Reducing Exposure to EndocrineDisrupting Chemicals

Community Wellbeing Grant Projects FY 2023

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Overview

This pilot program aims to educate BIPOC, expecting UCSF employees and learners, and those with new families on safer alternatives to plastic, which will reduce their exposure to the health concerns from exposure to endocrine disrupting chemicals. The focus is on food purchase, preparation, and storage with an exploration of effective business models to make the safe products more affordable.

Data Snapshot

Behavior change occurred in the desired direction in each surveyed category with most changes being statistically significant. Participant confidence increased significantly regarding how to reduce their exposure to the chemicals in plastic. Over 88% of participants felt confident to very confident that the EDC information was valuable. It helped with their understanding of the toxic health effects; the sample kit was useful to make realistic change to exposure and was worth sharing. 93% of participants reported moderately to very likely willingness to purchase items from the samples on their own. Specific findings include significant decreases in a) microwaving foods in take-out and plastic containers, b) purchasing hot take-out food and drinks in disposable cups, and c) purchasing and drinking water from plastic bottles. The increase in concern about plastic pollution and the health effects of chemicals in plastics was significant, shifting from somewhat or moderately concerned to extremely concerned.

Project Details

Endocrine disrupting chemicals (EDCs) are ubiquitous in our food, water, home and work. Exposure to toxic environmental chemicals can make people’s immune system less able to respond to disease and can increase risk for cancer, reproductive harm, metabolic diseases among other adverse health outcomes. Women and children are particularly vulnerable as are people of color who often carry a disproportionate burden of exposure. This program specifically targeted the wellbeing of pregnant English Second Language (ESL), Asian, Latinx, and Black employees and their spouses, as well as those with young families. The project offered an in-person information session which included receiving a sample kit of food storage items without chemicals of concern, as well as ways to prepare food and eat healthier. Recruitment flyers were distributed, and email announcements were sent to the following campus departments: Custodial, Hospitality, Materials Management, Food Services, Housing Services, Family Services, Wellbeing Grantees, Staff Registered Campus Organizations (RCOs), and two lactation rooms. A website was created. Samples products were discussed and ordered for distribution. Surveys were created and translated into Spanish and Cantonese. The information session was developed and recorded. Four in-person information sessions were held, two at Parnassus and two at Mission Bay. Work with HAAS Business School was initiated on potential business models. Two Zoom sessions were offered for follow-up Q&A. For participants unable to come in-person, the video presentation was posted on the website for mandatory viewing. A pre-session survey was required prior to attending the information session to assess knowledge and concerns regarding EDCs. Sample kits of safe products were given after the session was attended, either in person or online. After a month, a post-session survey was required. Additional resources are provided on the website.

Project Challenges

The major challenge confronted in the study was reaching the desired target group of Black and Latinx staff and employees. Given that families of color are most directly impacted by the chemicals of concern, we focused our outreach on custodial and food service staff, distributing flyers through numerous campus offices and organizations. The second challenge was getting participants to attend the in-person sessions. Most participants could not attend due to conflicts or remote work arrangements.

Lessons Learned

Our outreach efforts succeeded in recruiting 39 participants out of a goal of 40. However, we had difficulty reaching our intended target communities, Black and Latinx staff and employees. Personal outreach to these communities might enhance recruitment and participation. Cash incentives for participation and inclusion in a raffle prize at the end of the project, in addition to providing the sample products, might also be helpful. Most of the participants were highly educated postdocs and other employees from Caucasian and Asian/Pacific Islander communities. Unfortunately, very few of participants were able to attend the in-person information sessions, though the sessions were lively and engaging. Some people who initially signed up were on leave and/or unresponsive to fill out the pre-session survey and watch the video. Feedback from those attending the information sessions was very positive. The most prevalent session questions regarded: a) freezing expressed breast milk into alternatives other than plastic bags and b) how to reheat milk without exposing infants to the chemicals leaching from the plastic into the it.