## Title

Merchant Attitudes Toward a Healthy Food Retailer Incentive Program in a Low-Income San Francisco Neighborhood



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## Abstract

In low-income urban communities across the USA and globally, small stores frequently offer processed foods, sodas, alcohol and tobacco, but little access to healthy products. To help address this problem, the city of San Francisco created a healthy food retailer incentive program. Its success depends, in part, on retailers' willingness to participate. Through in-person interviews, we explored attitudes toward the program among store owners or managers of 17 non-participating stores. Eleven merchants were uninterested in the program due to negative past experiences trying to sell healthier products, perceived lack of customer demand, and fears that meeting program requirements could hurt profits. Six merchants expressed interest, seeing demand for or opportunity in healthy foods, foreseeing few difficulties in meeting program requirements, and regarding the assistance offered as appealing. Other municipalities considering such interventions should consider merchants' perspectives, and how best to challenge or capitalize on retailers' previous experiences with selling healthy foods.

## Introduction

Low-resource urban communities in many parts of the world often are characterized as "food swamps," where offerings of unhealthy snack foods, typically produced by large multinational corporations, "swamp out" healthier options.[1-7] Consequences for residents include an increased risk of obesity and its associated health problems,[8-11] and premature morbidity and mortality.[12] One strategy for improving food environments is through interventions that incentivize small stores and convenience stores -- which are more common in low-resource neighborhoods than full serve grocery stores[6,13,14] -- to stock healthy foods.[15] Typically, such stores offer limited selections of healthy foods at high prices and a wide selection of sugar-sweetened beverages and energy-dense, inexpensive, and processed foods, along with alcohol and tobacco.[4,5,16,17] Enhancing fresh produce offerings at these stores may be more important than improving proximity to supermarkets in efforts to increase the consumption of healthier foods.[18,19]

Small store interventions commonly involve a partnership between retailers and local governments and/or non-governmental organizations, in which retailers receive support -- equipment, monetary incentives, training, marketing, and nutrition education -- to increase healthy food inventories.[15,20] A systematic review of such interventions in the U.S. found that they increased availability and sales of healthy foods, and improved customers' dietary health-related knowledge and behaviors.[21] While less attention has been paid to merchant attitudes toward these programs, previous research has shown that small store owners face challenges in creating access to healthy foods. Key among these are perceptions of limited customer interest, experiences with fresh food spoilage and waste, lack of resources such as space and

refrigeration, and limited availability of affordable distribution outlets.[3,20,22-28] Some small retailers have also reported an unwillingness to eliminate or reduce tobacco marketing or sales.[29]

In 2013, San Francisco signed into law its healthy food retailer incentive program, "Healthy Retail SF" (HRSF), to improve access to heathy foods and reduce tobacco and alcohol saturation in low-income neighborhoods. Because local merchants are integral to the success of this and other healthy retail programs, understanding their perceptions is critical. This paper explores the attitudes of corner store owners and managers in San Francisco's Tenderloin neighborhood, the city's largest food swamp, toward healthy retail in general and HRSF in particular. The perspectives of merchants interested in potentially participating in HRSF were compared with those who were not. Special attention was paid to differences in perceived benefits and challenges of changing one's business model to include more fresh produce and other healthy foods and less alcohol and tobacco. Following a review of HRSF's creation, we present the study's methods, results, and implications for other municipalities considering such interventions. We aim to contribute to a growing literature exploring the urban food environment and community-based nutrition and tobacco and alcohol control interventions from merchants' perspectives.

**Background**

In 2011, several NGOs, including neighborhood and faith-based organizations and the city Department of Public Health, formed the Tenderloin Healthy Corner Store Coalition (the "Coalition") to increase access to healthy foods and improve the health of neighborhood residents.[30] The Tenderloin is a racially and ethnically diverse neighborhood home to

approximately 32,000 residents, over a third of whom live below the poverty line,[31] including a sizeable homeless population.[32] It lacks a full-service grocery store and is undergoing rapid gentrification, with the number of corner stores declining from 71 in 2013 to 59 in 2016. Some store owners have reported rents as high as $5000 per month.

The Coalition hired local residents as Food Justice Leaders (FJLs) who received weekly trainings in tobacco control, nutrition, research, and advocacy. The four FJLs (later increased to eight) conducted the first of four detailed annual store assessments in 2013 in two-thirds of the neighborhood's then 71 corner stores, using an observational assessment tool developed by the Department of Public Health. Findings were used to calculate each store's percentage of assessment criteria met (e.g., carrying low fat dairy products and accepting "food stamps") and assign each store a one- to four-star rating based on the percent of standards met. The store ratings and other assessment highlights then were used to create a shopping guide in several languages for local residents.[33] Research, community engagement and policy advocacy by the Coalition and similar collaboration in the city's second largest food swamp helped lay the groundwork for the 2013 HRSF ordinance.[34]

Retailers participating in HRSF agreed to devote at least 35% of their selling space to fresh produce, whole grains, lean proteins, and low-fat dairy products, and to limit the combined alcohol and tobacco selling space to 20% (table 1).[35] They also agreed to tobacco and alcohol advertising restrictions, and to using and sharing findings from a computerized point-of-sale (POS) cash register system to enable evaluation of changes in sales of tobacco, fresh produce and other products over time (table 1).

In return, stores received equipment and assistance over a three-year period. In the first year, program staff and the Coalition partnered with stores to create individualized development plans detailing the provision of new equipment (e.g., a 4 foot refrigeration unit or produce inserts for an existing unit; new shelving for produce and/or healthy snacks; and façade improvements (e.g., new paint and awnings), as needed (tables 2 and 3). Stores without an adequate POS system were offered up to 50% of the purchase price ($1000 maximum) (table 3). In the first year, each store also received technical assistance from a consulting architect, a store redesign, and help with marketing, store branding, and community engagement (table 2). In years two and three, each store received up to $1,500 in additional equipment and services (table 3). Merchant incentives totaled approximately $24,000 (table 3), excluding staff consultations and assistance with community engagement and business development.

To date, nine stores have participated in HRSF, five (of 59 eligible) in the Tenderloin. Although more Tenderloin store owners were interested in participating, city funding was limited in the first three years (it doubled to $120,000 annually in 2017-2018), resulting in some applications being denied. Preliminary data suggest that the first four participating Tenderloin stores have done well, with total unit sales per month of produce increasing 35% in the first year, modest declines in tobacco sales, and higher overall sales.[36] While these findings are encouraging, the extent to which healthy retail programs can transform food environments through scalability depends upon retailers' willingness to participate. Thus, the perspectives of retailers not participating in such programs, and the reasons for their interest or lack of interest, must be understood.

## Methods

This study was approved by UC Berkeley's institutional review board (protocol #2015-01-7045). On seven occasions between February and September 2016, 1-2 investigators (PM, MM, and/or JF) approached store personnel at 24 of the 55 corner stores not participating in HRSF in 2016. (Potential interviewees were identified by Coalition staff, who provided a list of 15 merchants who had expressed interest or disinterest in HRSF; we also approached an additional 9 merchants not listed). Investigators explained their role as researchers, the purposes of the study, the voluntary nature of participation, and how confidentiality would be protected, and requested an interview with the owner or manager. Two owners refused, three were unavailable, and two did not speak English. Of the remaining 17 stores (71% of those approached), investigators interviewed the manager in 2 stores, and the owner in 15 stores, including one in which husband and wife co-owners were both interviewed. Like their fellow neighborhood merchants, approximately 90% of owners and managers interviewed were Middle Eastern or South Asian. The great majority lived in the neighborhood, and for most, English was a second language.

We conducted in-store interviews, which, while allowing for informal observation of the business, required that interviews be conducted expeditiously. We used an open-ended, semi-structured interview format, providing some structure while also allowing participants to influence the pace and content of the interview. Questions focused on interviewees' customer base and changes over time; their knowledge of and thoughts about HRSF; what factors might influence their decision to apply for HRSF; and any changes they had made to promote healthy foods or beverages or reduce tobacco in their stores. Each participating merchant was given a $40 gift card as thanks for their participation.

Five interviews were audiotaped and transcribed by experienced transcribers. For the remaining interviewees who declined to be audiotaped, investigators took written notes during interviews, including paraphrased and direct quotes, and expanded upon them after leaving the store. We imported interview transcripts and notes into NVivo 10[37] to assist in coding and data management and analysis. JF developed a codebook and coded the data in NVivo, identifying themes inductively, based on repeated readings of the data. MM and PM independently coded the data, with all three noting and reconciling any discrepancies among coders.

## Results

### Merchants uninterested in participating in HRSF

The 11 merchants who were uninterested in HRSF reported owning (or in one case, managing) their corner stores for periods from 8 months to 35 years. Most described their clientele as neighborhood residents (many without kitchens), either single people or families with children, and some described tourists and the homeless as occasional or frequent customers. Most stores sold soda, snack foods, dry and canned goods, and some dairy products, as well as a small variety of fresh produce. All but two reported selling tobacco, and all but three reported selling alcohol.

*Perspectives on the local community*

Many of the merchants uninterested in HRSF remarked that Tenderloin residents faced challenges, including poverty, homelessness, and alcoholism and drug addiction. Some saw their role as trying to promote health, e.g., stocking healthier foods to “help my customers.” One merchant gave “some credit or even free food if [customers] need it” (Owner, store #11)

while another, who felt he “had” to sell tobacco, tried to discourage cigarette purchases by posting before and after pictures of a smoker suffering from lung cancer (Owner, store #13).

*Lack of customer demand for fresh produce*

Retailers offered several reasons to explain their lack of interest in HRSF. Among the most common was a perceived lack of customer demand for fresh fruits and vegetables. Many reported previously stocking such items, but failing to sell enough to cover costs, partly because of the short shelf-life. For example, one of store #1’s owners stated, “I buy $15 bags of [produce] and sell maybe 2-3 pieces and put the rest in the garbage.” Similarly, the owner of store #13 said, “The little fruit I carry mostly goes bad.” Another store owner had recently transformed his store into a café and specialty market. He explained that the change was due to a failed attempt to sell a variety of fruits and vegetables and fresh meat. “It [didn’t] work. I threw out the fruits and vegetables and chicken. … Now I sell pastries” (Owner, store #2). Another store owner found that only certain fruits sold: “I started stocking produce – apples, bananas, oranges, berries. The only things that sell are cut up watermelon and cantaloupe. Others I have to buy by the box, and I end up throwing half of it out. I lose money” (Owner, store #12).

Interviewees offered several explanations for limited customer demand. One was the availability of less expensive or superior sources of fresh produce nearby. Several interviewees pointed to giveaways by local churches as an alternative source of fresh food. For example, the owner of store #1 stated that “The church gives fruits and vegetables daily from donations from Costco and CVS to the residents….Why would people buy produce from us if they can get it for free?” The owner of store #11 agreed, asserting that “not enough people buy [fresh produce]

here because they get them at [a local church].” Other competitors suppressing demand for corner store-supplied produce included supermarket delivery services and nearby specialty produce or farmers’ markets selling less expensive produce. The owner of store #1 stated that “There are a lot of Asian residents around here. They buy their produce in Chinatown, not here. They should support their neighborhood, but…maybe there are vegetables there that they can’t get here. We would sell it if they would buy it.”

In pointing to free or lower-cost competitors crowding out their ability to sell healthy products, store owners implied that price was a barrier for some neighborhood residents. Only two made this point explicitly, however. The owner of store #15 argued that Tenderloin residents “barely have money to pay for rent, let alone healthy food….Little Debbie’s [cupcakes] cost under $1. That is something people can afford.” Similarly, the owner of store #12 stated that “people seem interested in buying [fresh produce], but when they ask the price, they say it’s too expensive.”

*Inability or unwillingness to meet HRSF requirements*

Retailers also attributed their disinterest in HRSF to their inability or unwillingness to comply with program requirements. Space was problematic for some, who were either uninterested in reducing space allotted to tobacco and alcohol, or who did not want to make room for healthy products. For example, the only store owner uninterested in HRSF who reported positive experiences trying to sell produce, explained, “It’s good to have healthy food, but space is a problem” (Owner, store #4). He had no desire to limit the amount of floor space devoted to alcohol and tobacco products. Similarly, the owner of store #9 said that he had no room for other products because the “store is completely full.”

Other retailers objected to the increased costs that complying with the program might incur. For example, the owner of store #15 stated that "We all want to be healthy, sell healthy" but explained that "our store cannot handle the water and electricity" associated with a produce refrigerator. The owner of store #11 simply stated that he could not afford to meet HRSF requirements, noting that he already spent "$7,000 for [a] refrigerator just to keep some things [customers] want like milk [and] lettuce." He asserted that he wanted to "help my customers, but this is the worst corner….I can't afford [it]."

*Vendor difficulties*

A final reason offered for merchants' lack of interest in HRSF was concern about procurement and stocking of healthy food due to local food vendors' inflexibility. The owner of store #15 complained that "the vendors around here only allow us to return 10% of what doesn't sell. … Vendors need to come in and work with us. Put up their stands, take back what doesn't sell." Some vendors of perishable healthy prepared foods also required a minimum weekly order of $20, too much for merchants for whom "only 20%" of their products "sold quickly" (Owner, store #15).

**Merchants interested in participating in HRSF**

The six merchants who expressed an interest in HRSF had owned (or, in one case, managed) their stores for 3.5 to 30 years. One had applied to the program, one planned to apply, and the remaining four were considering it. Those considering applying mentioned limited time, a need to consult with business partners, and a need for more information on the potential financial impact of participating as reasons for delaying their formal commitment to HRSF. The merchants described their clientele as mostly neighborhood residents, and,

occasionally, tourists. All of the stores offered a small selection of fresh fruits and vegetables, along with more typical offerings of sodas, sugary snacks, and dried and canned foods. Five of the six stores sold tobacco products, but only one sold alcohol. The manager of the store that did not sell tobacco stated that the owner thought it was "better for the neighborhood" not to (store# 17). Merchants did not think it would be difficult to comply with HRSF's healthy foods/tobacco/alcohol space requirements.

*Perspectives on the local community*

Like their counterparts who were uninterested in HRSF, merchants who were interested in the program acknowledged challenges facing Tenderloin residents, including drug addiction, poverty, and homelessness. Some also saw their role as helping residents by offering them healthy food choices and not selling alcohol and/or tobacco. Several mentioned that they started to sell healthy products, such as produce, at customers' request.

*Customer demand for fresh produce*

Unlike the retailers who were uninterested in HRSF, those who were interested saw a demand for or potential opportunity in fresh produce or other healthy foods. For example, the owner of store #6 thought that if he sold more fresh fruits and vegetables, "I'm going to generate more revenue….I have this little bit here, but it's not enough." He explained that other stores in the area "close early or open late," sending customers his way in search of fresh produce. He seemed unconcerned by experiences with imminent spoilage from fruit that did not sell, noting with a smile that "when it goes…a little soft, then I…start eating [it]." Similarly, the manager of store #7, who already offered some organic products and fresh produce, explained that he was interested in offering more because "I know it would sell and I know I

should have it." He also seemed unconcerned by a recent experience with stocking tofu at customers' request, and only selling a few: "I think it will pick up once…people know that I have it." One owner, despite already selling some organic foods to "look different from other stores," did not use this experience to explain his interest in HRSF; instead, he pointed to the science behind HRSF: "I'm pretty sure it won't hurt sales because there's a study on this" (Owner, store #3).

*Interest in specific aspects of the city's healthy retail program*

Merchants also explained their interest in HRSF by highlighting its appealing aspects. For one merchant, the free shelving and refrigeration unit were a draw (Owner, store #14). For others, it was the marketing components, specifically, free advertising and guidance on in-store promotions. The owner of store #3 said that he had "strong hope" that the program could teach him "how to promote the healthy stuff." Another merchant saw HRSF-related publicity as a way to "bring more people" into the store (Owner, store #16). He also appreciated the free tastings associated with the program, since they increased the likelihood that customers would later purchase those same (more expensive) products.

*Support for program goals*

Merchants interested in HRSF also expressed support for the program's ultimate goal, to offer community residents healthy foods. One merchant described the program as "a noble idea" (Store #16). Another saw it as "very good for the stores [and] for the neighborhood" (Owner, store #17), noting that the Tenderloin was inundated with alcohol and tobacco retailers and arguing that "we need more healthy stores." The owner of store #14 agreed, stating that he was interested in applying to HRSF in part because it would help the community get "more

healthy foods." One merchant also explained that selling healthy products could have a positive impact on both community residents and retailers: "[Selling healthy foods is] awesome because people come the first day, they get a banana, they get a watermelon, and the next day, [they say] 'I like that!'…so they buy more of it. It makes me happy to see people like what I bring to the table" (Owner, store #17).

## Discussion

We found that Tenderloin merchants who were uninterested in participating in the city's healthy retailer incentive program raised objections to the intervention that were similar to those reported by small store owners and managers elsewhere.[3,20,22-28] As in these studies, the biggest barrier for Tenderloin corner store owners was a perceived lack of customer demand for fresh produce. Experimentation with trying to sell these products had taught them that stocking healthy foods was risky, and likely to result in waste, and, more importantly, financial losses. In contrast to other studies' findings, however, a perception of customers' inherent disinterest in heathy food was not a major contributor to lack of demand.[3,28] Rather, merchants often noted free or lower cost alternatives available in the neighborhood which, however well-meaning and necessary, posed a barrier to sales.

Some concerns retailers raised could likely be reduced or overcome by retailer education efforts. Such efforts are a key component of HRSF, and include informational meetings that highlight lower cost sources of fresh produce and the higher profit margins of these products than of alcohol and tobacco,[38] and one-on-one conversations between merchants and FJLs about ways to improve store ratings in the neighborhood shopping guide.

Highlighting how the program can address what may have gone wrong with merchant experimentation with selling produce (e.g., inadequate marketing of new products) may also garner program interest. Given the key role of personal experience in dampening merchants' enthusiasm for healthy retail, however, some may wait for more direct evidence – such as their competitors' thriving under HRSF – before making a commitment. The recent increase in the HRSF budget should enable more retailers to do so.

Other merchants did not share the same concerns about customer demand for healthy products and expressed interest in participating in HRSF, even, in some cases, despite comparable experiences with slow sales and the short shelf life of fresh produce. They saw no difficulty in complying with HRSF requirements, particularly those concerning alcohol sales, which most avoided, and saw a greater demand for healthy items, viewing participation in HRSF as an opportunity for more revenue. Their customer base may have been slightly different from those merchants who experienced limited demand for fresh produce. These retailers may also have been less risk averse or more willing to try to compete with the small number of neighborhood retailers that sold a variety of produce. Their enthusiasm for HRSF's goals may have also played a role in their willingness to consider making a larger investment in healthy retail.

Without additional data, it is difficult to deduce from this study whether, on balance, the merchants who were reluctant to participate in HRSF were behaving economically rationally. The financial incentives offered by the city (averaging the equivalent of $8000 per year over 3 years) may not have been compelling to those who relied heavily on alcohol and tobacco sales to pay a $5000 monthly rent. Similarly, as suggested by several interviewees, the

long-term utility costs associated with selling fresh foods may have outweighed the immediate financial gains. POS data gathered by the program may help shed light on this question, with baseline data on sales patterns providing some insight into retailers' financial calculus.

Regardless of their interest or lack of interest in HRSF, many retailers expressed concern for the health of community residents, and manifested it in their business practices. This was evident in their willingness to stock healthy items requested by customers on a trial basis; to extend credit to customers to buy food; and, in some cases, to decline to sell alcohol or tobacco, or to discourage its use). The decision not to stock tobacco or alcohol products may impact their bottom line; indeed, some Tenderloin merchants asserted that tobacco was a necessary component of their stores (although, as noted above, profit margins for fresh produce are higher than those for cigarettes).[38] Retailers in other cities have made similar decisions to end tobacco sales due to health concerns,[39-41] but they have typically not been small store owners in low income communities, suggesting that such concerns impact a broader range of retailers than previously observed.

Retailers' concern for the health of the local community suggests that there is a foundation on which to build retailer interest in HRSF. It is also consistent with findings of a substantial increase over four years in the number of Tenderloin corner stores – even those not participating in HRSF -- improving their healthy food offerings, as measured by Coalition store assessments.[34] As additional data on the impact of HRSF on participating stores become available, more merchants may be willing to make a formal commitment to healthy retail.

Our study has limitations. The data came from a small number of merchants in one San Francisco neighborhood, and are thus not be generalizable to the broader city population of

corner store owners. We were also unable to interview non-English speakers, several of whom where Asian produce store owners, who may have had different perspectives on HRSF. Despite explanations of our role as university-affiliated researchers to interviewees, some interviewees may have assumed that we were representatives of HRSF, resulting in socially desirable responses to some questions, particularly among those who expressed interest in HRSF.

Despite these limitations, our study offers insight into the challenges posed by small store interventions to change the food, alcohol, and tobacco environment. Other communities considering such interventions should consider merchants' perspectives, and how best to capitalize on or challenge retailers' previous experiences with selling healthy foods. Merchants' interest in promoting community health is also a resource that may be leveraged to try to enhance merchant support for an intervention.

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Table 1. Examples of commitments made by Tenderloin corner store owners participating in Healthy Retail San Francisco, 2016

| **Category** | **Commitment** |
|---|---|
| Food & beverages | Stock at least 1 type of low-fat (1%) or skim milk (non-fat milk). Stock at least two lactose-free or non-dairy options, such as lactose-free milk, soy, rice, or almond milk. |
| | Based on consumer demand, increase the amount of beverages with no added sugar. No added sugar beverages include: bottled water, sparkling water, coconut water, milk, and 100% juices. Work towards 1/2 of all of juices sold being 100% juice (100% juice is labeled and will have no added sugar). Over time, decrease advertisements for sugary beverages. |
| | Stock at least 10 varieties of fresh fruits and 10 varieties of fresh vegetables, not including potatoes, onions, lemons and limes. At least one vegetable must be a dark leafy green (not including iceberg lettuce). Produce should meet top quality USDA standards, and be displayed in a designated space off the ground, and not in torn or tattered boxes. |
| | Stock 5 types of low-fat and low-sugar (< 10 grams of sugar and < 10% daily value of fat) savory and sweet snacks and/or grab ‘n go items. |
| Alcohol & tobacco | No violations of alcohol or tobacco laws in the duration of the 3-year project. |
| | No displays of any exterior alcohol or tobacco ads outside nor interior alcohol/tobacco ads near kids (below 5 feet). |
| | Over time, agree to take down tobacco and alcohol ads and replace with positive healthy promotion posters/ads or similar items (i.e. shelf talkers) |
| | No resources from this project (including schematics, technical assistance, shelving or refrigeration) may be used to introduce or expand any alcohol or tobacco products or product displays in the store. |
| General | Use and share findings from a computerized point-of-sale cash register system to enable evaluation of changes in sales of tobacco, fresh produce and other products over time. |

Table 2. Examples of commitments made to Tenderloin corner store owners participating in Healthy Retail San Francisco, 2016

| **Goal** | **Objective** | **Sample Activity** |
|---|---|---|
| Physical store redesign for healthy retail | Design more vertical space and square footage for healthy products | Create new store schematic and review with store owner |
| | Remodel the store | Plan and implement store "reset" to install equipment, stock shelves, replace tobacco/alcohol/sugary beverage ads with health promotion materials |
| | Increase inventory of healthy food products | Meet with produce consultant, set up store vendor account, purchase produce based on customer survey |
| Increase sales and profits by engaging community and building awareness of healthy food | Evaluate product offerings | Conduct store standards assessment and provide feedback packet to store owner |
| | Increase community awareness, patronage, and assess customer preferences for healthy food | Draft and conduct customer survey, prepare report, and recommend new healthy products to store owner |
| | Expand customer base | Complete 2-4 marketing activities (e.g., flyering, promotions, taste testing) |
| Business strengthening | Ensure longevity of business in current space | Obtain a Disaster Recovery and Business Continuity Plan |
| | Increase skills in business fundamentals | Training on sales and customer service |
| | Improve financial management of business, inventory controls and sales tracking | Seminars on bookkeeping, accounting, budgeting, and financial management for small business |
| | Learn how to establish business credit | Counseling and assistance in accessing capital and preparing loan applications |
| | Develop skills with produce handling and merchandising | Training on produce handling and maintenance |
| | Evaluation and follow up | Monthly report card visits to evaluate performance |

Table 3. Financial incentives offered to merchants participating in Healthy Retail San Francisco, 2016

| **Service** | **Cost** |
|---|---|
| Equipment and consulting (e.g., store redesign) | $20,000 |
| Point of Sale system | Up to $1000 |
| Incentive associated with annual review | $3000 ($1500 each in years 2 & 3) |