brazil. The worst problems used to be hunger and malnourishment. Now, obesity is epidemic in both developed and developing countries.

He says sugar-sweetened beverages are to blame for much of the weight gain. “You are what you drink,” he says. In 1960, the average American consumed 100 to 200 calories a day in beverages. Today, the figure is 500 calories.

In 2005, Popkin assembled leading nutrition experts from Johns Hopkins, Harvard, Louisiana State and Oregon State universities, and other institutions, to study available literature and provide guidance on risks and benefits of various beverage categories. Their results were published in *The American Journal of Clinical Nutrition* in 2006.

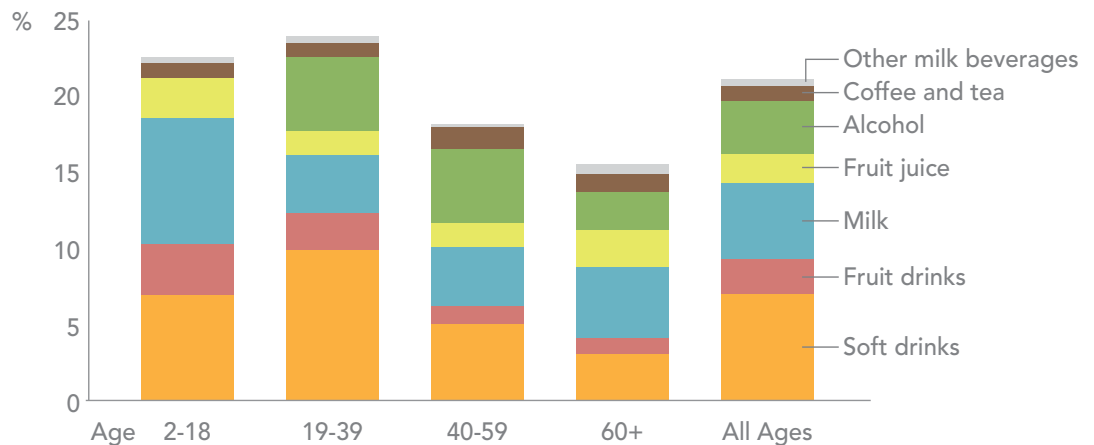
“The Beverage Guidance Panel that Barry convened produced a first of its kind—a guide for the kinds of beverages that have the best value for your health,” says George Bray, MD, Boyd Professor and chief of the division of clinical obesity and metabolism at the Pennington Biomedical Research Center in Baton Rouge, La., and a member of the panel.

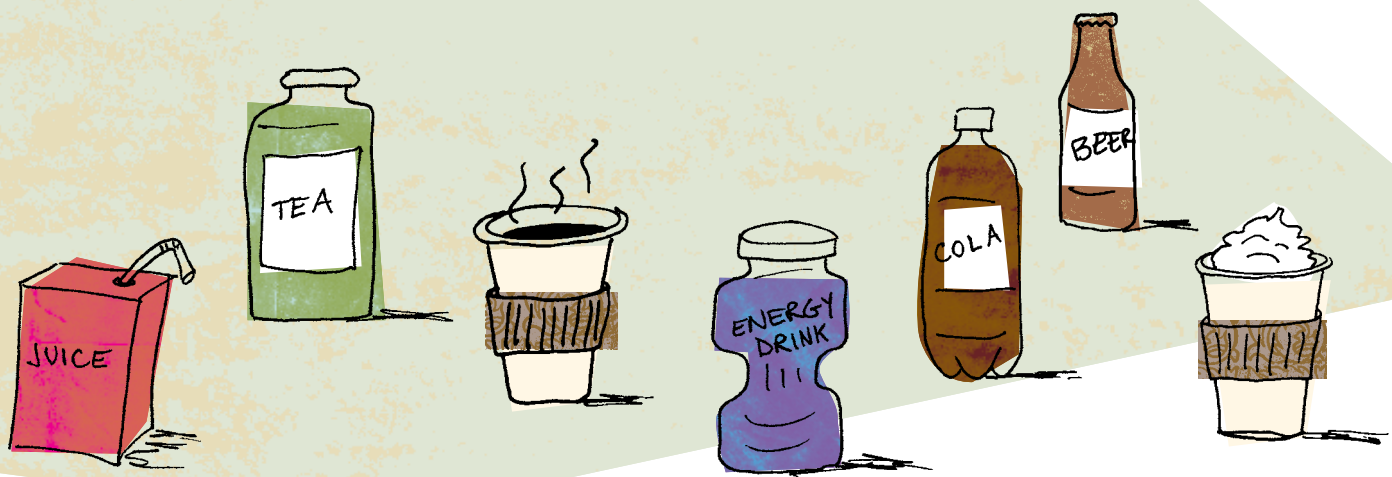
Now, Popkin works with governments around the world to establish beverage guideline policies.

“France and the U.K. have banned caloric beverages in schools,” he says. “Mexico has created beverage guidelines, and now I am working with the U.K. and China on this topic.”

In the U.S., he advocates a tax on sugar-sweetened beverages to discourage people from drinking them, he says. He and six other scholars wrote a 2009 report in *The New England Journal of Medicine* that advocated a consumer tax of one percent per

Percentage of daily caloric intake from beverage, by age group





ounce on sugar-sweetened beverages both to reduce consumption and bring in money to support health programs, as tobacco taxes have done. His latest study, published March 9, 2010, in *Archives of Internal Medicine*, shows that people eat less fast food, such as pizza and burgers, when the prices go up, supporting his proposal to tax these foods in addition to sugar-sweetened beverages.

Not surprisingly, soft-drink makers, supermarket companies, the fast-food industry and other groups poured more than \$24 million into the coffers of Washington lobby-

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“You are what you drink.”

ists in the first nine months of 2009 to fight a potential national tax and other regulations, according to *The Huffington Post*.

Popkin’s recent book, *The World is Fat: The Fads, Trends, Policies and Products that are Fattening the Human Race*, draws on what

he’s learned throughout his career. He makes a strong case that lifestyle changes, including eating more sugary and fatty foods, as well as government policies and globalized food marketing, are fueling the weight gain.

“How we eat, drink and move has changed so drastically in the last 60 years,” he says. “Our biology clashes with modern marketing and technology.”

His research examines health implications of those policies and lifestyle changes, and his findings have been published in more than 300 articles in peer-reviewed journals, including *The New England Journal of*

Medicine, Journal of the American Medical Association, Science, Obesity, Circulation and the American Journal of Clinical Nutrition. His research covers the whole spectrum of life—for example, he’s published articles in both *Pediatrics* and the *Journal of Nutrition of the Elderly*. His work has appeared in renowned peer-reviewed publications in Europe, China, the Philippines and the Asia-Pacific region.

His most innovative work, say colleagues, has been developing the concept of “Nutrition Transition,” a way of understanding long-term nutritional status changes by looking at shifts in the stages of eating, drinking and activity, underlying societal shifts and resulting effects on body composition.

He also has pioneered large longitudinal studies around the world, including ones in China, Russia and the Philippines. He’s led related studies in Brazil, Mexico and other countries, studying some populations for four decades. “When I came into the field, such studies were not a focus,” he says.

His work has played a major role in establishing databases for scholars to study diet and activity. More than 10,000 researchers have downloaded his longitudinal studies. ►►

Dr. Barry Popkin takes personally his professional campaign for good health, regularly biking to campus for exercise. (Note: Popkin removed his helmet to pose for the photo, but he never bikes without it.)

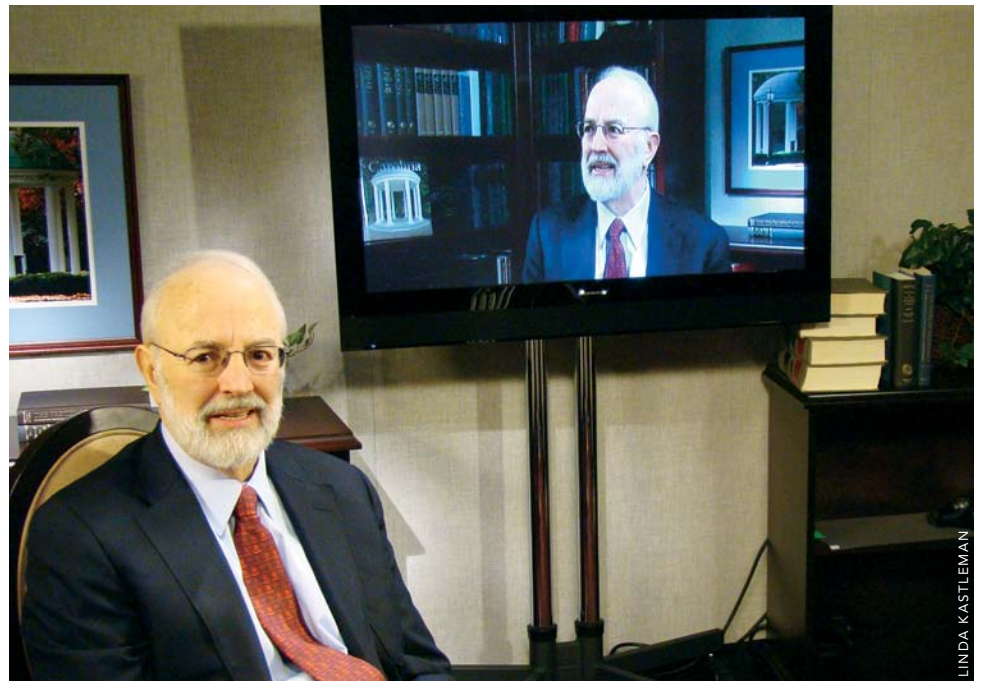


“Barry has made many important contributions to nutrition research,” says Penny Gordon-Larsen, PhD, UNC associate professor of nutrition, who has published several articles with Popkin. “He is probably most well known for his work on the nutrition transition and global obesity. Yet he also has made major contributions in investigations on the role of dietary fat in obesity, sugar-sweetened beverages and obesity, health disparities, and economic determinants of diet and obesity.”

Popkin—tall, wiry and agile—attacks obesity many different ways. On a personal level, he rides his bike to work and around town. He is part of an international board of scientists helping to develop simple front-of-the-package labels in European countries, Israel and India. He’s working with the Mexican Ministry of Health and Finance to develop a similar program in that country.

He also has waded into the U.S. Food and Drug Administration’s review of nutrition labeling guidelines. In the Feb. 8 issue of *The New York Times*, he wrote: “Placing complicated labeling on the back of the package simply does not work. Studies from the Netherlands, the U.S. and elsewhere have found that system to be confusing and that it does little to affect consumer decisions. Front-of-the-package labeling, which has emerged in the past three to four years, promises to be more effective.”

But he doesn’t stop there.



Dr. Barry Popkin is a frequent guest at Carolina News Studio, giving interviews that are broadcast around the world.

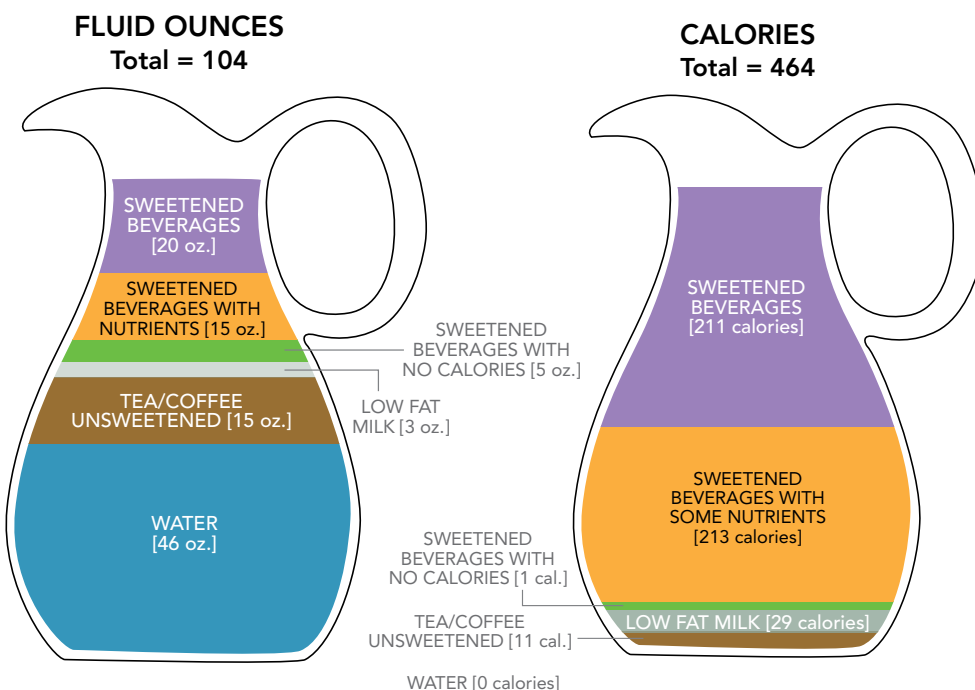
“We also need to remove all false advertising that says ‘contains antioxidants’ and tries to connote that a product is ‘heart healthy’ when there is no reality to that claim,” he writes. “We need ways to stop food manufacturers from making misleading claims, and we need scientists independent of the food industry to set healthy guidelines for various food categories.”

No wonder he’s a target.

However, he also tries to reach out to the food and beverage industry, encouraging them to be part of the solution to obesity. In 2007, he started an annual “Global Obesity Business Forum” with senior executives from food, beverage and infant formula companies. The meetings are private, Popkin says, so the executives can be frank and open about their concerns and processes.

As a college student in the 1960s, Popkin was active in the civil rights movement nationally and in his home state of Wisconsin. Those experiences, he said, taught him to take the slings and arrows of criticism in stride. “There were people who loved you, and people who hated you,” Popkin says. “That’s the way it is when you’re fighting for a cause.” ■

—Susan Shackelford



Americans drink too much and drink unhealthily. These figures show the beverage intake pattern of adults in the U.S., in volume and calories. Drinking 35 oz. of sweetened beverages in a day (out of a total 104 oz.) accounts for about half of the calories consumed from beverages. Popkin’s Beverage Panel suggests the average adult might best consume 98 oz. in beverage each day, including up to 50 oz. of water and no sweetened beverage without nutrients.