



**CHAMPION  
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PSE Playbook

## INTRODUCTION

### What is PSE Change?

Imagine a healthy community. Families have access to nutritious food, children can safely walk and bike to school, seniors are physically active, and residents have the opportunities and resources they need to lead an active and nourishing life. *Policy, system, and environmental (PSE) change* refers to interventions that affect the upstream causes of health, such as access to nutritious food and opportunities for physical activity. PSE change is vital to creating healthy communities across California.

- **Policy change** involves the creation or alteration of a formal written statement of a government, business, or non-profit that results in a new organizational position, decision, action, or mandatory rule or regulation.<sup>1</sup>
- **System change** involves informal and ongoing change in organizational practices and procedures that results in a new, voluntary way of doing business.<sup>1</sup>
- **Environmental change** directly alters the physical, economic, social, or messaging environment that results in a new level of access or opportunity for the target population.<sup>1</sup>

### How can Healthcare Providers Support PSE Change?

Healthcare providers are a valuable partner because of their health expertise, experience with at-risk populations, and role as a respected member of the community. They can play many roles with varying levels of involvement in order to support PSE change.

Role		Level of involvement	
<b>Connector</b>	Identifies other providers in the community to augment support for an issue	Low	A one-time role that requires a limited time commitment and is not central to the implementation or sustainability of the intervention (e.g. testifying at a public meeting)
<b>Advocate</b>	Advocates for a specific policy, decision, or change	Low	
<b>Amplifier</b>	Writes, speaks, blogs, or is interviewed about an issue	Medium	An ad-hoc role that requires a moderate time commitment and is not central to the implementation or sustainability of the intervention (e.g. attending three task force meetings to help design a policy)
<b>Team Expert</b>	Joins an existing collaboration or partnership or provides subject matter expertise	Medium	
<b>Leader</b>	Identifies or produces resources, convenes stakeholders, or establishes multi-sectoral partnerships	High	An ongoing role that requires a significant time commitment and is central to the implementation or sustainability of the intervention (e.g. securing funding for and helping to design and manage an ongoing physical activity program)

### What is the Purpose of this Playbook?

Healthcare providers and local health departments play distinct roles in making communities healthier, and the two can collaborate to be more effective. This playbook showcases examples of collaboration between providers and local health departments on PSE change. It covers the following topics:

- Healthy food and beverage standards
- Food security
- School wellness
- Safe routes to school
- Structured physical activity

For each topic, the playbook describes the problem, offers a menu of PSE solutions, and highlights a California case study.

Each case study is unique. Readers will notice that interventions fall in multiple PSE categories; providers play more than one role or play the same role repeatedly, making for a larger time commitment than indicated above; and institutions or support teams are sometimes central to the intervention. There is no one-size-fits-all approach to collaboration between providers and local health departments, and this playbook is intended to inspire action rather than prescribe a specific path forward.

DRAFT

## HEALTHY FOOD AND BEVERAGE STANDARDS

### What's the Problem?

- **The food environment affects community health.** Research shows the availability, affordability, and marketing of foods and beverages in stores, restaurants, schools, workplaces, healthcare settings, and other places where residents spend their time have a substantial impact on diet and diet-related disease.<sup>2,3,4</sup>
- **Low-income residents, communities of color, and rural residents are disproportionately exposed to unhealthy food environments and messages; they are also more likely to face barriers to accessing healthy food.**<sup>5</sup> Stores located in low-income communities of color stock more processed foods and alcohol, and carry lower quality produce and meats.<sup>2</sup> Low-income Latino and African American communities are disproportionately targeted by unhealthy food advertising: for example, African American and Latino youth are significantly more likely than white children to see fast food advertisements.<sup>6,7</sup>
- **These community members are disproportionately affected by poor health outcomes associated with diet and physical activity, including obesity, diabetes, heart disease, and dental decay infection.**<sup>5,8</sup>

### What are Healthy Food and Beverage Standards?

For the purposes of this playbook, *healthy food and beverage standards* are a set of requirements that define the types of foods and beverages available and the way they are promoted in stores, restaurants, schools, workplaces, healthcare settings, and other places where community members can get food. Interventions that create healthy food and beverage standards could:

- **Require the stocking, serving, and sale of healthy items**, such as fresh produce, whole grains, low-fat dairy, and low-sodium snacks.
- **Prohibit or limit the stocking, serving, and sale of unhealthy items**, such as sugary drinks, candy, high-sodium snacks, and alcohol.
- **Make unhealthy foods and beverages less attractive** by changing the price, removing signage, or altering the location of these items within the food environment.

### What are Examples of PSE Changes that Use Healthy Food and Beverage Standards?

Type of PSE change	Example
Policy / Environmental	Adopt a municipal policy requiring food stores to place healthy items near the checkout counter instead of unhealthy items
	Adopt a municipal policy requiring food stores to stock a minimum amount and variety of specific healthy foods
System / Environmental	Implement a healthy corner store program incentivizing small food stores to stock and sell healthier foods and beverages while limiting the promotion of unhealthy items
	Pilot a pricing initiative at a hospital or workplace subsidizing the cost of healthy food options
	Change procurement practices at a workplace to prioritize vendors offering low-sodium menu items

### Case Study: Choose Health LA Restaurant Program<sup>9</sup>

Type of PSE change	Provider and team roles	Level of involvement
System / Environmental	Leader / Team expert / Advocate / Connector	High

#### Intervention summary

The Choose Health LA Restaurant Program was established by the Los Angeles County Department of Public Health in 2013 to incentivize restaurants in the LA area to offer healthier menu items.<sup>10</sup> The program’s healthy food and beverage standards include:

- Smaller portion sizes
- A healthy kids menu including fruit, vegetables, and non-fried food
- Water upon request, free of charge<sup>10</sup>

In exchange for offering healthier options, restaurants are given free promotional materials and assistance redesigning their menus.<sup>10</sup>

#### Provider and team role

Dr. Elisa Nicholas, MD, MSPH and Chief Executive Officer of The Children’s Clinic (TCC), led efforts to secure funding from the County of Los Angeles and First 5 LA to operate the Choose Health LA Restaurant Program in Long Beach (*leader*).<sup>11</sup> MPH professionals at TCC reached out to and educated local restaurants about the program (*advocate / connector*).<sup>11</sup> They also partnered with the local health department and Long Beach restaurants to redesign menus (*team expert*).<sup>11</sup> One of the restaurants they partnered with was Kim Sung Kitchen, a Cambodian-Chinese restaurant.<sup>11</sup>

#### Results

Since the program’s launch, 700 restaurant locations and counting have joined the program and agreed to offer smaller portion sizes and healthier menu options.<sup>12</sup> Already, local restaurants including Kim Sung Kitchen are seeing customers regularly order from the smaller portions menu.<sup>11</sup> Staff at Kim Sung Kitchen report eating and feeling better as a result of healthier menu options and smaller portion sizes.<sup>11</sup>

## FOOD SECURITY

### What's the Problem?

- **Food insecurity affects community health.** Food insecurity is the lack of consistent, dependable access to an adequate supply of food for a healthy life.<sup>13,14</sup> Community members experiencing food insecurity make tradeoffs between food and other necessary expenses, such as rent.<sup>15</sup> Research shows food insecurity affects nutrition and childhood development, and can lead to or exacerbate physical, behavioral, and psychological health conditions.<sup>16</sup>
- **Low-income residents, communities of color, and rural residents are disproportionately affected by food insecurity.** Nationwide, African Americans and Latinos are almost twice as likely to experience food insecurity compared to white households.<sup>17</sup> Among U.S. counties with the highest rates of food insecurity, half are located in rural areas.<sup>18</sup> Low-income rural residents, particularly those living on Native American reservations, have high rates of hunger and poor access to healthy food.<sup>2</sup>
- **These community members are disproportionately affected by poor health outcomes associated with diet and physical activity, including obesity, diabetes, heart disease, and dental decay infection.**<sup>5,8</sup>

### What is Food Security?

For the purposes of this playbook, *food security* refers to the consistent availability and usability of affordable, nutritious food among at-risk communities. Interventions that improve food security could:

- **Increase the affordability and supply of healthy foods and beverages for low-income community members** by increasing enrollment of eligible residents and retailers in the Supplemental Nutrition Assistance Program (SNAP, commonly known as food stamps); the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); the Senior Farmers' Market Nutrition Program (SFMNP); and other food benefit programs.
- **Incentivize the purchase of healthy foods and beverages** by subsidizing the price of healthy items bought using SNAP, WIC, and SFMNP benefits.
- **Increase the supply of healthy foods and beverages in food banks** by encouraging donations of surplus healthy items from grocery stores, restaurants, farmers' markets, and farms.
- **Educate community members** about SNAP, WIC, SFMNP and other food benefit programs; available food sources; selecting healthy food; and preparing healthy food.

### What are Examples of PSE Changes that Improve Food Security?

Type of PSE change	Example
Policy / System	Adopt a payment policy at a local farmers' market allowing SNAP participants to purchase produce with their SNAP benefits
Policy / Environmental	Adopt a healthy food and beverage standards policy at a food bank to ensure it only accepts healthy donations
System / Environmental	Implement a voluntary program matching purchases made with SNAP benefits at a farmers' market, allowing SNAP participants to double the

	amount of produce they can purchase with their benefits
	Implement a voluntary program distributing surplus food donations from stores, restaurants, farmers’ markets, and farms to food banks
Environmental	Operate a community garden program enabling residents to voluntarily learn about, grow, and eat fresh produce

**Case Study: Downtown Dinuba Certified Farmers’ Market**

Type of PSE change	Provider and institution roles	Level of involvement
System / Environmental	Leader / Team Expert	High

**Intervention summary**

The Downtown Dinuba Certified Farmers’ Market was established in Tulare County in 2014 to improve food security and increase access to physical activity.<sup>19</sup> It was created by Network Leaders on the Move (NLOM), a collaborative that includes healthcare providers, healthcare networks, the local health department, the City of Dinuba, and other community organizations and government agencies.<sup>19,20</sup>

In order to ensure low-income residents have access to affordable, healthy food, the farmers’ market accepts cash, WIC benefits, and Electronic Benefit Transfer (EBT) payments.<sup>19,20</sup> In California, EBT includes SNAP benefits, California Food Assistance Program benefits, and cash aid benefits.<sup>21</sup> The farmers’ market matches EBT purchases up to \$10, so shoppers receive \$20 worth of produce for only \$10 in EBT benefits.<sup>20</sup> It provides seniors 60 and older with \$20 vouchers to spend at the market.<sup>20</sup> It also offers Zumba dance classes and stations where community members can check their blood pressure, apply for Medi-Cal, or sign up for EBT.<sup>20</sup>

**Provider and institution roles**

The Family Health Care Network and Kaweah Delta Health Care District planned and implemented the farmers’ market (*leader*).<sup>20</sup> Several clinics and providers have staffed booths at the farmers’ market, sharing information about nutrition and opportunities to improve oral and physical health (*team expert*).<sup>20</sup> Participants included Dinuba Orthodontics and Alta Family Healthy Clinic.<sup>20</sup>

**Results**

Since the market was established, it has become a community gathering place and venue for concerts, performances, and workshops.<sup>20</sup> Vendors report more residents pay for produce using EBT benefits than cash, which suggests the market is successfully increasing access to fresh, healthy food for low-income community members.<sup>20</sup>

## SCHOOL WELLNESS

### What’s the Problem?

- **The school environment affects student health.** Research shows that school features – including the types of foods and beverages available, marketing of those foods and beverages, availability of and access to physical education, and design of outdoor activity areas – affect student diet, exercise, academic performance, and behavior.<sup>22</sup>
- **Low-income youth, youth of color, and rural youth disproportionately rely on schools as a source of food and physical activity, yet they are more likely to attend schools with limited healthy food and beverage options, limited physical education programs, and outdated recreational equipment.**<sup>23</sup> Latino children disproportionately experience food insecurity, make up 32 percent of students receiving free lunch, and are less likely to have healthy snacks available at school compared to white students.<sup>24</sup> Schools located in low-income neighborhoods are less likely to have physical education classes or incorporate physical activity practices in the school day compared to schools in high-income neighborhoods.<sup>25</sup> Low-income youth of color have the shortest recess periods.<sup>26</sup>
- **These students are disproportionately affected by poor health outcomes associated with diet and physical activity, including obesity, diabetes, heart disease, and dental decay infection.**<sup>5,8</sup>

### What is School Wellness?

For the purposes of this playbook, *school wellness* refers to any effort to improve a school’s food or physical activity environment over and above changes required by federal law. (Federal law requires schools participating in the National School Lunch Program and other child nutrition programs to adopt a local school wellness policy.<sup>27</sup> These policies include standards requiring healthy foods and beverages in cafeterias and limiting the sale of unhealthy foods and beverages in vending machines.<sup>27</sup> This law is applicable to most public schools.) Interventions that improve school wellness could:

- **Apply healthy food and beverage standards to snacks available at after-school events,** such as club meetings, sports games, or fundraisers.
- **Require or encourage improvements to physical education programs and recreational facilities** to make physical activity more culturally-appropriate, safe, and widespread among students.
- **Establish recess and lunch break policies** maximizing physical activity among students and ensuring recess and lunch breaks are not taken away as a form of discipline.

### What are Examples of PSE Changes that Improve School Wellness?

Type of PSE change	Example
Policy / Environmental	Adopt a comprehensive school wellness policy expanding nutrition requirements to snacks provided at after-school activities
	Adopt a healthy vending policy prohibiting sugary beverages and candy from being sold at after-school events
System / Environmental	Change the recess schedule to increase the amount of time available for students to be physically active during the school day

Environmental	Redesign a playground to make it more appealing, safe, and accessible to students with a range of interests and abilities
	Redesign a school cafeteria, including the display and placement of lunch food, to promote healthy choices in line with the Smarter Lunchroom Movement recommendations <sup>28</sup>

**Case Study: Sacramento Local School Wellness Policy<sup>29</sup>**

Type of PSE change	Provider role	Level of involvement
Policy / System / Environmental	Team Expert	Medium

**Intervention summary**

In 2015, the Sacramento City Unified School District (SCUSD) began updating its school wellness policy to maximize student wellness during the school day and streamline existing district policies.<sup>30</sup> Based on a series of community input sessions, SCUSD drafted a new policy that

- prohibits offering food as an incentive or reward for behavior and performance,
- requires all food offered during the school day, including for birthdays, meets the Smart Snacks for Schools guidelines,
- encourages staff to choose water and use non-branded containers if they drink sugary beverages on school grounds,
- ensures physical activity and recess are not taken away as a form of punishment, and
- requires schools to meet and exceed physical activity requirements by grade level.<sup>30</sup>

Some of these requirements go above and beyond the federal requirements, such as encouraging staff to model nutritious choices. SCUSD is currently soliciting community input on the draft policy and hopes to finalize and adopt the policy later this year.<sup>31</sup>

**Provider role**

Dr. Zoey Goore, a Champion Provider Fellow and pediatrician, has been active in her community for years on issues of food security and obesity prevention.<sup>32</sup> For example, she participated in a community health forum with the school district in 2015.<sup>32</sup> When the new school wellness policy was being drafted, she was asked to join the Coordinated School Health Committee.<sup>32</sup> Dr. Goore provided input on nutrition and physical activity requirements for student wellness as well as up-to-date information on child nutrition standards during a series of meetings with stakeholders including SCUSD staff, parents, teachers, health and counseling staff, food services staff, and expert community organizations (*team expert*).<sup>32</sup>

**Results**

Once adopted, this policy will be unique for encouraging staff to model healthy food and beverage choices for students.<sup>32</sup> Furthermore, SCUSD will join the ranks of school districts maximizing and ensuring equitable access to daily physical activity for all students, including those being disciplined, recognizing it as a critical form of stress release and an important opportunity to promote physical and mental wellness and increased cognitive functioning.<sup>33</sup>

## SAFE ROUTES TO SCHOOL

### What’s the Problem?

- **The route between students’ homes and schools affects their health.** Research shows the quality and presence of sidewalks, bike lanes, and crosswalks, and the accessibility and affordability of public transit all affect physical activity levels and safety for residents in nearby areas.<sup>34</sup>
- **Low-income youth and youth of color walk and bike at very high rates, yet they disproportionately live and go to school in areas that are unsafe for walking and biking.**<sup>35</sup> Low-income neighborhoods are less likely to have sidewalks and streetlights.<sup>36</sup> Low-income students are more likely to walk to school in the face of hazardous conditions, making them more vulnerable to injury and fatality on their way to school.<sup>35</sup> African American children are 50 percent and Latino children are 40 percent more likely than white children to be killed while walking; they are also more likely to be killed while bicycling.<sup>35</sup>
- **These students are disproportionately affected by poor health outcomes associated with diet and physical activity, including obesity, diabetes, heart disease, and dental decay infection.**<sup>5,8</sup>

### What are Safe Routes to School?

For the purposes of this playbook, *safe routes to school* refers to any effort making it safer and more convenient, accessible, and affordable for students and their families to walk, bike, or take public transit to school. This definition is based on The National Safe Routes to School program, which encourages active transportation – such as walking and biking – as a form of exercise and supports bicyclist and pedestrian safety between home and school.<sup>37</sup> The national program incorporates six elements: evaluation, engineering, education, encouragement, enforcement, and equity.<sup>38</sup> Interventions that create safe routes to school could:

- **Create or improve walking, biking, and public transit infrastructure,** including sidewalks, cross-walks, protected bike lanes, and bus stops.
- **Improve safety conditions near schools** by creating street features or enforcement mechanisms that force cars to stop and slow down.
- **Make walking, biking, and public transit more affordable** by reducing the cost of using public transit to get to school.
- **Educate or encourage students** to walk, bike, or use public transit to get to school.

### What are Examples of PSE Changes that Create Safe Routes to School?

Type of PSE change	Example
Policy / System	Adopt a transit agency policy setting aside funding for free and reduced-cost youth bus passes for low-income students
Policy / Environmental	Develop a municipal Bicycle and Pedestrian Plan directing funding to projects that create and improve pedestrian and bicycle infrastructure in neighborhoods with high injury and fatality rates
System / Environmental	Implement a volunteer crossing-guard program providing assistance and supervision at crosswalks near schools before and after school hours to ensure traffic yields to students

	Create remote drop-off locations where students can voluntarily be dropped off by bus or car to safely walk the remainder of the way to school to increase physical activity
	Implement a voluntary walking school bus program where adults walk with groups of children between specific neighborhood locations and school

**Case Study: Cupertino Safe Routes to School<sup>39</sup>**

Type of PSE change	Provider role	Level of involvement
Policy / Environmental	Advocate	Low

**Intervention summary**

In 2015, the City of Cupertino adopted a resolution launching a pilot Safe Routes to School (SR2S) Working Group and initiating a formal partnership between the City of Cupertino and the Cupertino Union School District (CUSD).<sup>40</sup> The goal was to identify and address opportunities to improve safety for students walking and biking to school, while reducing traffic congestion and air pollution.<sup>40</sup> The Working Group has met bi-monthly over the last two years to identify priority projects that meet this goal, including

- creating bike lanes and separating bike paths from cars,
- improving traffic flow and safety along the Foothill expressway,
- improving bicycle infrastructure and connections to schools on Stevens Creek trail, and
- educating community members, including parents and kids, about the benefits of biking and basic bike safety, in order to encourage biking and decrease morning traffic.<sup>40,41</sup>

**Provider role**

Dr. Jyoti Rau is a Champion Provider Fellow and the parent of a 15-year old student who attends a CUSD school.<sup>41</sup> While Dr. Rau grew up biking in Cupertino and Sunnyvale without traffic safety concerns, today she worries about her son’s safety when he asks to bike to school.<sup>41</sup> She also sees the negative impacts of physical inactivity and stress on her patients.<sup>41</sup> Dr. Rau got involved with the SR2S Working Group when she and her son attended a city-sponsored training and learned about bike safety and options for improving bicycle infrastructure citywide.<sup>41</sup> Since the training, Dr. Rau has been attending Working Group meetings and participating as a vocal community member to ensure that her son and his friends can enjoy the same freedom and opportunities for physical activity that she experienced as a young person (*advocate*).<sup>41</sup>

**Results**

The SR2S program is now active at all CUSD schools.<sup>40</sup> Since the launch of the SR2S Working Group, city and school officials have tracked data on student mode choice and found that more students are using an active mode of transportation to get to school: nearly a quarter walk and a tenth bike.<sup>42</sup> As for Dr. Rau, she has noticed her son is more vocal about bicycle safety and is educating his friends and members of his boy scouts troop about it.<sup>41</sup>

## STRUCTURED PHYSICAL ACTIVITY

### What’s the Problem?

- **Access to physical activity opportunities and facilities affects community health.** Research shows the availability, affordability, safety, and convenience of physical activity programs and facilities – such as playgrounds, parks, public pools, or gyms – in schools, workplaces, and neighborhoods affects the amount of exercise that nearby residents get.<sup>43,44</sup>
- **Low-income residents, communities of color, and rural residents disproportionately live in areas with limited access to physical activity programs or safe and convenient facilities.**<sup>45</sup> Low-income areas and communities of color have fewer parks and recreational spaces near their homes than white and high-income neighborhoods.<sup>46,47</sup> Parks in low-income areas are less likely to receive adequate maintenance or have resources for physical activity programs.<sup>43,47</sup>
- **These community members are disproportionately affected by poor health outcomes associated with diet and physical activity, including obesity, diabetes, heart disease, and dental decay infection.**<sup>5,8</sup>

### What is Structured Physical Activity?

For the purposes of this playbook, *structured physical activity* refers to convenient, planned, guided, and culturally-appropriate recreational opportunities in community centers, schools, workplaces, healthcare settings, or other venues. Unstructured physical activity, by contrast, refers to unplanned activity, such as playing games at recess. Interventions that improve access to structured physical activity could:

- **Make physical activity programs more affordable** through free or low-cost guided exercise classes and team sports.
- **Make physical activity programs more convenient** by incorporating exercise and movement into the daily operations and activities of a school, workplace, healthcare setting, or other venue.
- **Increase the number of places physical activity programs can be offered** by creating or improving facilities, or expanding access to public facilities such as school gymnasiums, playgrounds, fields, courts, and tracks.

### What are Examples of PSE Changes that Create Structured Physical Activity?

Type of PSE change	Example
Policy / System	Adopt a school policy requiring teachers to incorporate physical movement into daily classroom activities
Policy / Environmental	Adopt an open use, shared use, or Facilities use agreement making school facilities available for structured physical activity
	Adopt a municipal policy converting vacant land or underutilized parking lots into public open spaces
System / Environmental	Change workplace practice and culture to incorporate voluntary walking meetings into employees’ regular routines
	Create a hospital-based physical activity program offering voluntary dance and yoga classes on hospital grounds

**Case Study: Park Prescriptions: Stay Healthy in Nature Every Day<sup>48</sup>**

Type of PSE change	Provider role	Level of involvement
System / Environmental	Leader / Advocate	High

**Intervention summary**

Park Prescriptions: Stay Healthy in Nature Every Day (Park Rx SHINE) is a partnership between the UCSF Benioff Children’s Hospital Oakland and the East Bay Regional Park District (EBRPD).<sup>48</sup> It was established to alleviate high levels of stress and correlated physical inactivity and chronic disease among the hospital’s 35,000+ low-income patients.<sup>48</sup> The program increases access to nature, which it considers a social determinant of health, for clinic patients by

- bringing nature into the clinic using large wall posters of East Bay parks and open space areas,
- scheduling outings to East Bay parks and providing transportation, food, and trauma-informed programming for children and adults during these visits, and
- integrating questions about access to nature into electronic medical records as a routine piece of health information to collect.<sup>48,49</sup>

**Provider role**

Dr. Nooshin Razani has been a champion for Park Rx SHINE since the beginning. When the hospital was approached by EBRPD, Dr. Razani was already involved with grassroots and community-based efforts to advance environmental justice.<sup>48</sup> Dr. Razani and EBRPD recognized that patients who face chronic levels of stress due to poverty and housing instability stand to benefit greatly from access to green space, and they worked together to envision the program and secure funding from EBRPD and East Bay Regional Parks District Foundation (*leader*).<sup>48</sup> Dr. Razani also convinced other clinic staff to implement the program (*advocate*).<sup>48</sup> In her words, “my role was to be the fanatic.”<sup>48</sup>

**Results**

As of March 2017, Parks Rx SHINE has organized 44 structured parks outings, attracted as many as 75 patients to individual outings, and inspired patients to make 900 total visits to parks.<sup>48</sup> A group of regulars always attends, and clinic staff attend in higher numbers than before.<sup>48</sup> Dr. Razani is the principal investigator of a clinical trial assessing the impact of Parks Rx SHINE on patient health, including stress and physical activity.<sup>50</sup> Her work also led to institutional shifts in 2016, when UCSF Benioff Children’s Hospital Oakland established a Center for Nature and Health to support ongoing research and education on the health benefits of nature.<sup>48</sup> In 2016, REI awarded the center a \$200,000 grant to support clinical research and programming about the outdoors and health.<sup>48</sup>

<sup>1</sup> Definitions adapted from California Department of Public Health, Nutrition Education and Obesity Prevention Branch. 2015. “Policy, Systems, and Environmental Change Resource Guide: Strategies for Increased Access to Healthy Foods, Beverages, and Physical Activity.” Available at:

<https://www.cdph.ca.gov/programs/NEOPB/Pages/Policy,SystemsandEnvironmentalChangeResourceGuide.aspx>

<sup>2</sup> Bell J, et al. 2013. *Access to Healthy Food and Why it Matters: A Review of the Research*. PolicyLink and The Food Trust. Available at: [http://thefoodtrust.org/uploads/media\\_items/access-to-healthy-food.original.pdf](http://thefoodtrust.org/uploads/media_items/access-to-healthy-food.original.pdf).

<sup>3</sup> Partnership for a Healthier America. 2015. *In It For Good: 2015 Annual Progress Report – Executive Brief*. Available at: [http://ahealthieramerica.org/wp-content/uploads/2016/05/2015\\_PHA\\_Annual\\_Report\\_FINAL\\_LR.pdf](http://ahealthieramerica.org/wp-content/uploads/2016/05/2015_PHA_Annual_Report_FINAL_LR.pdf).

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- <sup>8</sup> California Pan-Ethnic Health Network. 2016. *Taking a Bite Out of Oral Health Inequities: Promoting Equitable Oral Health Policies for Communities of Color*. Available at: [https://cpehn.org/sites/default/files/resource\\_files/cpehn\\_oral\\_health\\_brief\\_01\\_16.pdf](https://cpehn.org/sites/default/files/resource_files/cpehn_oral_health_brief_01_16.pdf).
- <sup>9</sup> Case study information included courtesy of Penelope Leon at The Children's Clinic (TCC) in Long Beach, CA.
- <sup>10</sup> Los Angeles County Department of Public Health. "Choose Health LA: Restaurants." Available at: <https://www.choosehealthla.com/eat/restaurants/>.
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