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To: Contra Costa Board of Supervisors

From: Ori Tzvieli, MD, Director Public Health

Re: Healthy Options at Point of Sale

Date: 5/3/2023

# I. Background

On May 24, 2022, Contra Costa Health (CCH) and a local community organization named Bay Area Community Resources (BACR) presented along with their youth led advocacy team known as Healthy Options at Point of Sale (HOPS) the prospective health benefits of a Healthy Retail policy to the Board of Supervisors. The recommended policy would require the placement of healthy food options in checkout queues or at the point of sale.

At the conclusion of the presentation the Board of Supervisors (BOS) requested that CCH staff work with BACR to further explore Healthy Retail policy options and the matter was referred to the Family and Human Services (FHS) Committee for continued discussion.

On February 27, 2023, CCH and BACR made a joint presentation to the FHS Committee with FHS Chair Anderson directing staff to solicit feedback to retailers about the proposed policy options and return to the full Board for further discussion. This report seeks to provide supplementary information regarding the health benefits of Healthy Retail and offer considerations for action to be reviewed by the full Board of Supervisors.

# II. Healthy Retail Ordinance Survey

Contra Costa County's retail environment plays a critical role in the overall health of the county. The retail food environment impacts the local economy and affects the physical health of the neighborhood. The FHS Committee requested that CCH staff conduct a survey to the 32 retailers within the unincorporated areas of the county, who would be impacted by the proposed Healthy Retail Ordinance. CCH staff and BACR youth were recruited to conduct the survey in **March 2023.** CCH staff and BACR youth provided an introduction of the elements of healthy retail ordinance to the retailers as a part of the survey, which yielded the findings below.

**Surveyed Participants:** Of the **32** retail owners, managers, and employees, **18** food retailer stores throughout unincorporated areas of Contra Costa County were interviewed. The survey included the questions below and this report will provide details regarding the retailer's responses to those questions.



Would healthy retail materials (posters), technical assistance be of interest to you?

YES\_\_\_ NO\_\_\_

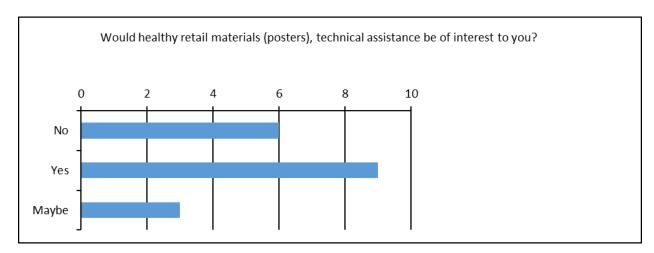
Are you interested to attend any virtual meetings to learn more about Healthy Retail?

YES \_\_\_ NO \_\_

Are you interested to test out new healthier snack options at your store? YES\_\_ NO\_\_

**Healthy Retail Ordinance Technical Assistance:** 50% (9 of 18) of all retailers surveyed would like technical assistance as well as healthy retail educational materials such as posters. The remaining 9 retailers responded that they would comply with the ordinance if their corporate office directed them to do so and/or if the ordinance passes, they will accept the nutrition education materials and technical assistance.

**Healthy Retail Meetings with Retailers:** Retailers were invited to attend meetings to learn more about the ordinance, however only a couple of stores noted that they would attend if corporate asked them to. Most retailers indicated they were unsure or not interested in attending at all.



**Determining Healthy Snack Options:** Results indicated the retailers had stocked fruit, primarily bananas or oranges, in the checkout area. Retailers indicated that the produce items often have a low shelf life and rot before they have a chance to sell the products. If a proposed ordinance were to take place, the retailers were interested in the non-perishable products examples list that would be eligible to be stocked in the checkout area under the policy. Additionally, six retailers were interested in trying out new healthier items in their checkout environments. Five were not, and seven were undecided or would defer to corporate.

# III. Healthy Retail Policy Considerations

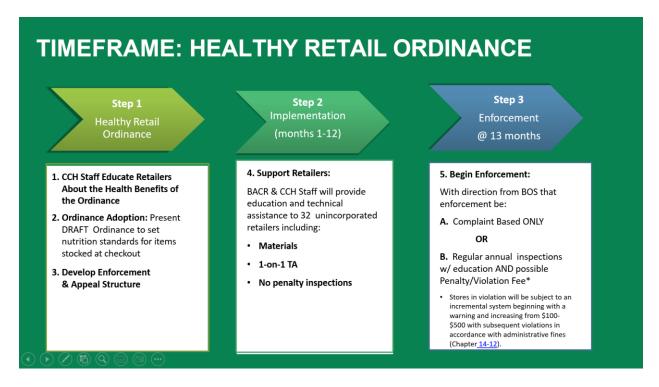
#### Policy Recommendation



Contra Costa Health's Nutrition and Physical Activity Promotion Program (NPAP) staff and BACR recommend adopting a **three-step approach** and timeline to execute a healthy retail policy for stores greater than 2000 square feet in unincorporated Contra Costa County.

**Step 1:** CCH staff will **educate retailers** about the health benefits of the ordinance and prepare **an ordinance for Board adoption** to advance the following healthy checkout requirements in designated checkout aisles and within 3 feet of a retailer's register:

- Foods with  $\leq 5$  grams added sugar and  $\leq 200$  mg sodium per serving
- Gum and mints with no added sugar
- Beverages with no added sugar and no low- and no-calorie sweeteners



**Step 2:** CCH staff and BACR's HOPS youth will **support** healthy retail education and technical assistance to **32 impacted retail stores during its** implementation phase (**months 1-12**). This assistance will include: **1)** distributing retailer education packets, information cards, list of healthy options, and health promotion posters; **2)** providing one-on-one technical assistance for all stores by phone, email and in-person visits; and **3)** conducting no penalty store evaluations and evaluation feedback for store managers.

**Step 3:** CCH staff will be responsible for the enforcement of the sale of healthy food and beverage options in checkout areas, which will begin approximately **13 months after** the passing of the ordinance to allow time for retailer education and engagement.



Options that CCH staff recommend for its retail enforcement are as follows:

# A. Complaint Based ONLY OR

# B. Annual Inspection AND Penalty Fee\*

#### **Violation-Penalty**

It is recommended that those retailers in violation of the proposed Healthy Retail Ordinance would be subject to administrative citations in accordance with the following:

- **1st Violation:** Store owner will be served with a written notice to comply with the Healthy Retail Ordinance and re-inspection.
- 2nd Violation: Impose a \$100 violation fee\*
- 3rd Violation: \$200 violation fee\*
   4th Violation: \$500 violation fee\*
   \*Fee Violation is based on Administrative Fines (Chapter 14-12)

## **Appeal Structure**

CCH staff recommend that a retailer objecting to or disagreeing with the violation under this ordinance may appeal the denial to the appointed \*Appeals Officer, as decided by the BOS. Any request for an appeal hearing must be in writing and must be received by the appointed officer within ten days after notice of the decision was mailed. Any request for an appeal hearing must state the legal and factual basis for the appeal and be accompanied by payment of a fee established by the BOS by resolution. A hearing on the appeal will be held within fifteen days after the request for appeal is received by the appointed officer. The appointed officer will issue a written decision supported by written findings. The decision will be based on the applicant's compliance or noncompliance with this ordinance.

\*CCH staff will seek advisement from the BOS to appointing the Appeals Officer.

#### Reporting

CCH will include a summary of their key findings of the healthy retail ordinance as an amendment in their annual progress reports to the BOS.

#### IV. Additional Considerations

Direct Contra Costa Health staff to request guidance and legal support from County Counsel to develop a DRAFT Healthy Retail Ordinance for the Board of Supervisors consideration and a formal vote of action.



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<sup>\*</sup> Stores in violation will be subject to an incremental system beginning with a warning and increasing from \$100-\$500 with subsequent violations in accordance with administrative fines (Chapter 14-12).

# V. Contra Costa Health Nutrition and Physical Promotion Program

The overall goal of the CCH Nutrition and Physical Activity Promotion Program (NPAP) is to use evidence-based approaches to reduce rates of obesity and chronic diseases associated with poor nutrition and physical inactivity. This is accomplished through a comprehensive nutrition education and physical activity promotion program that seeks to increase access to and the consumption of healthy foods and water; reduce sugar-sweetened beverage accessibility; increase opportunities for safe, physical activity; and increase food security among the most vulnerable Contra Costa County residents. As a U.S. Department of Agriculture (USDA) Supplemental Nutrition Assistance Program Education (SNAP-Ed) funded program, NPAP prioritizes partnering with communities that are living <185% below the federal poverty line to support and enhance the probability that persons eligible for SNAP will make healthier food choices and choose physically active lifestyles as an outcome of the program's strategies and interventions that focus on education and training; social marketing and retailer engagement; as well as policy, systems, and environmental changes (PSE) that make the healthy choice the easy choice.

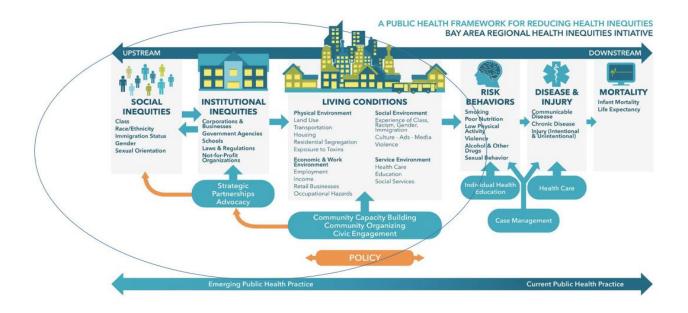
The work developed by NPAP is guided by several public health best practices and model frameworks that influence a person's health within a community.

#### VI. Model Frameworks of Public Health

# Public Health Social-Ecological Model for Food & Physical Activity Decisions

The Social-Ecological Model is a guiding principle for SNAP-Ed program that demonstrates how various influences ranging from individual factors to social and cultural norms can shape decisions regarding physical activity patterns, food and beverage consumption, and eventually health outcomes. The social-ecological model used by the USDA places individual factors such as knowledge and taste within environmental settings (the food environment). For example, a participant's behavioral changes resulting from nutrition education and a physical activity class and/or workshop. Individual behaviors are then influenced within the sectors, systems, organizations, businesses, and industries. This includes agriculture, marketing, retail, and government influence on the food environment, which are set within social and cultural norms and values. Within these sectors are the settings where individuals eat, learn, live, play, shop, and work. The settings influence those individuals' behaviors through the PSE changes.

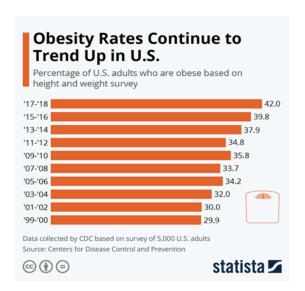
Similar conceptual upstream frameworks, such as that of the Bay Area Regional Health Inequities Initiative, illustrates the connection between social inequities and health, and focuses attention on measures which have not characteristically been within the scope of public health department epidemiology. This framework has been used widely as a guide to health departments undertaking work to address health inequities. Changes to public policies to improve health equity remains an important tenet of NPAP's work in Contra Costa County.



#### VI. National and Local Health Outcomes

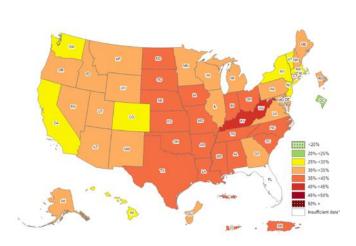
#### National and Local Rates of Adult Obesity

Over 4 out of every 10 American adults are obese, according to a study by the CDC. 1 out of every 10, the study says, is severely obese. This chart shows the percentage of Americans who are obese based on a height and weight survey. The findings come from the Centers for Disease Control and Prevention annual health survey from 2017-2018, where over 5,000 U.S. adults measured their height and weight. For 2017-2018, the survey recorded a record 42 percent of people within the obesity threshold, with over 9 percent within the severely obese threshold (NHANES, 2021). These numbers are up 2 percent and 8 percent, respectively, from the health survey of 2015-2016. According to the CDC, obesity rates in the country have been



steadily climbing for the past two decades. In 1999-2000, the same health survey found an obesity rate around 30 percent – much lower than the 42 percent recorded in 2017-2018 (NHANES, 2021).





Other national data from the 2017-2020 Health National and Nutrition Examination Survey also show nationally, 41.9 percent of adults have obesity, with African Americans adults having the highest level of adult obesity at 49.9%, followed by Hispanic adults with a rate of 45.6%, White adults at a rate of 41.4%, and Asian adults with the lowest obesity rate of 16.1% (NHANES, 2021). In Contra Costa County the obesity rate continues to rise, with over 25% of the adult population with obesity.

# National and Local Rates of Childhood Obesity

The CDC states that childhood and adolescent (ages 2-19 years) obesity rates have reached epidemic levels in the United States. Currently, about 17% (14.7 million) of US children and adolescents are obese. Yet not all communities experience the same level of negative impacts by this health condition, making it also an issue of health equity. Childhood obesity is also more common among certain populations.

According to the CDC, the obesity prevalence was the highest among Hispanic children at 26.2%, compared to 24.8% among non-Hispanic Black children, 16.6% among non-Hispanic White children, and 9.0% among non-Hispanic Asian children (Stierman, 2021). In addition, the CDC revealed that obesity prevalence was correlated with socioeconomic status. Its study found higher obesity rates of 18.9% among children and adolescents aged 2-19 years in the lowest income group, compared to 10.9% among those in the highest income group. Local data, such as the FitnessGram Report, is a reference that allows tracking of the physical fitness assessment scores and healthy zone achievement among students in 5<sup>th</sup>, 7<sup>th</sup>, and 9<sup>th</sup> grade.

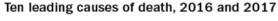
In Contra Costa County, the FitnessGram Report revealed that 36.5% of 5th and 7th grade students are obese, with its highest obesity rates among children of color. Rates are highest among communities of color with over 40% for African Americans, close to 50% for Hispanic and Latinos, and 60% for Native Hawaiian/ Pacific Islanders.

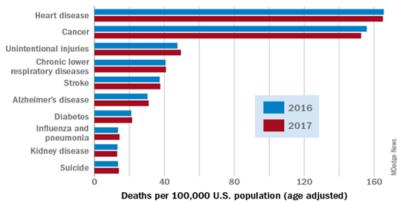
#### National and Local Leading Causes of Death

The CDC further states that obesity has individual and societal consequences for both children and adults as it has the potential to increase the risk of numerous health conditions that lead to illness and death, decrease quality of life, increase risks for mental health challenges, and medical costs. According to the CDC, these conditions themselves can lead to other chronic illnesses and health maladies that impact quality of life such as heart disease and stroke, certain cancers (including colorectal cancer and breast cancer), Type 2 diabetes, and tooth decay; these conditions can also be disruptive to one's work life and contribute to a loss of income for an individual. Psychological



problems such as anxiety and depression, low self-esteem and lower self-reported quality of life, social problems such as bullying and stigma result in impacting children and adolescents overall physical health. In fact, heart disease remains the leading cause of death in the United States, at 165 deaths per 100,000 individuals in 2017 (Morrison, 2015).

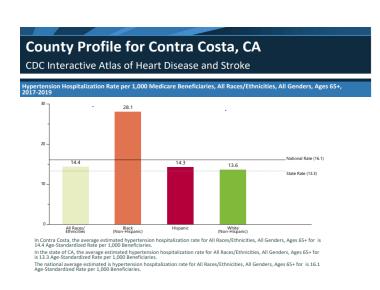




Note: Based on data from the National Vital Statistics System.

Other diseases related to cardiometabolic health saw increases. CDC's National Center for Health Statistics (NCHS) revealed that strokes and diabetes each caused a small but significant increase in deaths in 2017, which saw a 1-year increase to 37.6 from 37.3 stroke deaths per 100,000 Diabetes people. deaths increased to 21.5 from 21 per 100,000 the previous year (NHANES, 2021). Stroke was the fifth and diabetes the seventh most common cause

of death, according to the data brief published by the CDC's National Center for Health Statistics.



The Behavioral Risk Factor Surveillance System (BRFSS), which collects county health data through telephone surveys, along with research from the California Department of Public Health (CDPH), revealed that among adults in Contra Costa, 9.06% have been diagnosed with heart disease within the last 5 years. Moreover, the 2017-2019 Centers for Disease Control's Interactive Atlas of Heart Disease and Stroke estimated the average hypertension hospitalization rate for Contra Costa County adults over 65 years old was 14.4%, with rates for African Americans being the highest. In

fact, according to the CDPH Contra Costa County Health Status Profile for 2018, the leading cause of death is attributed to heart disease. The report also stated in 2019-2020, adults diagnosed with high blood pressure was 27.15%, with 9.87% being diagnosed with diabetes. Rates were higher overall for adults living 185% below the Federal Poverty Level (FPL) illustrating the health disparities that continue to exist for those underserved communities within the county (CDPH, 2020).



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# Health Impact and Access within the Retail Environment

Increasing attention has been given to the role of retail food environments in shaping dietary behavior and obesity risk. Studies show an association between living in a neighborhood near healthy food options and better dietary quality, higher fruit/vegetable intake, and a lower risk of having a higher body weight, even after controlling for individual level characteristics (Pem, 2015). Promoting healthier foods and beverages in retail environments near underserved communities of color who frequently lack full-service grocery stores is one solution to promote health and prevent chronic disease.

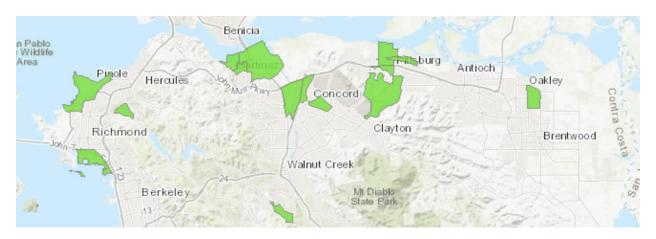
Individual circumstances, such as mobility, financial resources, travel time, and transportation availability, greatly influence food access. The United States Department of Agriculture's (USDA) Economic Research Service defines food deserts as "areas with limited access to affordable and nutritious food." There are various measures of access, including distance to the store, income, and availability of transportation (personal vehicle or public transit). The USDA Economic Research Service estimates that 2% to 5% of the United States population lives outside of walking distance from a supermarket and has no vehicle access. In 20% of rural counties, residents must travel more than ten miles to the closest supermarket or superstore (USDA, 2023). While urban community members may have access to supermarkets via public transportation, they face other challenges, such as the cost of using public transit and significant travel time to and from food retailers.

In the absence of conveniently accessible supermarkets or conventional grocery stores, small stores may serve as the primary retail food source for many community residents. In some communities, small stores are the only place for SNAP recipients to use their benefits. While corner stores stock a range of options (hot and cold prepared foods, packaged items, beverages), their inventories tend to feature high-calorie, low-nutrient items, such as fried foods, snacks, and packaged baked goods. Consequently, the USDA Economic Research Services research states that individuals who rely on these establishments have difficulty obtaining the quality and quantity of healthy food they need to meet dietary guidelines. The items stocked by corner stores often reflect the goods available to them. Independently owned businesses constitute 63 percent of the nearly 153,000 small stores that operate in the United States. Supply chain and distribution channels can make it difficult for these stores to stock healthy items because they may not, given their size, meet distributors' minimum order requirements and may face cost issues, namely that healthy items must be purchased in smaller quantities due to shorter shelf lives and are often more expensive to stock. Additional barriers to stocking fresh food include: a lack of equipment for proper storage, staff knowledge regarding handling and food safety, and understanding of what constitutes healthy food.

Research suggests that communities without access to grocery stores are at higher risk of being overweight or obese (Morland et al. 2006). Instead of grocery stores, these areas are often high in stores that sell less nutritious foods, including fast food restaurants and convenience stores. This combination is especially prevalent in low-income urban areas, and the high density of non-nutritive food options has led some researchers to term these areas "food swamps." Food swamps are abundant throughout Black, Indigenous, People of Color (BIPOC) communities where fast foods and junk foods are more abundant than healthy foods (Hager et al, 2017).



The USDA's Food Access Research Atlas provides data to showcase food access indicators for low-income communities, which map the accessibility to sources of healthy food as measured by distance to a store or by the number of stores in an area. Below is the 2019 food access map for Contra Costa County. The green highlighted areas depict the communities that are low-income and have a lack of access to food, otherwise known as the county's food deserts. From examining the map, low-income communities of East and West Contra Costa County have more than a 1-mile distance to the nearest supermarket with vehicle availability within the county.



Retail environments can make the difference to reduce the obesity rates among all populations by offering foods or snacks that are healthier and can be prepared at home.

# VII. Inequities of Access to Healthy Food within the Social-Ecological Model

#### Marketing and Advertising in Low Income Communities of Color

According to Rudd Center for Food Policy & Obesity; Council on Black Health, U.S. food companies disproportionately target Black and Hispanic consumers with marketing for high-calorie, low-nutrient products including candy, sugary drinks, snacks, and fast food (Durfee, 2021). The more than one billion spent on this targeted marketing exacerbates inequities in poor diet and diet-related diseases in communities of color, including heart disease, obesity, and diabetes. The marketing of unhealthy foods and beverages to youth may contribute to obesity by influencing their food choices, taking advantage of their developmental vulnerabilities. The food and beverage industry spends approximately \$2 billion per year marketing to youth (Kovacic, W. e. 2008). Low-income and BIPOC people in the United States are targeted by the food and beverage industries with disproportionate in-store and media-based advertising. In 2017, food companies spent \$1.1 billion targeting Black, and Hispanic television viewers, and Black teens saw twice as many advertisements for unhealthy foods as their white counterparts (Harris, 2018). A meta-analysis of 22 studies showed that food advertising is linked to increased food consumption in children, particularly after kids have viewed ads for highly processed foods (Boyland et al, 2016).

Furthermore, the food industry pays to place products at checkout. Product promotion, like that referenced above, occurs not just on television and online but also in retail stores. The industry pays slotting fees to get highly processed, often sugar-sweetened products in front of consumers throughout the grocery store (Rivlin, 2016). Research shows that this strategic placement can



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prompt children's requests for foods (Horsley, 2014) and adult purchases (Kerr, 2012). Products at checkout are currently unavoidable and contribute to impulse buys that harm health (Cohen, 2012).

Data from the Journal of American Diabetics stated that empty calories from added sugars and solid fats contribute to 40% of daily calories for children and adolescents age 2–18 years—affecting the overall quality of their diets (Reedy, J, Krebs-Smith SM, 2010). Approximately half of these empty calories come from six sources: soda, fruit drinks, dairy desserts, grain desserts, pizza, and whole milk (Reedy J, Krebs-Smith SM, 2010). Most youth do not consume the recommended amount of total water (Drewnowski A, Rehm CD, Constant F., 2013.) Experts and researchers agree that high levels of consumption of unhealthy foods is a huge contributor to the steep rise in rates of diabetes, high blood pressure, and even strokes.

# Healthy Stores Healthy Communities (HSHC) Survey - Contra Costa County

In 2019 NPAP, the HIV/AIDS and STI, Tobacco Prevention and Alcohol and Other Drugs Program and their partners, including BACR, participated in the CDPH Healthy Stores Healthy Communities (HSHC) campaign whose goal is to improve the health of residents and reduce health inequities by supporting healthy changes in the retail store (including convenience stores and gas stations) environment. Below are the findings from the survey.

# Findings: Access to Healthy Foods in Contra Costa County

Of the 183 Tobacco retail stores surveyed by the HSHC Taskforce, 54% of those stores carried a selection of fresh fruits and vegetables for purchase and 33.9% stocked low-or non-fat milk. In comparison, over 50% of unhealthy sugary drink storefront ads and access to sugary drinks were advertised at the point of checkout. The dearth of availability of fresh, quality, nutritious foods and drinks in the retail store environment is apparent in the data.

# VIII. Community Collaboration for Change

Historically NPAP has engaged local retailers in education and social marketing strategies to improve their store environment and encourage patrons to purchase healthy foods. For example, NPAP has conducted store tours, provided recipes for retailers to provide to their customers, and conducted food demonstrations in the stores themselves.

In addition, NPAP has intentionally developed strong ties and relationships with youth-serving agencies as empowering young people to make healthy choices to improve their quality of life has been a priority for the project. Bay Area Community Resources is one of several youth-serving agencies that NPAP has also awarded subcontracts to engage young people in developing healthy eating habits and physically active lifestyles in the early stages of life.

# BACR and the HOPS Youth Advocacy Team

BACR's program uses a Youth Participatory Action Research (YPAR) model which engages young people to conduct community-based research, analyze data, and use this data to develop policy, systems or other environmental change proposals. In engaging youth as co-researchers,



youth participants gain transferable, real-world skills in project planning, communication, and complex problem-solving.

In 2019, BACR began a project working with high school aged youth in the West Contra Costa Unified School District. The youth wanted to assess the prevalence of sugar-sweetened foods and beverages in the retail environment. The project later became known as the Healthy Options at Point of Sale youth advocacy team.

### Community-based Research and Findings

Incorporating the tenets of the YPAR framework, the HOPS youth gathered information and conducted in-store retail observations throughout Richmond and unincorporated areas of Contra Costa County. The youth also conducted surveys, resident focus groups, and expert interviews in Richmond, North Richmond, East Richmond Heights, and El Sobrante neighborhoods. This two-year effort and assessment resulted in data being collected from 40 grocery and corner stores, 5 focus groups, 8 key interviews (local health providers, educators), and 3 retailer interviews (local grocery and convenience stores in Richmond) and 562 Richmond voters being surveyed.

Their findings revealed that in the unincorporated communities of Contra Costa, 69% of beverages at the local stores' checkout area were unhealthy compared to only 24% healthy options that were available. Similarly, 55.5% of foods sold were unhealthy with chips, candy, and high sugar snacks available at the checkout, while only 4.5% of foods present were healthy with bananas, mixed nuts, and dried fruit available at the point of sale. The remaining 40% of food options was made up exclusively of gum and mints. Overall, the HOPS advocacy team findings revealed that candy made up 35% of all foods sold at checkout.

Focus group and key informant findings had unanimous support for healthy checkout. The main motivators for this support included the acknowledgement that unhealthy items appeared to be targeting children; a concern for long term health effects on youth who consume unhealthy foods and beverages; a lack of access to quality foods in low-income neighborhoods; inaccessibility to healthier groceries stores; and the desire to support local farmers in their produce purchases. Of the 562 Richmond voters surveyed, 77% supported a policy or ordinance of healthier options at the point of checkout. Of the 3 retailers interviewed, all were in full support for a healthy checkout, with their main concerns centered around a perceived lack of demand, short life of produce, but they agreed that consumers should have the choice to eat healthier foods.

#### Community and Partner Collaboration

In July of 2021, the HOPS youth advocates presented their findings and proposal for a healthy checkout policy to the countywide Families CAN coalition, hosted by the NPAP team. Subsequently, NPAP invited HOPS to present at an HSHC Taskforce meeting. Countless other community partners from across the county, several of whom were fellow subgrantees of NPAP, hosted the youth advocates' presentations and provided feedback and letters of support. These included organizations such as Healthy and Active Before 5, 18 Reasons, Fresh Approach, and the UC Cooperative Extension.



#### Youth Advocacy

The HOPS youth advocacy team has presented the findings above to the Richmond City Council and the Contra Costa Board of Supervisors requesting that strong consideration in both jurisdictions be given to a policy that would require that items stocked at checkout consist of 5 or less grams of added sugar per serving, 200mg or less of sodium per serving, and that beverages exclude added sugar and sweeteners. This policy recommendation puts healthier snack options in front of waiting customers. This makes it easier for customers to make healthy choices, while still allowing them to purchase their favorite treats in other store aisles.

## IX. Research Best Practices in Healthy Retail

#### International Research

To address obesity and corresponding metabolic disease, the United Kingdom (UK) now implements restrictions on less healthy food items, which are no longer permitted within two meters of designated queuing area or point of sale (Department of Health and Social Care, 2021). It also disallows the placement of less healthy foods in prime locations such as aisle end caps. The regulations come following years of research throughout Europe supporting strong, consistent policy for healthy foods at checkout.

Before the UK implemented national policy, many supermarkets across the UK piloted voluntary healthy checkout initiatives, reducing the less healthy options stocked at checkout. Studies conducted on these stores found that those with clear, consistent policies were the most effective at implementation (Lam et al., 2018). In the year following the implementation of these healthy checkout policies, there was a 15% decrease in the purchase of less healthy items like chocolate, candy, and chips that were previously stocked at checkout (*UKCRC Centre for Diet and Activity Research*, 2020). A corresponding study by Dutch researchers found that when implementing healthy checkout, the complete substitution of less healthy snacks with healthier alternatives is most effective at reducing less healthy purchases (Huitink et al., 2020).

#### Local Research

In a national study, one in three adults reported purchasing foods from the checkout aisle during their last shopping trip, with lower-income shoppers more likely to purchase from checkout than higher-income shoppers (Falbe et al., 2021). Falbe's research indicates that healthy checkout policies have the potential to impact both nutrition and health equity.

A meta-analysis of sugar-sweetened beverage tax policies, like those enacted in Berkeley, Albany, Oakland, and San Francisco also work to reduce the purchase of sugary drinks through higher prices (Andreyeva et al., 2022).

#### X. Bay Area Healthy Retail Initiatives

Healthy retail is a priority for many leading health organizations and local health departments. In Contra Costa County, NPAP has been a long-standing grantee of the California Department of Public Health's Nutrition, Education, Obesity Program (CDPH-NEOP) Branch to deliver nutrition and physical activity programming to low-income families within the county. The program's funding with CDPH-NEOP grant is aimed to assist families who are enrolled and/or are eligible for SNAP for themselves and their families. Its programming offers SNAP participants with



nutrition education classes, social marketing campaigns, and efforts to improve policies, systems, and the environment of communities. It also encourages efforts to promote retail-based PSE change strategies to encourage storeowners to increase access to and availability of healthy food choices. The SHOP Healthy Here (SHH)- Healthy Retail Recognition Program facilitates partnerships between qualifying small neighborhood grocery stores and local health departments to increase the purchase and consumption of healthy foods and beverages among SNAP-eligible Californians. By providing retailers with a variety of tools, resources, and outreach activities, SHH builds the capacity of retailers to inspire healthy changes among consumers.

Funds granted to CCH-NPAP include the Healthy Refrigeration Grant Program from the California Department of Food and Agriculture to support additional retail environment interventions. The funds support energy efficient refrigeration units in corner stores, small businesses in low-income or low-access areas throughout the state to stock California-grown healthy, minimally processed, and culturally appropriate foods. CCH is partnering with local retail stores to provide technical assistance to retailers to apply for energy-efficient refrigeration for quality produce, connect retail stores to local farms for better quality produce, stimulate the local economy and minimize transportation needs, and marketing strategies, including in-store cooking demonstrations and healthy advertising.

Other local partners, such as BACR and the Berkeley HOPS youth advocacy team, have been awarded by the Healthy Berkeley Community Grants Program to lead efforts to pass the Healthy Checkout Ordinance for the City of Berkeley, the first of its kind in the United States. This ordinance applies to stores larger than 2,500 square feet and prohibits stores from selling food items that contain more than five grams (5g) of added sugars or 200 milligrams (200mg) of sodium per serving or beverages with any added sugar or sweeteners, within three feet of a cash register. The City of Berkeley's ordinance went into effect on March 1, 2021, and enforcement began on January 1, 2022. Youth-led HOPS teams are currently working in the cities of Richmond and Oakland to introduce similar healthy retail policies.

Finally, other Bay Area counties that have passed similar policies include the County of San Francisco that in 2013, adopted The Healthy Food Retailer Ordinance to improve health outcomes by increasing access to healthy food and reducing unhealthy influences such as tobacco, alcohol, and processed foods in underserved parts of the city. Technical assistance and store redesign to support a healthy retail environment are key components of the program.

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