

Understanding the Value of Academic Research Partnerships with Food Retailers

Healthy Eating
Research

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Introduction

Americans typically purchase almost two-thirds of their calories from large grocery stores [Figure 1].¹ The COVID-19 pandemic limited away-from-home food consumption opportunities and shoppers increased spending at supermarkets, discount retailers, and convenience stores by 19.3% in March 2020, compared with March 2019.² The pandemic has also exacerbated the challenges faced by people managing nutrition-related chronic conditions, including obesity and type 2 diabetes. These patients have suffered disproportionately high rates of severe illness and mortality from the virus.³ The correlation between the consumption of ultra-processed products and poor health outcomes has been well documented, so it is important to examine the practice of promoting these products in supermarkets.⁴

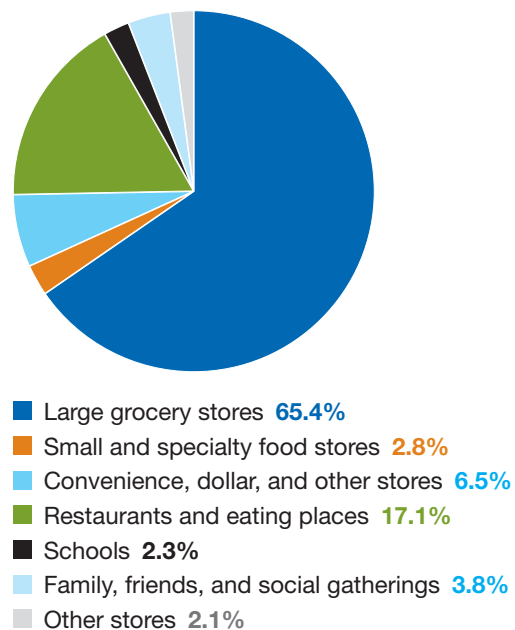
Academic researchers and food retailers share a mutual interest in understanding consumer behavior related to grocery shopping and can benefit from collaborative studies. To derive the greatest impact, researchers should have a basic understanding of food retail business dynamics. This brief shares some aspects of food retailing that are common practices across the mainstream supermarket industry, and sheds light on the types of interventions that are more likely to be adopted, scaled up, and supported by grocers because they help improve business. In addition, it explores topics related to research in the food retail environment, including motivations to partner, outcomes of mutual interest, and challenges research teams may face when collaborating with retailers.

Why academic research partnerships with food retailers are important

An increasing number of retailers in the United States and abroad are committed to supporting positive health practices as a matter of good business and competition.⁵ Some supermarkets offer the services of registered dietitians to help shoppers with basic nutrition, health condition management, and allergy concerns. Others offer product navigation services such as Guiding Stars, which helps shoppers make informed, healthy choices from among the tens of thousands of products a typical supermarket offers.⁶ Retailers offering these types of services have raised the bar for the industry, setting consumer expectations that grocery stores will support shoppers' efforts to eat for a healthy lifestyle.



Figure 1
Share of Household Calories by Food Source



Note: "Other" includes food from work, food banks, Meals on Wheels, and own production (gardening, hunting, and fishing).

Source: USDA Economic Research Service estimates using data from USDA's 2012–13 National Household Food Acquisition and Purchase Survey (FoodAPS).

Despite pressure to support healthy choices, these businesses are also under tremendous pressure to meet quarterly reporting requirements and shareholder demands. Grocers must strike a delicate balance when determining agreements with suppliers and investing in programs, organizations, and services that support healthy communities. According to Nielsen, 66% of consumers surveyed said they were willing to pay more to support a business that is committed to positive social impact. Therefore, investing in relationships that support healthy communities is a solid business strategy.⁷ But if grocers are not profitable, they will not have funds to support food banks and other vital outreach services.

Engaging with researchers can provide retailers with valuable insights. For example, they can learn more about the challenges faced by low-income shoppers who are trying to prevent their pre-diabetes from escalating into full-blown type 2 diabetes. In another example, retailers may not recognize the impact that conspicuous displays of cheap snacks can have on vulnerable communities. When high-calorie, low-satiety sweets are all that parents can afford for school snacks, students may gain excess weight and struggle to focus in class, contributing to disparities in health and education.⁸ It's not to say that retailers should shoulder the entire burden for reversing childhood obesity, but this is an important perspective for retailers to hear.

Inviting retailers to the research table enables everyone to learn and benefit. Finding new ways to meet consumer

demand for nutritious foods can help retailers build their business and working with researchers may provide insights that advantage them over their competitors. By the same token, understanding the nuances of food retailing can help researchers identify interventions that are likely to be adopted by grocers.

Types of outcomes that interest food retailers

At the end of the day, retailers want to know what will help their shoppers thrive in a way that also makes their businesses thrive. For them, outcomes of a successful intervention might include increasing customer loyalty, shifting occasional shoppers to become more frequent shoppers, and increasing basket size. If study participants increase the number of products they purchase or the total value of their purchases increases as a result of an intervention, it may be worth replicating in other markets or scaling up for chain-wide implementation. Increasing consumers' trust in a retailer and reinforcing the retailer as a destination for solving common consumer challenges like balancing cost, convenience, and nutrition may be valuable, too.

Researchers should consider offering a summary or presentation of research findings that includes implications for their retail partner to further enhance the relationship. They may also offer to help retailers scale up successful interventions for meeting consumer needs more efficiently.

“Why can't supermarkets just display fresh produce in the checkout lane instead of candy?”

Frustrated by the persistence of nutrition-related chronic illness, public health advocates often challenge food retailers to defend decisions to display unhealthy products in high-traffic locations. Although supermarkets are increasingly on board to help shoppers find more nutritious foods, it is not as easy as it may seem.

Take, for example, the idea of replacing checkout lane candy with fresh fruit.

Produce requires costly care from farm to store, including an unbroken cold chain for some products. Produce is perishable, which results in “shrink,” or loss of product that has been paid for by the retailer but cannot be sold or even donated (e.g., moldy raspberries).

Labor for products like ready-to-eat fruit cups can add up, too. Grocers can cull from packages or displays of produce that are partially damaged to create these fresh offerings but it is time-consuming work that may not pay off. If those parfaits don't sell today, they're fuel for the local farm or biodigester tomorrow. Although retailers are increasingly

committing to help reduce food insecurity and diminish high-carbon food waste, they are challenged by the need to preserve freshness and donate surplus produce.

In addition, supermarkets often source produce from multiple suppliers of the same product. Most of those suppliers cannot afford to compete with services offered by consumer-packaged suppliers, reducing the likelihood that those fruit cups will end up in the checkout lane.

At the other end of the spectrum, candy, salty snacks, and soda are shelf-stable and typically come with manufacturer-provided delivery, fixtures, and labor. Many products are “direct store delivery,” which means that manufacturers foot the bill for transporting products from production to retail locations. For beverages, some suppliers pay retailers to display their branded coolers, which are stocked by delivery staff, at checkout. Under some agreements, suppliers retrieve unsold product to donate or discard without further retailer risk or investment. All these extra services save retailers supply chain costs, capital investments, and labor.

Understanding food retail business dynamics

Retailers question how to stay profitable and meet growing consumer demand for healthier choices when less healthy foods sell in high volumes and bring in income not always obvious to the outside. In general, manufacturers offering more nutritious, less processed foods are smaller and less able than bigger, more established brands to pay “slotting” fees or “vendor allowances” that many grocers charge for precious shelf space.

Retailers make trade-offs between new products and well-known, reliable sellers. Getting creative with new items can keep shoppers interested and increase basket size. But, it is also a risk as retailers can find themselves stuck with surplus trendy items that do not sell as well as traditional items.

In addition, consumers tend to be more aspirational than consistent when shifting to more nutritious diets. Even the most health-committed shoppers continue to buy premium ice cream and chocolate, according to consumer segmentation studies conducted by Natural Marketing Institute and Hudson Institute. Consumer groupings less dedicated to healthy behaviors are likely to be more susceptible to the lure of prominently displayed, heavily discounted, and tasty foods.⁹ To maintain space on the shelf, products must move fast enough to justify keeping a slot where a more profitable item could be offered.

Key considerations and challenges to partnering with large retail organizations

Organizational Differences

Retailers live in a different world than their academic research partners. Even the most well-intended retail partners are focused on their own deadlines and sales results. It may not even be clear to the research team how they can connect with the right partners needed to execute the study. Sometimes the needs of the study fall outside the expertise of a primary contact and identifying specialists both inside and outside the organization may be needed to create special materials or access data. It's hard to say exactly how much time is required for this phase, but researchers should build additional time into their timelines and expectations.

Data Use

Assuming the right person is identified and participation in the study is supported by corporate leadership, there can be push-back from the legal department about data use and security. Even though many retailers are publicly held and must disclose quarterly results, retailers do not easily part with detailed sales data that could expose their pricing strategies to competitors or be misinterpreted by critics. Researchers should explain that they deal with extremely sensitive, personal data as a matter of course and have reliable systems to protect privacy and ensure security. However, they should also be prepared for hesitation from retailers.

Participant Recruitment

As a study takes shape, it's important to consider together how participants will be recruited. Some retailers have “non-solicitation policies” that prevent activities like distributing leaflets for political, religious, or other reasons and selling gift wrap or candy for scouts or sports. It may not be clear whether asking shoppers to participate in a survey or study violates such policies, but settling the issue may take additional time. To maintain communication with study participants and connect them with purchase trackers, it may be necessary to enroll people in loyalty programs offered by food retailers.¹⁰ It's critical to assure the retailer that no personal identifiers are vulnerable to security breaches.

Understanding Purchase Data

Understanding purchase data is another challenge. First, it is not always clear how to classify a food product. For example, some items sold in the produce department are not single-ingredient items.¹¹ There are products that contain fresh produce but also have other ingredients (e.g., custard, frosting) that render them desserts rather than healthy snacks. By the same token, many items found in the center of the store do, in fact, support good health. Nutrient-rich brown rice in a microwavable pouch may be a packaged, “processed” product, but it's also a solid choice for a convenient, health-promoting side dish. A nutrient-density guidance program, such as Guiding Stars, can be helpful in identifying foods to encourage across categories.

Price variability is another factor to consider when analyzing purchase data. Many retailers price common items in relation to how their competitors price them. For example, a discount store may offer a popular item at a price that a mid-tier store would sell for X percent more than the discounter, but Y percent less than a premium player. These “loss leaders” are products sold at a loss to attract customers.¹² Retailers hope that shoppers will come in not only for these heavily discounted sale items, but for their entire shop, too. Some retailers argue that if they didn't sell these items at such a low price, then the store down the street would, and they'd lose shoppers for that sale item plus the whole basket. This is a helpful perspective for researchers to understand.

Publishing and Acknowledgment

Retailers participating in a study may have concerns about agreeing to publication of results before they know what those results are, so it is important to discuss publication rights up front. What if the findings are unflattering to the retailer or to certain manufacturers whose business is important to the retailer? Disguising a company's name in the publication of a study may provide some cover, but it is possible to narrow down the likely participant by process of elimination. On the other hand, if findings suggest the retailer is doing something right, the company's reputation could benefit by going public with the results. Partnering with researchers might be an avenue to earning recognition for making a positive impact. Once a study has been funded, starting the process for an agreement is a good next step.

What makes a good retail-research partnership?

Engaging with Retailers Early

It's better to build retailer perspectives into a concept during the research phase than to propose legislation that does not consider the impact to retail and risk a lobby effort to prevent its passage. For example, to understand which strategies might enable SNAP-eligible shoppers to choose more nutritious foods, input from supermarkets during the research phase could be quite valuable.¹³ Collaborating at each study phase and keeping an open dialogue will produce the most valuable learning for all parties.

Asking Questions and Adapting Interventions

Alignment on project scope and structure is essential. Approaching a retailer with an idea about an intervention may help capture their interest, but it's important to keep an open mind on how a study might work within a supermarket organization. Asking questions about the structure of the retail markets will help researchers understand how the business is managed and how an intervention might best be designed. For example, a study design might seek to include stores serving neighborhoods within a certain range of median income, but the retailer might organize its stores into districts that include some stores that meet the study criteria and some that don't. Working with multiple district managers can be complicated, especially if the study affects only select stores within the districts. In addition, rolling out an intervention for just a few stores may be more challenging than intervening chainwide. Supermarkets are built for efficiency, so adding a step to a checkout procedure may cause a store to fall behind others on target metrics, such as the time it takes a cashier to complete a transaction.

There are operational matters to consider together in the study design phase. A commonly requested intervention involves re-arranging the way a certain category is displayed in the store. Take, for example, the "commercial bakery" aisle, typically found in the center of the store, separate from the fresh bakery department. Researchers might want to explore whether shoppers make different choices if all whole-grain breads are displayed at eye level.¹⁴ Like the products typically displayed at checkout, these are "direct store delivery," meaning that manufacturers deliver directly from their facilities and their employees stock the shelves, rather than store employees. Changing the product display in this aisle would require complex communications with numerous bakery suppliers. In some cases, suppliers will have paid for their shelf space and such a disruption might bring long-term agreements into question. These types of interventions are not necessarily impossible, but researchers should ask retailers up front what's behind their product display strategies in order to minimize disruption.

Assembling a Multi-Disciplinary Study Team

Assembling a diverse, cross-functional project team of people who can stay engaged on an ongoing basis is important for gaining traction and seeing a study through to completion. Different viewpoints are often needed to successfully address challenges.

For example, tracking purchases made by test and control groups using different point-of-sale technologies can be difficult. Older systems may require cashier engagement for intervention activities. However, there is high turnover at the front of store, so training for new procedures can be cumbersome, especially if associates are required to do things that differ from regular procedures and only applies to a small sample of shoppers.

Input from project team members with in-store experience can illuminate solutions that may not occur to corporate office dwellers. Leveraging their practical knowledge and ability to find real solutions that benefit customers can be the difference between study implementation and conference room frustration. Persisting through retail and technical hurdles can test the patience of the steeliest of teams. The confounding influences that drive consumer purchasing behavior, paired with the increasing complexity of the food retail ecosystem, creates a challenging path for researchers and their retailer partners. Returning regularly to the study goal can keep a team on track and motivated to push through resistance from people or systems.

Summary

Like the consumers they serve, retailers are trying different approaches to shift toward healthier food options. Retailers also struggle to resist the temptation of unhealthy foods that are cheap and reliable. Partnerships with academic researchers give retailers an opportunity to experiment with product variety while benefiting from analytical support to determine the impact of the change on health and on sales. Food retailers are motivated to work with research teams because they hope these collaborative studies can help them identify effective strategies to understand complex consumer behavior and grow their business. If the study is published in a peer-reviewed journal, it brings credibility to the work, which can bolster support for scaling up promising strategies. Partnerships that result in mutual benefits can last for years and yield valuable lessons for all. Ultimately, shoppers looking to balance their budgets, schedules, taste preferences, and health stand to benefit the most from these partnerships.

References

1. USDA ERS - Summary Findings. <https://www.ers.usda.gov/data-products/foodaps-national-household-food-acquisition-and-purchase-survey/summary-findings/#calories>.
2. Okrent M, Elitzak H, Park T, Rehkamp S. *Measuring the Value of the U.S. Food System: Revisions to the Food Expenditure Series, TB-1948*. U.S. Department of Agriculture, Economic Research Service, September 2018. Updated July 2020.
3. Dietz W, Santos-Burgoa C. Obesity and its implications for COVID-19 mortality. *Obesity*. 2020;28(6):1005. doi:10.1002/oby.22818.
4. Lawrence MA, Baker PI. Ultra-processed food and adverse health outcomes. *BMJ*. 2019; 365:l2289. <https://doi.org/10.1136/bmj.l2289>.
5. Lam CCV, Ejlerskov KT, White M, Adams J. Voluntary policies on checkout foods and healthfulness of foods displayed at, or near, supermarket checkout areas: a cross-sectional survey. *Public Health Nutr*. 2018;21(18):3462-3468. doi:10.1017/S1368980018002501.
6. Fischer LM, Sutherland LA, Kaley LA, et al. Development and implementation of the guiding stars nutrition guidance program. *Am J Health Promot*. 2011;26(2):e55-e63. doi:10.4278/ajhp.100709-QUAL-238.
7. *The Sustainability Imperative: New Insights on Consumer Expectations*. The Nielson Company. <https://www.nielsen.com/wp-content/uploads/sites/3/2019/04/global-sustainability-report-oct-2015.pdf>. 2015.
8. Drewnowski A, Specter SE. Poverty and obesity: the role of energy density and energy costs. *Am J Clin Nutr*. 2004;79(1):6-16. doi:10.1093/ajcn/79.1.6.
9. Monteiro CA, Cannon G, Levy RB, et al. Ultra-processed foods: what they are and how to identify them. *Public Health Nutr*. 2019;22(5):936-941. doi:10.1017/S1368980018003762.
10. Polacsek M, Moran A, Thorndike AN, et al. A supermarket double-dollar incentive program increases purchases of fresh fruits and vegetables among low-income families with children: the Healthy Double Study [published correction appears in *J Nutr Educ Behav*. 2020 Aug;52(8):826-827]. *J Nutr Educ Behav*. 2018;50(3):217-228.e1. doi:10.1016/j.jneb.2017.09.013.
11. Cordain L, Eaton SB, Sebastian A, et al. Origins and evolution of the Western diet: health implications for the 21st century. *Am J Clin Nutr*. 2005;81(2):341-354. doi:10.1093/ajcn.81.2.341.
12. Mamiya H, Moodie EEM, Ma Y, Buckeridge DL. Susceptibility to price discounting of soda by neighbourhood educational status: an ecological analysis of disparities in soda consumption using point-of-purchase transaction data in Montreal, Canada. *Int J Epidemiol*. 2018;47(6):1877-1886. doi:10.1093/ije/dyy108.
13. Franckle RL, Thorndike AN, Moran AJ, et al. Supermarket purchases over the Supplemental Nutrition Assistance Program benefit month: a comparison between participants and nonparticipants [published correction appears in *Am J Prev Med*. 2020 Aug;59(2):305]. *Am J Prev Med*. 2019;57(6):800-807. doi:10.1016/j.amepre.2019.07.025.
14. Cameron AJ. The shelf space and strategic placement of healthy and discretionary foods in urban, urban-fringe and rural/non-metropolitan Australian supermarkets. *Public Health Nutr*. 2018;21(3):593-600. doi:10.1017/S1368980017003019.

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The author works for Guiding Stars Licensing Company, which is a wholly owned subsidiary of Ahold Delhaize USA. The points of view shared in this brief reflect the author's experience collaborating with academic researchers and participating in multi-sectoral efforts to improve health outcomes through supermarket interventions during her work in the industry.

About Healthy Eating Research

Healthy Eating Research (HER) is a national program of the Robert Wood Johnson Foundation. Technical assistance and direction are provided by Duke University under the direction of Mary Story PhD, RD, program director, and Megan Lott, MPH, RDN, deputy director. HER supports research to identify, analyze, and evaluate environmental and policy strategies that can promote healthy eating among children and prevent childhood obesity. Special emphasis is given to research projects that benefit children and adolescents and their families, especially among lower-income and racial and ethnic minority population groups that are at highest risk for poor health and well-being and nutrition related health disparities. For more information, visit www.healthyeatingresearch.org or follow HER on Twitter at [@HEResearch](https://twitter.com/HEResearch).

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