Sugary drinks account for 34 percent of added sugar in the American diet, and for people who feel cravings and compulsive drive for sweet drinks, strong interventions in addition to the workplace sales ban may be needed, according to a new UCSF study.

Many institutions—such as schools, hospitals, and workplaces—have reduced the availability of sugar-sweetened beverages to help fight health problems such as weight gain, diabetes and heart disease. But for some people a sales ban that takes the temptation out of the
workplace may not be enough.

Sugary drinks account for 34 percent of added sugar in the American diet, and for people who feel cravings and compulsive drive for sweet drinks, strong interventions in addition to the workplace sales ban may be needed, according to new research published March 29 in the *Annals of Behavioral Medicine* [2].

In 2015, UC San Francisco banned the sale of sugary beverages, defined as sodas, sports and energy drinks, fruit drinks such fruit-flavored drinks that are not 100-percent fruit juice, and sweetened teas and coffees.

In the years since, an interdisciplinary team of researchers at UCSF has been studying ban’s effect.

From the outset, the researchers knew that some people may need a stronger intervention, and they conducted a multi-level intervention by adding an individual motivational session on top of the environmental change.

Before the sales ban began, participants reported their sugary drink consumption and their why they drink it whether it is in response to stress, because of the enjoyable taste, or because of strong cravings.

Half of a sample of UCSF employees were randomized to receive a 10-minute meeting with a trained health professional, who provided a brief counseling intervention and some follow-up phone calls to discuss obstacles. The session included education about sugary drinks and the impact of sugar on liver and disease risk, and goal setting to quit or cut down.

The researchers contacted participants six months later to reassess their consumption of the same type of drinks.

As reported in *JAMA Internal Medicine* [3], the sales ban reduced consumption across the sample by 45 percent, and the sample also showed reductions in abdominal adiposity. However, participants who reported drinking sugary drinks due to strong cravings did not benefit from the sales ban alone. But if they also received the brief intervention, they reduced their consumption by around 19 ounces per day. Reportedly drinking due to stress or enjoyment were not associated with outcomes in this study.

“This is striking,” said Ashley Mason, PhD [4], the lead author, assistant professor in the Department of Psychiatry and Behavioral Sciences and a member of the UCSF Weill Institute for Neurosciences [5]. “If we are able to identify who might benefit from an intervention as brief and simple as this one, we could meaningfully reduce the amount of sugar that heavy drinkers actually consume.”

Elissa Epel, PhD [6], professor in the Department of Psychiatry and Behavioral Sciences, the senior author, has been studying the effects of compulsive and emotional eating on metabolic health.

“The ability to influence metabolic health through an institution-wide sales ban alone is very exciting. However, we know that one size does not fit all, and for many, sugary drinks have become a compulsive habit that is hard to break,” said Epel, a member of the UCSF Weill Institute for Neurosciences. “But with a light touch motivational intervention, many changed their daily habits. Any reduction in sugar-sweetened beverages is meaningful, and for this
high-risk group, they reported large reductions.

Robert Lustig, MD [7], emeritus professor of pediatrics and study physician, remarked: ?SSBs have two addictive substances in them: sugar and caffeine. But sugar is worse, because of its deterrents to metabolic health, and because it is hidden in processed foods without our knowledge. We know how difficult it is to break sugar addiction, but this study shows that with both personal and societal intervention working together, it is nonetheless achievable.?

Laura Schmidt, PhD, MPH [8] ? the study co-PI, UCSF professor of health policy and an expert in food policy interventions ? noted: ?The next step is to disentangle the effects of the brief counseling intervention and the sales ban, and their synergy, particularly for people with strong sugar cravings. For those trying to quit, a supportive intervention alone might not be enough, but rather, using a sales ban to take the temptation out of the workplace could be very helpful.?

Read the journal article

- **Annals of Behavioral Medicine**: A brief motivational intervention differentially reduces sugar-sweetened beverage (SSB) consumption [9]

Further coverage

- **California News Times**: Workplace sugary beverage sales ban doesn't help everyone equally [10]
- **KGO-TV**: UCSF researchers share tips to lose 'quarantine 15' pandemic weight [11]

---

**About UCSF Psychiatry and Behavioral Sciences**

The UCSF Department of Psychiatry and Behavioral Sciences [12] and the Langley Porter Psychiatric Institute are among the nation's foremost resources in the fields of child, adolescent, adult, and geriatric mental health. Together they constitute one of the largest departments in the UCSF School of Medicine and the UCSF Weill Institute for Neurosciences, with a mission focused on research (basic, translational, clinical), teaching, patient care, and public service.

UCSF Psychiatry and Behavioral Sciences conducts its clinical, educational, and research efforts at a variety of locations in Northern California, including Langley Porter Psychiatric Hospital and Clinics [13]; UCSF Medical Centers at Parnassus Heights, Mission Bay, and Mount Zion; UCSF Benioff Children’s Hospitals in San Francisco [14] and Oakland [15]; Zuckerberg San Francisco General Hospital and Trauma Center; the San Francisco VA Health Care System; UCSF Fresno; and numerous community-based sites around the San Francisco Bay Area.

**About the UCSF Weill Institute for Neurosciences**
The UCSF Weill Institute for Neurosciences [16], established by the extraordinary generosity of Joan and Sanford I. "Sandy" Weill, brings together world-class researchers with top-ranked physicians to solve some of the most complex challenges in the human brain.

The UCSF Weill Institute leverages UCSF?s unrivaled bench-to-bedside excellence in the neurosciences. It unites three UCSF departments?Neurology, Psychiatry, and Neurological Surgery?that are highly esteemed for both patient care and research, as well as the Neuroscience Graduate Program, a cross-disciplinary alliance of nearly 100 UCSF faculty members from 15 basic-science departments, as well as the UCSF Institute for Neurodegenerative Diseases, a multidisciplinary research center focused on finding effective treatments for Alzheimer?s disease, frontotemporal dementia, Parkinson?s disease, and other neurodegenerative disorders.

**About UCSF**

The University of California, San Francisco [17] (UCSF) is exclusively focused on the health sciences and is dedicated to promoting health worldwide through advanced biomedical research, graduate-level education in the life sciences and health professions, and excellence in patient care. UCSF Health [18], which serves as UCSF?s primary academic medical center, includes top-ranked specialty hospitals [19] and other clinical programs, and has affiliations throughout the Bay Area.