



US RETAIL ASSESSMENT

2025

Country Report



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ABOUT ATNI

ATNi (Access to Nutrition initiative) is a global foundation headquartered in the Netherlands that actively challenges the food industry, investors, and policymakers to shape healthier food systems. Its mission is to transform markets so that, by 2030, at least half of companies' food and beverage sales are derived from healthy products. ATNi analyzes and translates data into actionable insights, driving financing, partnerships and innovations for market transformation so that all people have access to nutritious and sustainable food. ATNi is overseen by an independent board that work pro bono. The organisation is funded, among others, by the Gates Foundation and the UK Foreign, Commonwealth and Development Office. More information about ATNi's governance and operating policies is [available online](#).

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ABBREVIATIONS

CAGR	Compound Annual Growth Rate
CFBAI	Children's Food and Beverage Advertising Initiative
CSO	Chief Sustainability Officer
DGA	Dietary Guidelines for Americans
ERM	Enterprise Risk Management
ESG	Environmental, Social, and Governance
FAO	Food and Agriculture Organization of the United Nations
FDA	US Food and Drug Administration
FOPL	Front-of-Pack Nutrition Label
GDQP	Global Dietary Quality Project
GNI	Gross National Income
H-E-B	HE Butt
HFFI	Healthy Food Financing Institute
HFSS	High in fat, sugar and salt
HHI	Herfindahl-Hirschman Index Non-Disclosure Agreement
HSR	Healthy Star Rating
KPI	Key Performance Indicator
LMIC	Lower-and Middle-income Country
NCD	Non-communicable Disease
NHANES	National Health and Nutrition Examination Survey
NPM	Nutrient Profile Model
SNAP	Supplemental Nutrition Assistance Program
SSB	Sugar-Sweetened Beverage
UNICEF	United Nations Children's Fund
UPF	Ultra-processed Food
US	United States
USDA	United States Department of Agriculture
WHO	World Health Organization
WIC	Women, Infants, and Children program

GLOSSARY

Key terms are outlined below; the full glossary is available in the Retail Assessment 2025 [Scope and Methodology Report](#).

Convenience store: Grocery retail outlets selling a wide range of groceries and typically characterized by extended opening hours, a selling area under 400 square meters, and a range of foodservice products such as take-away or made-to-order hot foods [Euromonitor International, Passport].

Hypermarket: Like supermarkets but larger, with over 2,500 square meters selling space. Hypermarkets also sell a range of non-grocery merchandise. Hypermarkets are frequently located on out-of-town sites or as the anchor store in a shopping center. In the US, often referred to as 'supercenters'. Excludes cash and carry, warehouse clubs and mass merchandisers [Euromonitor International, Passport].

Modern grocery retail: Aggregation of modern grocery channels such as supermarkets, hypermarkets, convenience stores, discounters, warehouse clubs, and food/drink/tobacco specialists, including independent outlets [Euromonitor International, Passport]. It is distinguished from traditional grocery retail, which includes small, independent shops, market stalls, and informal vendors. In this report, modern grocery retail equals total grocery sales minus those via small local retailers.

Operating brand: The retail brand name under which a retailer operates its physical or online stores. A single parent company may own and manage multiple operating brands. For example, Food Lion is an operating brand of Ahold Delhaize USA, and

Intermarché is an operating brand of Les Mousquetaires. Sometimes referred to as 'grocery brands', 'trading brands', and 'retail banners'.

Private label: A product or brand made by a third-party but sold exclusively under a retailer's own proprietary brand label, with the retailer controlling all aspects. Sometimes referred to as 'own brand'.

Retail food environment: A subtype of the food environment relating to the physical and economic settings where people purchase food and beverages, such as supermarkets, convenience stores, restaurants, and vending machines. It includes the availability, affordability, quality, and marketing of food products within these outlets, which can influence consumer choices and population health.

Supermarket: Retail outlets selling groceries like non-perishable products (e.g. rice, pasta and sauces), fruit and vegetables, beverages and household products. Usually have a selling space of between 400 and 2,500 square meters. Excludes discounters, convenience stores and small independent grocery stores [Euromonitor International, Passport].

Ultra-processed food (UPF): The term is used with some variation across reports and studies, but it is most commonly defined according to the NOVA classification. UPFs are foods made mostly from industrial ingredients and additives, with minimal or no unprocessed food content. These additives, which are introduced during manufacturing to enhance taste, texture, and shelf life, result in products such as sweet and savory snacks, instant noodles, confectionery, meat substitutes, and soft drinks [Food Systems Dashboard].

SUMMARY

PURPOSE AND SCOPE

ATNi's US Retail Assessment 2025 evaluates how leading US food retailers influence access to nutritious and affordable foods through their policies, commitments, and actual performance. It explores what retailers state they aim to achieve through their nutrition strategies, targets, and governance, and compares this with different assessments on how they act in practice, based on independent analysis of their product portfolios, promotional activities, and pricing of 'retail' food baskets.

The findings provide a picture of how retailers shape food environments and highlight opportunities to enhance their role in promoting healthier and more equitable diets. For the United States (US), the analysis focuses on three of the country's largest grocery retailers: Walmart (25-27% market share), Kroger (6-8%), and Ahold Delhaize USA (and one of its operating brands, Food Lion; 2-4%).

RESEARCH METHODOLOGY

The assessment applies a harmonized methodology developed by ATNi and consistently applied across six countries representing different income settings. It integrates multiple data sources—including corporate disclosures, publicly available information, and curated third-party datasets—to construct a robust and comparable evidence base.

Nutritional quality of private-label packaged products is evaluated using internationally recognized nutrient profile models. Promotional practices and affordability are analyzed through established international analytical frameworks aligned with global nutrition guidance such as the EAT-Lancet reference diet.

By combining these elements, the integrated approach enables both context-specific insights for the US and cross-country comparisons, providing a solid foundation for informing retailers, investors, and policymakers in their efforts to foster healthier food retail environments.

KEY FINDINGS

GROCERY RETAIL LANDSCAPE

The US has a highly developed and continuously evolving grocery retail market. Consumers across income groups generally have access to a diverse range of modern formats for grocery shopping—primarily supermarkets (40% of sales) and supercenters (i.e. hypermarkets; 29%), as well as warehouse clubs, convenience stores, discounters, and e-commerce platforms, which are increasingly prevalent even in smaller metropolitan and many rural areas.

While the Food Systems dashboard shows that ultra-processed foods (UPF) represent a substantial share of overall packaged food sales (approximately 67%), fruits and vegetables, though widely available in most modern grocery formats, with the exception of convenience and discount stores. Private label products are also gaining prominence, outpacing growth in national brands sales. They now represent around 20% of total grocery spending in the US. For the selected retailers this share is even higher: Walmart (20-25% of sales), Kroger (35%), and Ahold Delhaize USA (targeting 45% of sales by 2028).

However, access to healthier foods remains unequal. Lower-income and rural households often face limited availability or affordability of nutritious options, contributing to persistent disparities in dietary quality, obesity, and diet-related non-communicable diseases (NCDs).

The grocery retail market in the US is both highly fragmented and competitive, with a few large national chains and a wide range of regional players and independent stores. The largest retailers are predominantly publicly owned, reflecting the capital-intensive nature of the sector. They typically operate under centralized corporate structures, with some regional flexibility to respond to local competition and consumer preferences—particularly retailers with multiple operating brands such as Kroger and Ahold Delhaize USA.

RETAILER ASSESSMENT FINDINGS

According to their reporting, all three assessed retailers have identified nutrition as a material risk and taken meaningful steps to embed nutrition within their ESG strategies and commercial growth plans. However, the extent to which these commitments translate into measurable outcomes varies considerably. While all three retailers use a nutrient profile model (NPM) and labeling system to guide consumers towards healthier choices, these are company-specific and not government-endorsed.

Ahold Delhaize USA demonstrates the most developed approach overall, including setting targets and reporting on the sales of 'healthier' products (using its own nutrition criteria), providing evidence of strategies to steer consumers towards healthier choices through product placement and loyalty programs, and demonstrating more robust nutrition governance systems than Walmart and Kroger. At the same time, none of the retailers demonstrate strong commitments to responsible marketing to children, underscoring a major gap in responsible marketing practices within the US retail sector.

The overall nutritional quality of private-label portfolios (with a total of 7,687 products included in the assessment) remains modest, with an average Health Star Rating (HSR) of 2.7 out of 5 and minimal variation between the three retailers. ATNi's independent Product Profile assessment of the companies' packaged private-label products found that 45% of Food Lion's portfolio (Ahold Delhaize USA) met the 'healthier' HSR threshold of 3.5 or above, compared with 39% for Walmart and 40% for Kroger.^a On average, retailers' private-label portfolios were slightly healthier (mean HSR 2.7) than those of 24 leading US manufacturers assessed in the Global Index 2024 (mean HSR 2.4).

Promotional practices show a similar imbalance. Less than one-fifth of total flyer space was dedicated to the promotion of healthier foods and beverages: 18% at Food Lion, 17% at Kroger, and 5% at Walmart, while over half of all promotions featured 'unhealthy' options (54% at Food Lion, 54% at Kroger, and 80% at Walmart). Refined grains, baked goods and snacks dominated these less healthy promotions, followed by sweets, ice cream, and sugar-sweetened beverages (SSB).

Under the HFSS+colors/flavors/NNS approach, the vast majority of private-label products are considered highly processed—88% for Walmart and Kroger, and 84% for Food Lion. Reformulation efforts, such as removing synthetic dyes and replacing with natural colorants, signal progress but do not change products' UPF classification. This highlights the need and opportunity for a more nuanced approach to identifying healthier products—one that considers both nutrient composition and the use of cosmetic additives such as colorants, flavors, and non-nutritive sweeteners, which serve as key proxies for highly or ultra-processed foods.

Finally, across all three retailers, nutrition commitments are weakened by the absence of comprehensive policies on responsible marketing to children and the responsible use of health and nutrition claims.

AFFORDABILITY OF HEALTHIER AND UNHEALTHY FOOD BASKETS

While both Walmart and Kroger emphasize affordability within their broader commitments to improving access to healthy food, the pricing analysis revealed a consistent cost disparity between the healthier and less healthy food baskets.^b At Walmart, the healthier basket was 18.4% more expensive, and at Kroger 58.7% more expensive, than the less healthy baskets.^c

In absolute terms, US baskets were among the most affordable across the six countries assessed, representing a smaller share of average income compared to upper middle- and lower-middle income countries (LMICs). However, the relative affordability

a Excluded categories from private-label products: baby food, alcohol, and health supplements, due to incompatibility with the selected NPMs. Fresh produce and foods prepared in-store were also excluded.

b Ahold Delhaize USA (Food Lion) was excluded, due to data collection constraints linked to the company's strict data protection systems, which prevent automated price scraping.

c Please note a possible confounding (price) factor related to the use of frozen rather than fresh fruits and vegetables, which was the only data available in Euromonitor International's VIA platform. In addition, the difference between healthier and less healthy products is more distinct and grounded in scientific consensus in some product categories than in others.

gap between healthier and less healthy baskets persists, suggesting that even in high-income contexts, cost remains a key barrier to healthy diets for lower-income households. These affordability gaps reflect broader market pricing dynamics rather than retailer-specific strategies, while also exposing a critical limitation in retailers' affordability strategies, which do not adequately address the higher relative cost of healthier products. Observed in France, reflecting higher income levels and purchasing power in high-income countries. However, the relative affordability gap persists, indicating that cost remains a barrier for lower-income households.

CONCLUSIONS

ATNi's Retail Assessment 2025 reveals that while leading US grocery retailers—Walmart, Kroger and Ahold Delhaize USA—have made some strides in integrating nutrition into their ESG strategies, significant gaps remain in translating these commitments into ensuring equitable food environments.

The analysis highlights systemic challenges in affordability and promotional practices. Healthier 'retail' food baskets in this assessment are consistently more expensive than less healthy ones, and promotional efforts favor less nutritious products. These observations suggest that current retailer strategies do not sufficiently address the structural barriers that prevent healthier choices from being both accessible and affordable to consumers.

To foster healthier and more equitable diets, retailers must go beyond availability and commit to reshaping pricing, marketing, and product reformulation strategies. Critical steps include strengthening responsible marketing policies, improving the nutritional quality of private-label offerings and aligning affordability initiatives with true costs of healthier foods. These actions, supported by robust governance and transparent reporting, can help retailers play a transformative role in improving public health outcomes across the US.



INTRODUCTION



RETAILERS AND THE FOOD ENVIRONMENT

The modern grocery retail landscape in the US is both complex and diverse, characterized by a highly fragmented market structure. To better understand its influence on public health, ATNi developed the Retail Assessment 2025, which evaluates leading US food retailers' commitments, policies, and practices related to nutrition and health. The assessment provides evidence to strengthen accountability and guide progress toward creating healthier food environments.

The grocery retail environment—where food is purchased for immediate or later consumption—represents a major component of the physical food environment and plays a critical role in shaping dietary patterns. Food retailers influence consumer choices through their decisions on product formulation,

pricing, placement, and promotion, thereby shaping the visibility, affordability, and desirability of different foods. Their strategies can therefore either support or hinder healthier diets, depending on how they prioritize and promote nutritious products.

In the US, where nearly all food purchases occur through modern retail channels, grocery retailers exert a particularly strong influence on what and how people eat. The country's grocery sector, where the modern supermarket first emerged, is among the most developed worldwide. However, the widespread availability and promotion of highly processed and convenience foods, alongside persistent inequities in food access, are linked to the high prevalence of overweight, obesity, and diet-related NCDs.¹





METHODOLOGY

ATNi's Retail Assessment 2025 comprises tailored research components applied consistently across 18 retailers in six countries: the US, France, Indonesia, South Africa, , the Philippines, and Kenya. As outlined in the [Scope and Methodology document](#), the assessment provides a transparent, evidence-based approach to evaluating how the modern grocery retail sector shapes food environments and nutrition outcomes. The methodology was developed in consultation with experts in nutrition, public health, food policy, and retail, and reviewed by an independent advisory group to ensure scientific rigor and policy relevance.

Together, the research components offer an integrated view of how modern grocery retailers influence food environments through their policies, practices, and pricing strategies. The analysis includes corporate nutrition-related policies and disclosures, as well as independent assessments of retailers' promotional activities, private-label product portfolios, and the

relative affordability of healthier versus less healthy retail food baskets. These are complemented by a review of national policy and regulatory frameworks to identify gaps and opportunities for stronger alignment between retail action and public health objectives.

Research was conducted between November 2024 and November 2025. This report presents the findings for the US, applying the methodology to three leading retailers: Walmart, Kroger, and Ahold Delhaize USA (Food Lion). The analysis offers valuable insights into how major retailer shape food environments, though it is limited to three national retailers and focuses primarily on private-label packaged products, excluding regional variation and the broader product offer. By using a consistent set of indicators and analytical procedures across all six countries, the assessment generates detailed country-level insights and enables meaningful cross-country comparison within a broader global perspective on food retail and nutrition.



MAPPING THE RETAIL LANDSCAPE

Mapping the US grocery retail environment provides essential context for interpreting the broader findings of ATNi's Retail Assessment 2025. This section offers a descriptive overview of the size, structure, and dynamics of the modern grocery retail sector, outlining key players, ownership patterns, and the consumer and policy factors shaping food retail within the broader US food system.

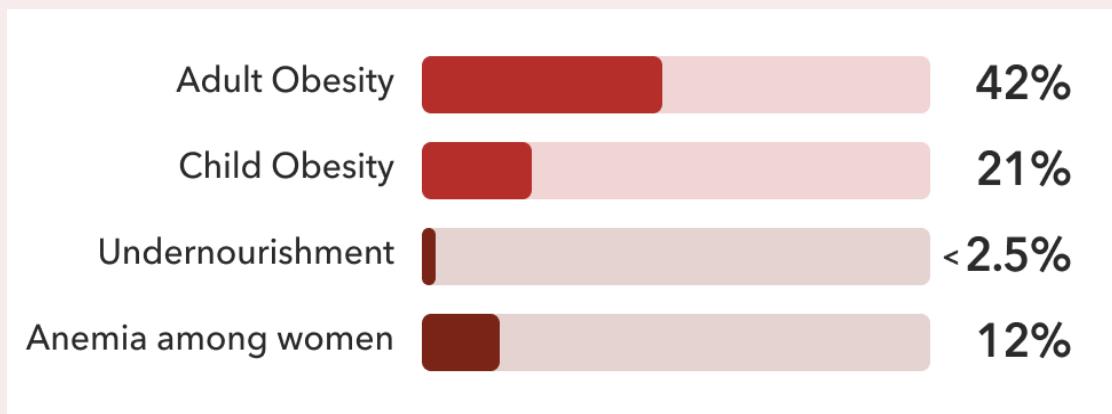
NUTRITION CONTEXT: MALNUTRITION AND DIETARY PATTERNS

Overweight, obesity, and diet-related noncommunicable diseases (NCDs) remain major public health challenges in the US, alongside persistent micronutrient deficiencies (Figure 1). Among adults (>18 years), age-standardized obesity increased from 36.9% in 2012 to 42.0% in 2023, while child and adolescent (5-19 years) obesity remains among the highest globally, at 20.6%.^{2,3} Anemia affects 11.8% of women aged 15-49, and 2016 National Health and Nutrition Examination Survey (NHANES) data indicate widespread micronutrient deficiencies—45% for

vitamin A, 46% for vitamin C, 95% for vitamin D, 84% for vitamin E, and 15% for zinc.^{4,5}

These outcomes reflect major dietary shifts over recent decades, from relatively simple, home-prepared meals to diets dominated by calorie-dense, nutrient-poor processed and ultra-processed foods (UPFs). Between 1970 and 2010, average daily caloric intake increased by approximately 23%, from 2,075 to 2,535 calories.⁶ Over half of total energy intake now comes from UPFs (as defined by the NOVA classification), rising from 53.5% in 2001 to 57% in 2018, with a slight decline to 55% in 2021-2023.⁷⁻⁹ Among youths (aged 2-19 years), UPFs account for nearly two-thirds of total energy intake.¹⁰

FIGURE 1
PREVALENCE OF DIFFERENT FORMS OF MALNUTRITION IN THE US



Source: FAO and WHO^{2,3,5}

Sales data mirror these patterns. Between 2017 and 2024, packaged food and beverage sales grew at a compound annual growth rate (CAGR) of 5.8% to USD 783.4 billion, while UPF-dominated categories grew 7% annually to make up nearly 67% of total sales—over five times the global per capita average (Figure 2).^{11,12,d}

Overall diet quality remains poor. Most Americans do not meet national dietary guidelines, which emphasize fruit, vegetable, and whole grain consumption while limiting added sugars, sodium, refined grains, and processed meat.¹³ The share of calories from minimally processed foods declined from 32.7% to 27.4% between 2001 and 2018.¹⁰ The Global Dietary Quality Project (GDQP) 2021 survey found that fewer than half (44%) consumed all five recommended food groups,

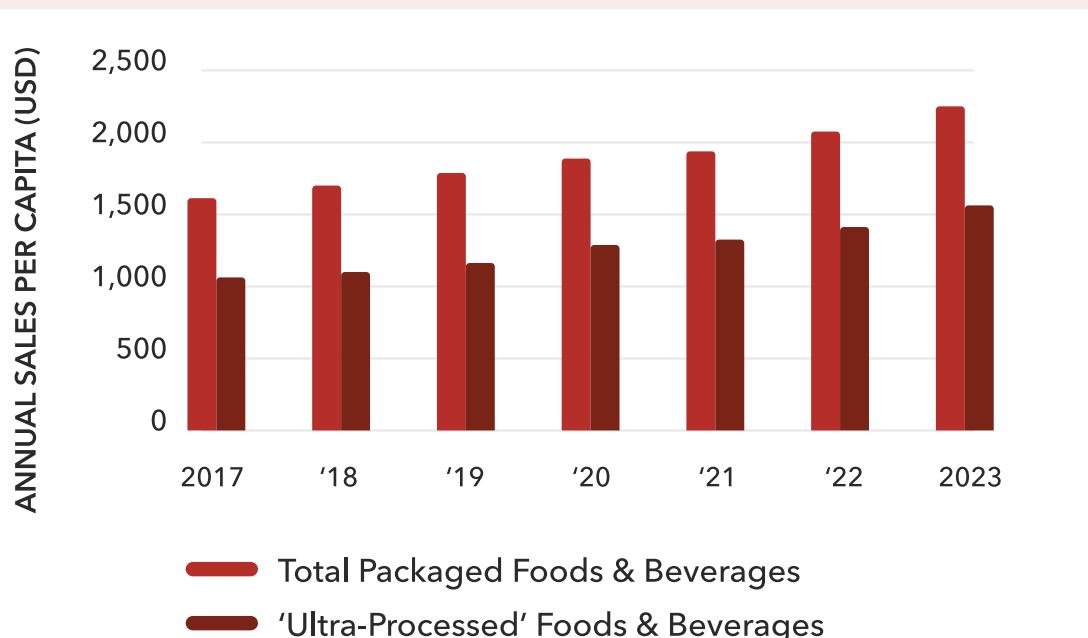
while 65% ate sweet foods, 43% salty or fried snacks (including 26% packaged UPF snacks), and 42% soft drinks.¹⁴

Health and dietary burdens are unequally distributed. NHANES data show a strong education gradient in obesity, with higher rates among those with lower education attainment.¹⁵ UPF consumption is widespread across all socioeconomic groups but highest among non-Hispanic white and black populations, younger adults, and low-income households.^{9,16}

The grocery retail environment reinforces these trends. It is heavily skewed towards convenient, ready-to-eat, and hyper-palatable products with limited nutritional value, promoted through intensive marketing, placement, and price promotions.^{8,17} Such foods are often cheaper and more accessible than fresh produce or whole grains, making them disproportionately consumed by low-income households seeking affordable calories through refined grains, sugars, and processed meats.¹⁸⁻²⁰

^d Defined as “foods made of mostly industrial ingredients and additives with minimal amounts of unprocessed foods. These additives are not naturally occurring in the food, but are added in the processing phase to increase palatability and shelf-life. Examples of UPFs include sweet and savory snacks, instant noodles, confectionery, meat substitutes, and soft drinks, among others.”¹

FIGURE 2
PACKAGED FOOD AND BEVERAGE SALES AND UPF^d CATEGORY GROWTH
IN THE US, 2017-2024



Source: FAO and WHO

MODERN GROCERY RETAIL LANDSCAPE

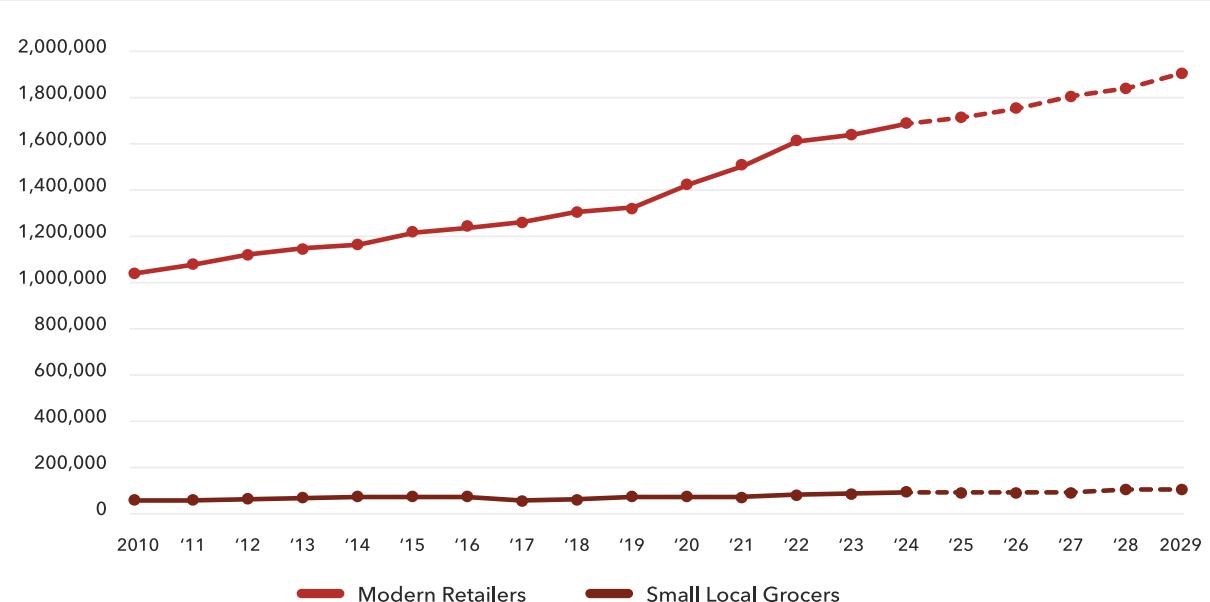
The dominance of highly processed packaged foods in American diets is closely linked to the structure of the grocery retail environment: retail dynamics shape consumer access, pricing, and exposure to both healthy and less healthy products.

The US grocery retail market is among the largest and most developed globally, valued at USD 1.75 trillion (EMI Data).^{12e} Modern retail formats—supermarkets, hypermarkets (“supercenters”), warehouse clubs, convenience stores, and discounters—account for nearly all grocery sales. In contrast, ‘small local grocers’ (independent outlets under 400 m²) account for only 2.6% of total grocery sales.¹²

Grocery sales have grown steadily over the past 15 years (Figure 3). Following a modest 2.6% CAGR between 2010 and 2019, pandemic-driven stockpiling and at-home consumption accelerated growth to 7.6% in 2020. Sales growth remained elevated after restrictions were lifted, with a CAGR of 4.2% between 2020 and 2024. Growth is expected to return to pre-pandemic levels from 2025 through 2029 amid inflationary pressures and a challenging economic outlook.¹²

^e Other estimates are substantially smaller in size, ranging from USD 717 bn (USDA Economic Research Service (ERS), 2017);²¹ USD 811 billion (IBIS World, 2024);²² USD 1 trillion (Circana, 2024);²³ and USD 855 billion (Statista, 2024).²⁴

FIGURE 3
HISTORICAL AND PROJECTED SALES GROWTH OF THE US GROCERY SALES VIA MODERN RETAILERS, 2010-2029



Source: Euromonitor International

BOX 1 PRIVATE-LABEL SALES

Private-label products have become a central feature of retail assortments. While packaged food sales in the US have long been dominated by national and international (A-) brands, private label sales have grown significantly—increasing by 34.2% between 2019 and 2023, outpacing national brands.^{22,25-28} Today, it accounts for 20.4% of total grocery spending in 2024, up from 17% in 2013.^{26,28} RaboResearch projects that the market share could reach 30% by 2033.²⁷ Nevertheless, private-label grocery penetration in the US remains lower than in Europe overall.²⁶

Private-label brands are typically cheaper for consumers than national brands and more profitable for retailers, while enabling them to rapidly adapt to changing consumer preferences.^{28,29} Consequently, major retailers operating supermarkets and superstores are expanding their private-label ranges.²² For example, Kroger's private label offering is one of the largest in the US, valued at \$37 billion, or 35% of sales, while Walmart's accounts for 20-25%.^{28,30} Ahold Delhaize USA, meanwhile, has a target to achieve 45% of its sales from its global private label products, including the US, by 2028.³¹

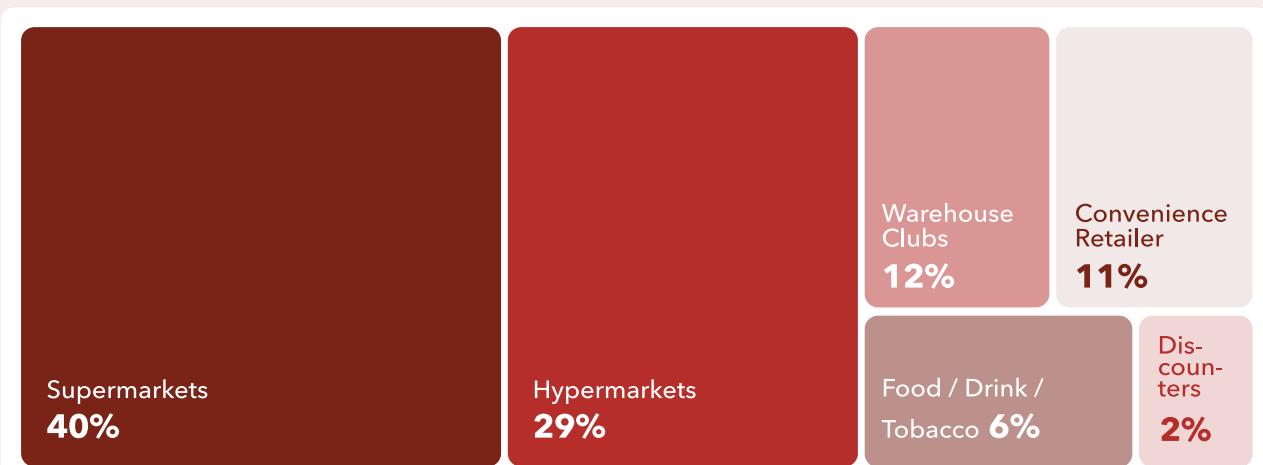
Retail formats

As shown in Figure 4, the modern grocery retail market in the US consists primarily of supermarkets (39.9%) and hypermarkets (28.9%).¹²

- **Supermarkets:** Typically $\geq 9,000$ sq. ft. (836 m^2) with at least 85% food sales.³² Kroger (selected for the Retail Assessment) is the largest retailer in the US, with other major players including Publix, Ahold Delhaize USA (also selected for the assessment), and HEB.

- **Supercenters (hypermarkets):** Combine groceries (typically at least 40% of sales) with general merchandise, with a focus on low prices and convenience.^{23,32} Walmart (selected for the Retail Assessment) and Target dominate this segment; other players include Kmart, Meijer, and Fred Meyer. After expending rapidly during the 1990s and 2000s, their market share has gradually declined since 2010 (from 33.5%), a trend expected to continue.³²

FIGURE 4
SHARE OF MODERN GROCERY MARKET BY RETAIL CHANNEL



Source: EMI Data. Disc: discounters.

Beyond these dominant formats, a range of other modern retail formats continue to shape food access and purchasing behavior:

- **Warehouse clubs:** Sell a limited assortment of bulk-packaged goods at discounted prices to paid members, with groceries accounting for 30-40% of sales.²² Costco and Sam's Club (owned by Walmart) lead this segment, which represents 12% of modern grocery retail sales in 2024 and remains the fastest-growing format.¹²
- **Convenience stores:** Represent 10.5% of the modern grocery market, typically offering a limited range of staples and ready-to-eat foods, with few fresh or healthier options.^{12,22,29}

- **Discounters:** Representing just 2.3% of modern grocery sales in 2024 (Euromonitor), it is the fastest growing retail segment in the US, having expanded 2.5-fold since 2010.^{12,29} Typically small in size, these stores sell products below standard retail prices through bulk purchasing, no-frills operations, limited service models, and private label offerings, with food accounting for 20-66% of total sales.³² While they do not typically offer fresh produce, this is beginning to change: more than 25% of Dollar General stores now sell fresh produce, for example.³³

BOX 2 E-COMMERCE

E-commerce now plays a substantial role in the US grocery market, representing the equivalent to 11.4% of physical grocery sales in 2024 (EMI Data), having recorded a CAGR of 24.6% between 2017 and 2024.¹² Over 70% of retailers now offer the option to order online, and nearly half of consumers shop for groceries online at least once a week.³⁴ Major retailers are investing in online channels, while third-party platforms such as Instacart offer a platform for smaller grocers to reach consumers.³⁵

While primarily utilized by younger, time-pressed, and tech-savvy customers who value convenience, the growth in grocery e-commerce can expand access and convenience for many, yet risks reinforcing digital divides.²⁹ For example, while 90% of Americans in low-income, low-access areas can access at least one grocery e-commerce platform, only 86% of Americans have adopted broadband.³⁶

Geographic coverage

Modern grocery retail outlets are widespread across the US, with 60% of the population living less than 1 mile (1.6 km) from a grocery retailer, and 30% within 0.5 miles (0.8 km), 2019.³⁷ The US averages 8.3 supermarkets per 10,000 people (2023), above the global average of 7.3.^{37,38} Modern retailer density is highest in urban areas but extends across peri-urban and rural areas: small urban nonmetro counties (one-third of all counties) have, on average, 10 supermarkets, 6.2 convenience stores, 0.7 supercenters, and 1.3 dollar stores, for example.³⁹

Despite the broad coverage of modern retail, these averages mask significant disparities in access, particularly in rural and low-income areas. The United States Department of Agriculture (USDA) estimates that 17.1 million people—or 5.6% of the US population—live in low-income or low-access tracts located more than 1 mile (1.6 km) in urban areas or 20 miles (32 km) in rural from a supermarket.^{37,f} Across the US, 76 counties remain without a single grocery store (excluding convenience stores), nearly half of which are in the Midwest and Great Plains.⁴⁰

These ‘food deserts’ have expanded since the 1980s as the smaller chains and independent grocers that served these areas closed, often due to the elevated prices charged by suppliers to offset their tightened margins as a result of bargaining power of large consolidated retailers.^{29,41} Given this lack of profitability, lower-income and rural communities are often left reliant on convenience stores and discounters which, on average offer fewer nutritious options, perpetuating inequalities in diet quality and health.²⁹

^f With a poverty rate of at least 20%, or a median family income less than or equal to 80% of the metropolitan area or state median income level.

BOX 3

POLICY: FEDERAL AND STATE FINANCING MECHANISMS

To address this, several federal programs aim to directly support healthier food retail in underserved areas. For example, the Healthy Food Financing Initiative (HFFI), a USDA-supported public-private partnership launched in 2010, provides grants, low interest loans, and technical assistance to eligible retailers and suppliers to increase their fresh and healthy products. HFFI funding has been used to open or expand stores in rural towns or urban neighborhoods with low access to healthy food, for example, supporting nearly 1,000 grocery and other healthy food retail projects in almost every state to date.^{42,43}

In addition, since 2000, the New Markets Tax Credits federal program offers flexible financing to catalyze private investment in low-income areas, and encourages expanding access to healthy food in food deserts.

In addition, Food Systems For the Future has identified state-based financial and technical support initiatives to support healthier food retail in underserved areas in Illinois, California, Colorado, New Jersey, and New York, delivered through grants or tax incentives.²⁹

CONSUMER BEHAVIOR AND PREFERENCES

Socio-economic dimensions

Geographic disparities are mirrored by socioeconomic differences in shopping patterns and food quality. A USDA study found that higher-income households spend proportionately more of their grocery budgets compared to lower income households at supermarkets (71% versus 65%) and warehouse clubs (11% versus 3%).³² While the price-per-unit is often lower at warehouse clubs, lower-income consumers' access is limited by the upfront cash required for larger purchases, the required storage space, and membership fees.²⁹

In contrast, lower-income consumers allocate more to supercenters (19% vs. 11%), dollar stores (3% vs. <0.5%) and convenience stores (1% vs. <0.25%).³² This reflects both the value and orientation of discounter formats and their greater presence in lower-income areas.^{29,44}

Spending patterns differ by store type. Consumers shopping at supermarkets, warehouse clubs, and supercenters spend proportionately more on healthier foods, such as fruits, vegetables, whole grains, and lean proteins—while those frequently visiting

convenience and dollar stores purchase more unhealthy products such as soft drinks and confectionery—patterns most pronounced among low-income households.³²

Shopping patterns also differ by income and access. Lower-income households with vehicle access tend to make fewer, larger grocery trips, often monthly, focusing on shelf-stable foods and consolidating purchases at supercenters, while higher-income households can shop more regularly.⁴⁶ Lower-income households without vehicle access, however, rely on smaller, more frequent trips to nearby stores, often convenience or independent stores, which typically offer more expensive offerings and fewer healthy options.^{29,45}

These combined trends underscore the stratified nature of the US grocery landscape: higher-income consumers benefit from convenient access to large retailers and bulk discounts, while lower-income households often depend on smaller outlets with limited healthier options and higher relative costs.

BOX 4 FEDERAL ASSISTANCE PROGRAMS

Nationally, the USDA administers two major social benefit programs aimed at addressing food insecurity among lower-income households. The Supplemental Nutrition Assistance Program (SNAP) provides financial assistance to low-income householders through an electronic benefit transfer card, which participants can use to purchase groceries (excluding alcohol, tobacco, and hot meals) at over 250,000 retailers.^{46,47} In 2023, SNAP generated \$124 billion in grocery sales.⁴⁸

Historically, SNAP has not distinguished between healthier and unhealthy products, although in 2025 a growing number of states have received waivers to restrict SNAP purchases of certain "junk foods", such as SSBs and confectionery.⁴⁹

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) offers monthly benefits to cover the cost of WIC-approved foods meeting specific nutritional criteria, including fruits, vegetables, whole grains, milk, and other nutrient-dense items, to women and children in low-income households.⁵⁰

While retailers of all sizes accepting SNAP and WIC benefits, more than 75% of combined benefits are captured by large retailers.²⁹

Shopping patterns and preferences

Most Americans shop across multiple formats but remain loyal to a primary store. A 2024 survey found that 89% visited a supermarket at least weekly, 81% supercenters, 48% warehouse clubs, and 50% discounters.³⁴ Over three-quarters (78%) shop regularly at the same grocery store, yet more than half (54%) frequently shop at three or more stores.³⁴

Consumers often bypass the nearest store: the average distance to the closest supermarket or supercenter was 2.1 miles (3.4 km), while the primary store averages 3.8 miles (6.1 km) away.⁴⁵ Price remains the dominant factor in store choice (83%), followed by product quality (71%), freshness (69%), and stock availability (69%), while location ranked fifth (64%).³⁴

Spending patterns vary by format. USDA research (2008-12) found average monthly spending highest at warehouse stores (USD 185), followed by supermarkets (USD 173) and supercenters (USD 166); it was lowest at dollar stores (USD 53) and convenience stores (USD 64).³²



MARKET STRUCTURE AND RETAILER CHARACTERISTICS

Market concentration and competition

At the national level, the US grocery retail market is highly fragmented, with a Herfindahl-Hirschman Index (HHI) score of 874.4 (out of 10,000).¹²⁹ While the largest company, Walmart, accounts for more than 25% of modern grocery retail market sales, the next nine largest companies together account for only 37% (Euromonitor International; Figure 5).

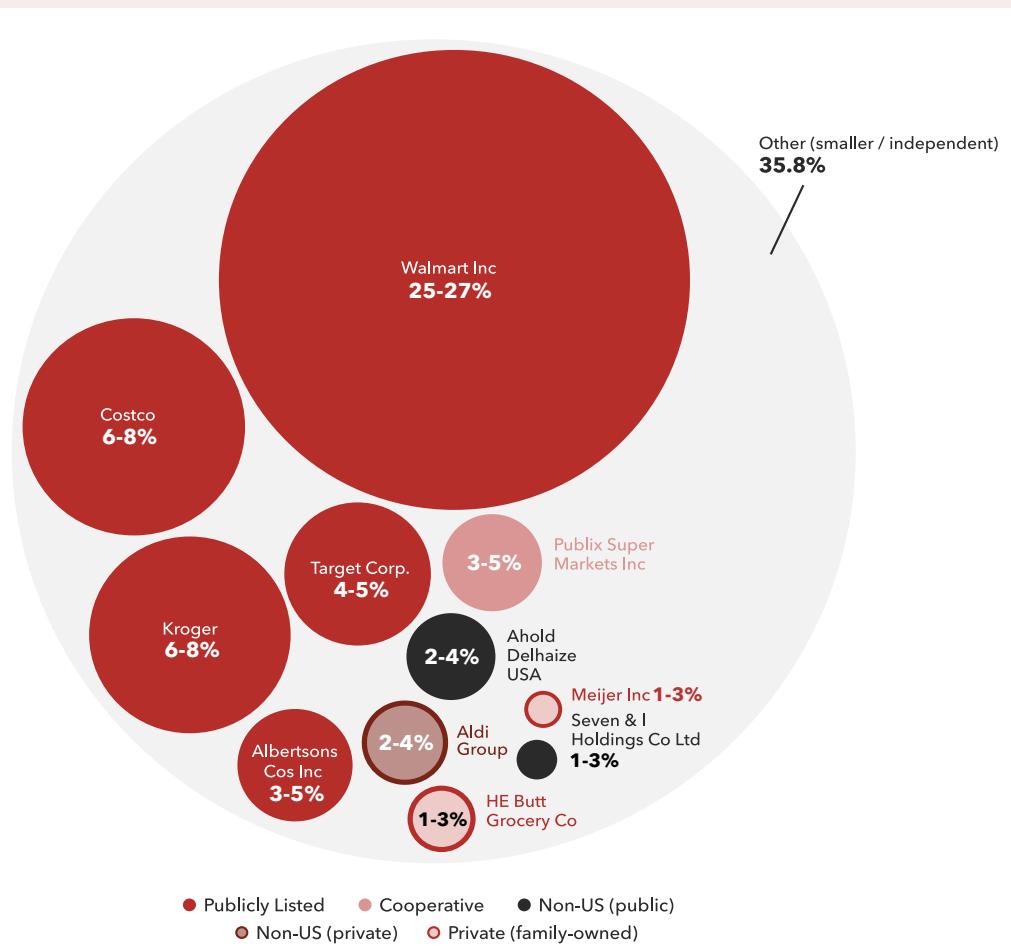
Around 30 additional grocery chains each hold between 0.01% and 1.5% market share, and nearly

one-quarter of modern grocery sales come from independent stores.¹² According to the USDA, independent stores represented about half of all food retailers in 44% of US counties in 2015.⁵¹

Despite ongoing consolidation since the 1990s, including extensive merger and acquisition activity in recent years, the market remains highly competitive overall, given the density of modern retailers and wide variety of store formats to choose from.^{21,52}

⁹ The HHI is used to assess levels of market concentration. It is calculated by squaring the market share of each company competing in the market and then summing the resulting figures.

**FIGURE 5
MAJOR US GROCERY RETAILERS BY MARKET SHARE AND OWNERSHIP TYPE**



Source: Euromonitor

National averages, however, mask substantial local concentration. The USDA has reports that in metropolitan areas, the four largest grocery retailers account for an average of 76% of grocery sales, with even higher concentration in rural and small non-metro counties.^{53,54} A key reason is that most major retailers in the US operate at a regional level, adapting to local preferences and market conditions.⁵⁵ Only a few retailers, such as Walmart, Kroger, Costco, and Target, have a nationwide footprint.⁵⁵ Others have a strong regional dominance: Albertsons (West, Southwest, and Northeast); Ahold Delhaize USA (East Coast and Southeast); Publix (Southeast); and H-E-B (Texas).⁵⁵

Retailer ownership characteristics

Among the largest grocery retailers, most are publicly traded entities, including Walmart (WMT), Kroger (KR), Costco (COST), Albertsons (ACI), and Target (TGT). Privately held grocery retailers are less common and typically operate regionally, such as family-owned H-E-B (Texas), Meijer (Midwest), and Wegmans (Northeast). Several sizeable employee-owned cooperatives also operate successfully, including Publix (Southeast), WinCo (West), and Hy-Vee (Midwest).

The predominance of publicly listed companies reflects competitive and financial pressures. With tight profit margins, companies consolidate, acquiring competitors, to achieve economies of scale and strengthen purchasing power. Larger, publicly traded retailers can leverage more efficient logistics, technology, and capital markets to fund store expansion and modernization.⁵⁶ Modern grocery operations require substantial capital investment—both for new store construction (often taking two years to reach profitability) and to adapt to rapid digital and technological change—conditions that favor access to public financing.⁵⁶

Foreign ownership and market entry

Several foreign-owned companies are among the country's largest grocery retailers. Ahold Delhaize USA, which entered as Royal Ahold (1977) and Delhaize Group (1983) before merging in 2016, is now the fourth-largest supermarket chain operator in the US. Aldi Süd, (entered 1976) and Aldi Nord (1979, through

its acquisition of Trader Joe's) are among the fastest-growing grocery players.⁵⁷

Successful entrants have typically adopted the European discount model, characterized by smaller store footprints (2,000–2,500 SKUs versus >12,000 for typical US supermarkets), strong private-label focus, and lean operations.⁵⁸ This model has proven resilient during economic downturns as consumers prioritize value. In contrast, several other European retailers—including Carrefour and Auchan (1990s), Tesco (2007, as Fresh & Easy), and X5 Retail Group (2012, as Okey-Dokey)—exited the market after failing to scale or secure viable locations, or adapt to US consumer preferences.^{58,59}

Governance and management of stores

US grocery retailers predominantly operate through corporate ownership and centralized control, though governance structures vary. Franchise models are rare compared with markets such as France.

Large retailers like Walmart and Albertsons, tend toward high centralization, with decisions on product assortment, pricing strategies and promotions, and supplier contracts made at corporate or divisional level. Store management primarily oversees operations such as staffing, inventory, and customer service.⁶⁰ Some degree of regional flexibility exists to respond to local competition or consumer preferences.

Other retailers employ multi-banners or subsidiary structures, allowing greater regional discretion. Kroger, for instance, operates banners including Kroger, Fred Meyer, Ralphs, King Soopers, Harris Teeter, and Dillon's, while Ahold Delhaize USA operates as Food Lion, Stop & Shop, Giant, and Hannaford. These divisions oversee local merchandising, marketing, and loyalty programs, while functions such as procurement, private label development, and national marketing remain centralized.^{61,62}

KEY INSIGHTS US RETAIL FOOD ENVIRONMENT

The US represents a highly developed and continually expanding grocery retail market. Across income groups, the majority can, overall, readily access a diverse range of modern grocery retail formats—primarily supermarkets and hypermarkets, and increasingly warehouse clubs, convenience stores, discounters, and e-commerce platforms—even in smaller metropolitan and many rural areas. While ultra-processed foods still account for a substantial portion of sales, fruits and vegetables are generally available at most modern grocery formats, with the exception of convenience and discount stores (although this is beginning to change). Private label product lines continue to grow rapidly, increasing access to affordable options, though they still lag behind European markets in both scale and penetration.

Nevertheless, access to healthier foods remains unequal: significant tracts of the country—often lower-income or rural—lack access modern grocery stores offering nutritious and affordable products, contributing to persistent disparities in dietary quality, obesity, and diet-related NCDs.

The grocery retail market is both fragmented and competitive, characterized by a few large national chains and a wide range of regional and independent players. The largest companies are publicly owned and operate through highly centralized corporate structures, while regional chains tend to maintain more flexible, often privately-owned and with locally responsive governance models.





RETAILER PROFILES

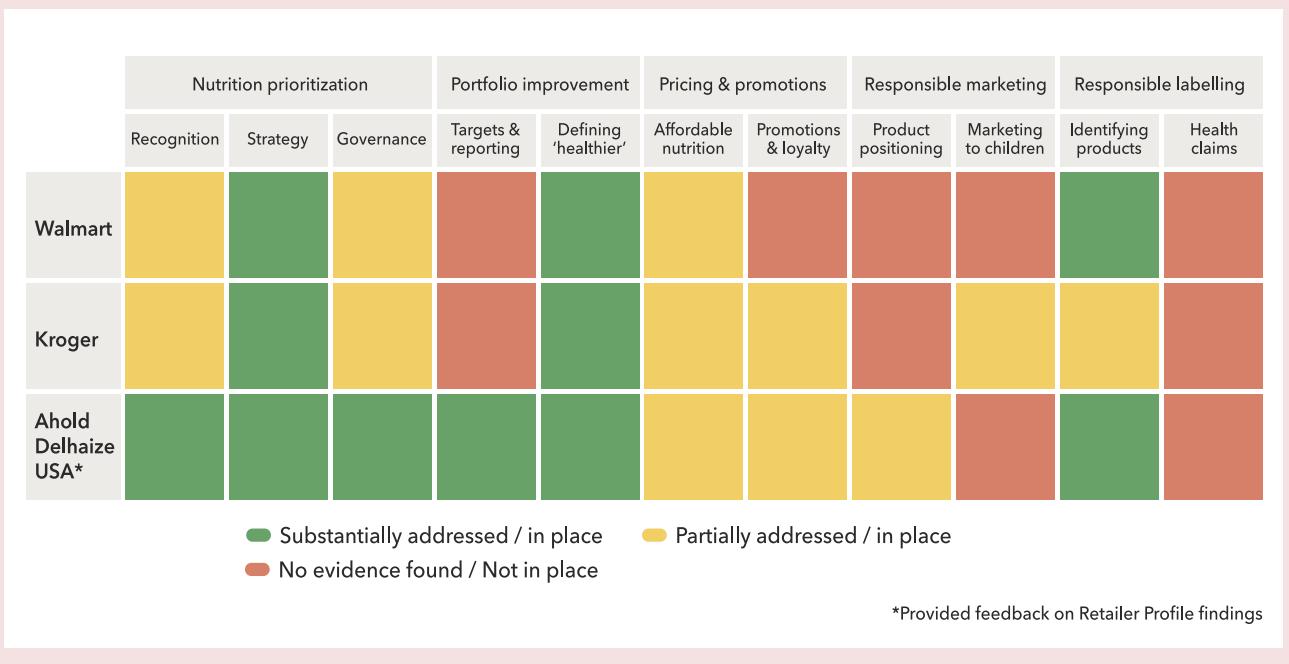
The Retailer Profile qualitatively assesses the extent to which the three selected retailers – Walmart, Kroger, and Ahold Delhaize USA – engage with nutrition, embed it within their commercial practices, and take steps beyond regulatory requirements to support healthier consumer diets. This assessment draws primarily on publicly available information. Although each company was invited to review the findings and provide additional evidence, only Ahold Delhaize USA chose to do so.

Encouragingly, all three retailers demonstrate some progress in integrating nutrition into their business strategies. Each has identified nutrition as a material risk and incorporated it into their ESG or Sustainability

strategies and commercial growth plans.

As shown in Figure 6, Ahold Delhaize USA has the most developed approach to nutrition, while Walmart and Kroger lag behind on several key elements, including the establishment of measurable targets and reporting on sales of 'healthier' products, product positioning, promotions and loyalty, and nutrition governance. This gap is notable given that Walmart and Kroger's consumer reach is substantially greater than Ahold Delhaize USA. In interpreting Figure 6, it is important to note that the green color indicates areas that are substantially addressed or in place; however, this does not imply that performance is optimal, or that no further improvement is possible.

FIGURE 6
RETAILER PROFILE FINDINGS PER NUTRITION TOPIC AREA



NUTRITION PRIORITIZATION & GOVERNANCE

Recognizing and addressing nutrition

All three companies acknowledge consumer health and nutrition within their materiality or ESG risk assessments. However, only Ahold Delhaize USA explicitly recognizes nutrition-related risks – such as scrutiny from stakeholders and reputational damage – as part of its enterprise risk management (ERM) register.⁶³

Walmart and Ahold Delhaize USA have both integrated nutrition strategies into their commercial growth plans, linking shared value creation with long-term financial goals.^{63,64} Ahold Delhaize USA's stands out with its 'Growing Together' strategy, which commits to support "healthy communities" by making healthier and more sustainable products affordable and accessible, and includes a target to increase sales of 'healthier' private label products in the US.⁶³ It is also the only retailer assessed that includes nutrition-related reporting within its financial disclosures.⁶⁵

Kroger's commercial strategy emphasizes growing sales of 'fresh' products including fruits and vegetables, but also baked goods and processed meats that should be consumed in moderation.^{66,67}

Nutrition governance and accountability

Both Kroger and Ahold Delhaize USA have assigned executive-level responsibility for their nutrition strategies. Kroger's executive leadership team "oversee[s] progress" while Ahold Delhaize USA's Health & Sustainability Group reports directly to its Chief Sustainability Officer (CSO).^{63,66} Walmart's overall ESG strategy, which includes nutrition, is also overseen by the CSO.⁶⁴

Only Ahold Delhaize USA formally incentivizes progress by linking executive remuneration to a nutrition-related key performance indicator (KPI): progress towards its global target to increase sales of 'healthier' own-brand (private label) products.⁶³ Walmart also links executive remuneration to ESG-related KPIs, though these are not publicly disclosed.

All three companies indicate that a Board sub-committee provides oversight either of their nutrition strategy (Kroger and Ahold Delhaize USA) or of the broader ESG strategy (Walmart).



PORTFOLIO IMPROVEMENT

Nutrition targets and reporting

Only Ahold Delhaize USA has established a target to increase the proportion of sales derived from 'healthier' products. In 2021, the company committed to ensuring that 54% of own-brand (private label) sales meet their "Guiding Stars" criteria by 2025.⁶⁸ The company discloses its US-specific progress on a third-party website, the Partnership For A Healthier America, with the most recent reporting year being 2023.⁶⁹ The company has since expanded its scope to include 'full store sales' (i.e. including national brands), to achieve 40% healthy sales by 2028.⁷⁰ No targets to increase sales of 'healthier' products were found for Walmart and Kroger.

Similarly, no specific targets were found relating to the reduction of specific nutrients of concern (e.g. sugar, salt, saturated fat) or for increasing levels of positive ingredients within their private label portfolios. However, Ahold Delhaize USA's use of the Guiding Stars system and target supports reformulation by applying thresholds for both nutrients of concern and positive ingredients.

BOX 5

VOLUNTARY REFORMULATION INITIATIVES

There are no mandatory reformulation standards in the US for HFSS products. However, the US Food and Drug Administration (FDA) has developed voluntary phased sodium-reduction targets for manufacturers, most recently updated in 2024, setting three-year reduction goals across 163 food categories.⁷¹ To date, no retailers have committed to meeting these targets.

Defining 'healthier' products

Each retailer applies a NPM to either define products as 'healthier' or indicate their relative healthiness, for various purposes. However, these models differ across companies and are proprietary, developed by private entities. A summary of their features is provided in Table 1.

It should be noted that while each NPM claims to be based on guidance by US government bodies such as the FDA and USDA, and to have been validated by peer-reviewed studies, none have been formally endorsed by a government body. Nor have they been benchmarked against any existing government-endorsed NPMs.

TABLE 1
OVERVIEW OF NPMs USED BY THE THREE SELECTED US GROCERY RETAILERS

Retailer	Name & Developer	Healthiness scale	Criteria Considered	Applies to	User for	Transparency
Kroger	FoodHealth Score (bitewell)	Continuous scale (1-100) with implicit color-coding. No fixed 'healthier' threshold.	Ingredient quality, nutrient density	All products	Online store only: product comparison, recommendations, basket assessment	Not available
Walmart	Great For You badge (Walmart)	Binary ('healthy' / 'not healthy')	Thresholds for nutrients of concern; ingredients to encourage	Private label products	On-pack labeling, online category	Published in full
Ahold Delhaize USA	Guiding Stars (Guiding Stars Licensing Co.)	Three levels: 1. Good, 2. Better, 3. Best	Nutrients of concern; artificial ingredients; nutrients to encourage	All products	Targets and reporting; in-store & online labeling (incl. A-brands); in-store positioning	Available upon request

BOX 6

RETAILERS' INFLUENCING ON SUPPLIER REFORMULATION

Given their powerful position within the food value chain, retailers have the opportunity to influence suppliers to improve the healthiness of their products. By adopting consumer-facing labeling systems that summarize nutrient content and applying them to national brand products, Kroger and Ahold Delhaize USA incentivize suppliers companies to improve nutrient content in order to increase sales.

Moreover, in a 2022 article, Kroger's Chief Medical Officer stated that the company "has been encouraging suppliers to consider reducing the amounts of ingredients like sodium and sugar while keeping the price affordable".⁷² However, further details of this approach are not publicly available.

PRICING AND PROMOTION STRATEGIES

Affordability of healthier products

Walmart, Kroger, and Ahold Delhaize USA each highlight affordability as part of their broader commitments to healthy food access, though the depth and specificity of their approaches vary.

- Walmart reports providing "price gaps" on fresh fruits and vegetables worth USD \$1.6 billion in 2025, though this concept is not clearly defined or explained, and what this represents in terms of total sales.
- Kroger positions general affordability at the core of its commercial and ESG strategy, with KPIs tied to this goal and a "Fresh For Everyone" promise that stresses affordable fresh, natural, and organic options. While incentives such as discounting imperfect fresh items further reinforce this focus, no targeted strategy for improving the affordability of healthier products across all categories was identified.
- Ahold Delhaize USA explicitly includes access to affordable, healthy products as a pillar of its nutrition strategy, though specific implementation details are being developed.

The results of ATNi's independent pricing analysis, which assesses the cost and affordability of healthier versus less healthy food baskets at Walmart and Kroger, are presented in Chapter 7.

Price promotions and loyalty rewards

Kroger and Walmart both offer extensive loyalty programs, but no evidence was found that these are used to incentivize healthier purchasing, nor that either retailer runs initiatives to offer proportionately more promotions on healthier products.

Ahold Delhaize USA, by contrast, has integrated nutrition into certain loyalty programs. At Food Lion, initiatives such as Bull City Bucks and SuperSNAP provide SNAP beneficiaries in North Carolina with up to USD 40 per month of free fruits and vegetables. In addition, customers with 'Healthy Savings' cards – issued through participating employers and insurance companies – receive automatic discounts on produce. The company informed ATNi that these initiatives remain active in 2025. However, they are limited to specific customer groups, rather than being available to the general consumer base.

The results of ATNi's independent analysis of the healthiness of the retailers' promotions—specifically, how frequently 'healthier' versus 'less healthy' products are promoted in their flyers and on e-commerce sites—are presented in Chapter 6.

RESPONSIBLE MARKETING

Product positioning & in-store marketing

Ahold Delhaize USA reports that all its operating brands use product placement strategies to support healthier choices. For example, Food Lion shared examples such as end-of-aisle displays and checkout areas dedicated to 'Guiding Stars' products, alongside shelf tags and educational content designed to guide customers toward more nutritious options. However, the frequency and consistency of these practices are not clear.

Kroger and Walmart show no evidence of policies or initiatives to influence in-store product placement, shelf-space allocation, or promotional techniques (beyond pricing) to encourage healthier choices or increase fruit and vegetable sales.

Responsible marketing to children

None of the three retailers demonstrate strong, codified commitments to responsible marketing to children.

- Kroger has a general 'Responsible Marketing Statement' that references marketing to children but lacks any nutrition-specific commitments. No policy on responsible in-store marketing was identified.
- Ahold Delhaize USA informed ATNi that Food Lion primarily targets its marketing content to adults, although this practice is not formalized in a written policy.
- Walmart has no publicly available policy on responsible marketing to children or restrictions on marketing unhealthy products.

BOX 7

SELF-REGULATION OF MARKETING TO CHILDREN IN THE US

Food marketing is not regulated at the federal level. The main self-regulatory initiative, the Children's Food and Beverage Advertising Initiative (CFBAI), includes 21 major food and beverage companies, which pledge to advertise only products meeting the CFBAI nutrition criteria to children under the age of 13 years.⁷³

However, these standards fall short of World Health Organization (WHO) and United Nations Children's Fund (UNICEF) recommendations and have been criticized as lacking adequate enforcement^{74,75} At present, no major food retailers are CFBAI signatories.

RESPONSIBLE LABELING

All three retailers have systems in place to help customers identify 'healthier' products. However, these systems employ different systems underpinned by company-specific NPMs (Table 1), with varying levels of reach and visibility.

- Ahold Delhaize USA uses the 'Guiding Stars' system front-of-pack across its private label packaging, the in-store shelf tags for branded products, and all products on its e-commerce platforms.
- Walmart uses the "Great For You" badge to signpost healthy products, appearing on-pack for private-label items and fresh produce, and on a dedicated online category page. However, the system does not extend to shelf tags or branded products in-store.
- Kroger's use of the 'FoodHealth' Score, which rates products on a scale of 1-100 and includes color-coding, is also notable as it applies to all products online and in the app, where it recommends healthier substitutes on each product page and

calculates the overall healthiness of the shopper's basket. However, it is not currently displayed in stores, limiting its impact at the point of purchase.

While it is encouraging that each company has adopted a FOPL system to help consumers identify healthier products in-store and/or online—and, in the case of Kroger's FoodHealth score, identifying unhealthy products—these are based on privately-developed NPMs that use different definitions of 'healthier' and lack formal endorsement from independent government bodies. This inconsistency could lead to confusion among US consumers. It is therefore positive that the FDA has proposed a mandatory front-of-pack label (FOPL), the 'Nutrition Information Box' to standardize labeling across retailers. The proposed rule is currently undergoing public consultation and, if adopted, would take effect no earlier than 2028.⁷⁶ Retailers have the opportunity to transparently communicate on their preparations for the upcoming regulation.

BOX 8

POLICY: NUTRITION LABELING AND HEALTH CLAIMS

In the US, on-pack nutrition claims and labeling are regulated by the FDA:

- The FDA 'Healthy' definition regulates the ability of manufacturers to use the term 'healthy' or 'nutritious' on their products: products must meet maximum thresholds for sugar, saturated fat, and sodium, and minimum levels for food groups to encourage, aligned with the Dietary Guidelines for Americans (DGA).^{77,78}
- The Nutrition Facts label (updated 2016), remains the mandatory back of pack (BOP) label for calories and nutrient content.⁷⁹
- In January 2025, the FDA proposed a mandatory front-of-pack label (FOPL), the 'Nutrition Information Box', indicating whether levels of saturated fat, sodium, and added sugars are 'high', 'medium' or 'low'.⁸⁰



PRODUCT PROFILES

Retailers play a key role in shaping food environments through their private label portfolio, which influences what consumers can access and afford. ATNi's Retailer Assessment 2025 includes a Product Profile that objectively evaluates the nutritional quality of private label packaged foods and non-alcoholic beverages sold by the selected grocery retailers.

Applied consistently across the six countries included in the wider assessment, the Product Profile uses the same internationally recognized NPMs, similar to ATNi's assessments on manufacturer brands. This enables comparisons and highlights opportunities for reformulation, product innovation, and diversification within national retail landscapes.

This chapter presents the results for the US, focusing on the nutritional quality of the private label portfolios of three of the largest grocery retailers: Walmart, Kroger, and Ahold Delhaize USA (Food Lion). The results for the US and all other countries included in the assessment can also be found in [ATNi's interactive dashboard](#).

Scope and Methods

The Product Profile assesses the private label portfolios using standardized per 100 g/mL nutrient data from Innova Market Insights, with limited company verification (i.e. only Ahold Delhaize USA: Food Lion provided ATNi feedback on the original dataset). Products were screened for duplicates, implausible values, and missing key nutrients; fresh produce, plain coffee/tea, spices, baby food, alcohol, and supplements were excluded.

Results are presented as unweighted averages, as category-specific food and beverage sales data for retailers were unavailable. Further details on data sources, categorization, proxy assumptions, and quality-control procedures are available in the [Scope and Methodology document](#).

BOX 9

EVALUATION OF PRIVATE-LABEL PRODUCTS' HEALTHINESS

Healthiness was evaluated using three internationally recognized models:

- HSR; products scoring ≥ 3.5 classified as 'healthier'
- Nutri-Score (A-E); with A+B and A+B+C results reported;
- HFSS+colors/flavors/NSS approach; flags products high in nutrients of concern (HFSS; high in added saturated fat, sodium, and sugar) and containing three markers of ultra-processed foods (UPFs), namely: colors, flavors, and non-nutritive sweeteners (NNS).⁸¹

As no government-endorsed NPM using per 100g data currently exists for the US, these international models were applied to ensure comparability across countries.⁸¹

For more detailed information on these NPMs: [ATNi's Retail Assessment Scope and Methodology document](#).

KEY FINDINGS

This section provides an overview of the nutritional quality of private-label portfolios for the three US retailers (Table 2) and compares their results with global averages across all countries included in the Retail Assessment and with US manufacturer branded products included in [ATNi's Global Index 2024](#).

TABLE 2
PRODUCT PROFILE RESULTS ACROSS THREE NPMS

Retailer	HSR			Nutri-score							HFSS + colors + flavors / NNS (UPF)		
	Mean HSR	% healthy	Total products	% healthy (A+B)	% healthy (A+B+C)	A	B	C	D	E	Total products	% products considered UPF	Total Products
Walmart	2.6	39%	3,274	24%	43%	517	256	617	833	1,036	3,259	88%	3,295
Kroger	2.7	40%	2,934	24%	44%	415	281	600	785	834	2,915	88%	2,955
Food Lion	2.8	45%	1,479	28%	47%	309	110	268	402	384	1,473	85%	1,499

Mean healthiness of retailers' private-label portfolios using HSR

The average HSR across the three US retailers (7,687 products) was low (2.7 out of 5), with minimal variation between retailers; with a mean HSR of 2.6 for Walmart (3,274 out of 3,274 products); 2.7 for Kroger (2,934 out of 2,934 products); and 2.8 for Food Lion (1,479 out of 1,479 products). Compared with other countries in [this assessment](#), US retailers show a similar mean HSR to those in France with a mean HSR of 2.7 (8,324 products in total); and the overall mean HSR of 2.7 (18,652 product in total) for all retailers included in the assessment across the six countries.

Proportion of private-label portfolios considered 'healthier' using HSR

Across the three US retailers, a total of 7,687 private label products were analyzed using the HSR system. Of these, 41% (3,117) met the 'healthier' threshold of $HSR \geq 3.5$, mirroring the overall average of 41% (7,724 out of 18,652 products) across all retailers included in the assessment. Meanwhile, 40% (3,210) of all US private-label products assessed scored 2 stars out of 5 or below, with 12% (981) receiving the lowest rating of 0.5 stars. Among the three US retailers, Food Lion had the highest proportion of 'healthier' private label products (45%), followed by Kroger (40%) and Walmart (39%).

Proportion of private-label portfolios considered 'healthier' using Nutri-Score

Results based on Nutri-Score reveal a similar pattern. Since Nutri-Score was not originally designed as a binary measure, both threshold approaches are presented for transparency:

- A+B threshold: 24% of Walmart and Kroger products meet this definition of 'healthier', compared with 28% at Food Lion.
- A+B+C threshold: 43% (Walmart), 44% (Kroger), and 47% (Food Lion).

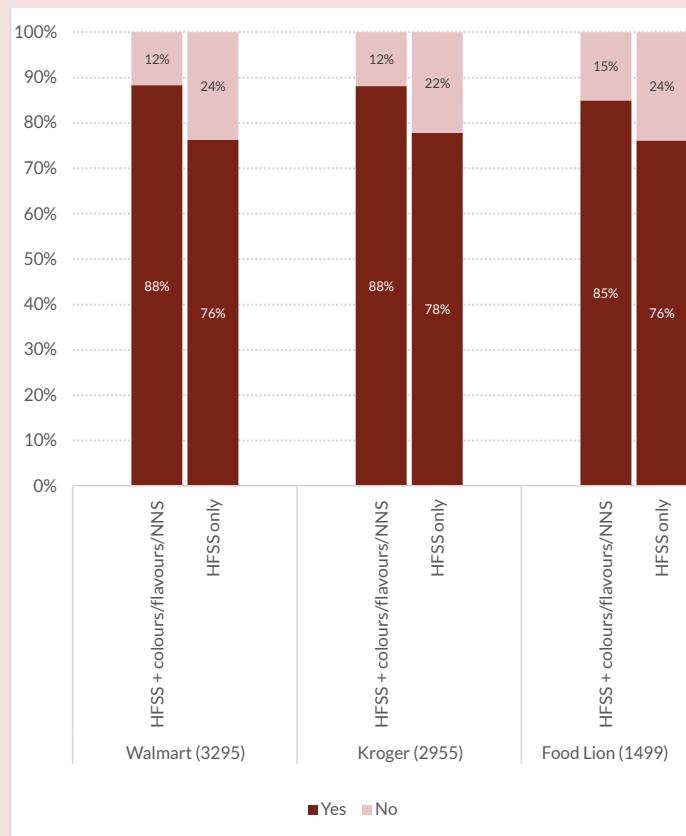
Looking across the Nutri-Score letter grades, Food Lion performs slightly better, with a higher proportion of products with the healthier 'A' grade (Walmart 16%, Kroger 14%, Food Lion 21%) and a lower proportion with the least healthy 'E' grade (Walmart 32%, Kroger 29%, Food Lion 26%).

Proportion of private-label portfolio considered 'highly processed'

The proportion of private-label products classified as highly processed under the HFSS+colors/flavors/NNS approach^h was relatively high across all three US retailers— 88% for Walmart (2,911 products out of 3,295), 88% for Kroger (2,605 out of 2,955 products), and 85% for Food Lion (1,274 out of 1,499 products). This is slightly higher than the overall proportion of 'highly processed' products across all retailers included in the assessment with 86% (15,639 out of 18,195 products). Product categories with lower levels of processing included: juice, processed fruit and vegetables, ready-to-drink tea, and ready-to-drink coffee. All other categories contain a considerable proportion of HFSS+UPF products (above 80%).

^h It is important to note that the analysis covers packaged food and beverages products. Fresh fruits and vegetables were excluded from the analysis. While some retailers package fresh produce items, resulting in barcoded products included in the original dataset, these were removed. NNS; nonnutritive sweeteners

FIGURE 7
PROPORTION OF HFSS+UPF PRODUCTS FOR THE THREE US RETAILERS



BOX 10

REFORMULATION AND THE REMOVAL OF SYNTHETIC DYES IN THE US

Amid growing concerns over the health impacts of UPFs⁸², synthetic food dyes have come under increasing scrutiny. Several dyes still permitted in the US, such as 'Red 40' and 'Yellow 5', have been banned in other markets, including the European Union. A recent study found that 19% of products produced by the top 25 US food and beverage manufacturers (n=39,763) contained synthetic dyes, rising to 28% among products most heavily marketed to children.⁸³ Since 2023, 25 US states have introduced legislation to ban, restrict, or require labeling of synthetic dyes. Meanwhile, under the 'Make America Healthy Again' banner, the FDA is moving to phase out petroleum-based synthetic dyes from the national food supply.⁸⁴

In response to this evolving policy and consumer environment, all three assessed retailers have taken steps to address these concerns:

- Ahold Delhaize USA's 'Guiding Stars' algorithm deducts points for artificial ingredients, incentivizing their removal to achieve healthier product ratings to meet its healthy sales targets.⁸⁵
- Kroger's 'Simple Truth' private-label brand emphasizes 'clean label' formulations, excluding artificial colors.⁸⁶
- Walmart has gone the furthest, committing to eliminating synthetic dyes and 30 other additives, including preservatives, artificial sweeteners, and fat substitutes from its private-label products by 2027.⁸⁷ The company reports that synthetic dyes are present in about 10% of its private-label portfolio.

Retailers have begun responding through private-label reformulations (see Box 10) by removing synthetic dyes from their products, one of the markers of ultra-processing. Under the HFSS+UPF approach, however, products reformulated from synthetic to natural colorants remain classified as UPF. This is because the model considers all cosmetic additives – regardless of their origin, as markers of ultra-processing – reflecting modification beyond a product's natural state and serving no direct health-related function (unlike, for example, preservatives). While these regulatory and retailer-led actions may enhance compliance with color additive standards, they do not necessarily alter a product's UPF classification within this analysis.

Within the private-label portfolios of the three US retailers, low-fat yogurts clearly illustrate this tension. Many of these products contain non-nutritive

sweeteners and, in some cases, added flavors or colors. While such formulations may be considered 'healthier' under the HSR and Nutri-Score systems – reflecting lower levels of energy and sugar – they remain classified as ultra-processed under the combined HFSS+UPF approach due to the presence of cosmetic additives and sweeteners. Similarly, some products have replaced high-fructose corn syrup with sugar, a change that does not necessarily alter the HFSS classification when total sugars remain above model thresholds.

Together, these findings highlight the importance of interpreting results across multiple models: while nutrient-based scores may improve following reformulation, but processing-based indicators persist where cosmetic additives or sweeteners remain present.

Comparing product categories across retailers using HSR

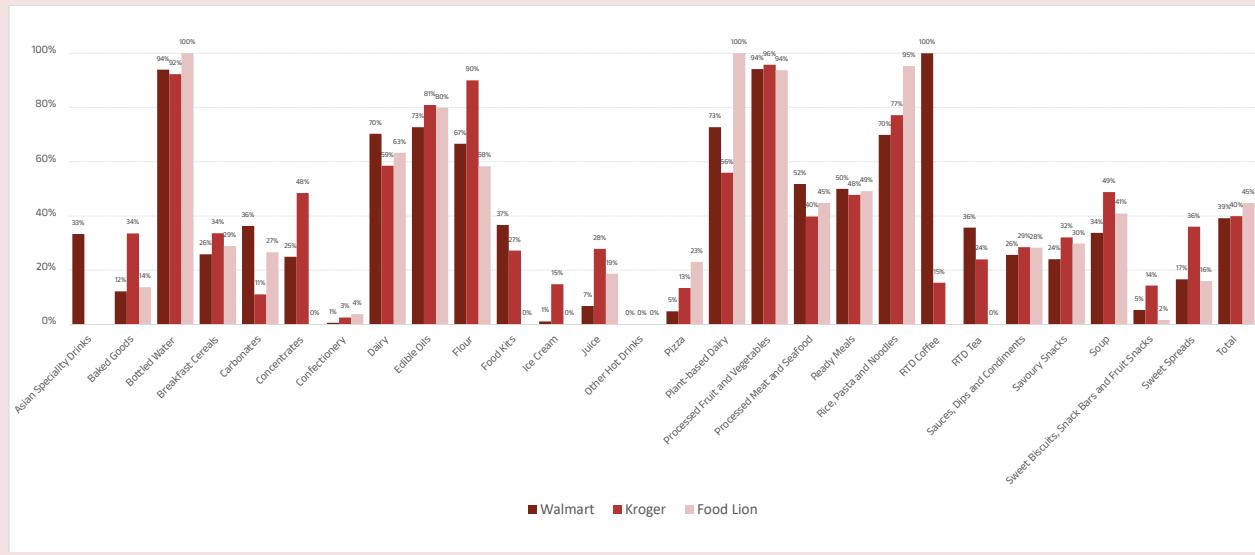
The analysis covers 27 product categories, revealing significant variation in nutritional quality. Breakfast cereals had a relatively low mean HSR, ranging from 2.8 to 3.0 across the three US retailers. Within this category, only 26% (23 out of 89 products) of Walmart's, 34% (33 out of 98 products) of Kroger's, and 29% (11 out of 38 products) of Food Lion's private label products meet the healthier threshold (HSR ≥ 3.5).

Within each product category, mean HSR results were relatively similar across retailers, with few differences. The exception was 'baked goods' where Walmart had the lowest mean HSR (1.7) compared to Kroger (2.5) and Food Lion (2.1). When comparing the share of products classified as 'healthier' (HSR ≥ 3.5) across the grouped categories, slight differences can also be observed between the three retailers (Figure 8).

[ATNi's interactive dashboard](#) provides a more detailed comparison of category-level results across retailers and the six countries included in the overall Retail Assessment.

FIGURE 8

PROPORTION HEALTHIER PRIVATE-LABEL PRODUCTS BY CATEGORY GROUP FOR THE THREE SELECTED US RETAILERS



Comparing private-label with global manufacturer portfolios

At an aggregate industry level, retailers' private-label portfolios in the US show a slightly higher overall healthiness than those of leading manufacturers assessed in the Global Index 2024. The mean HSR for private label portfolios across Walmart, Kroger and Food Lion was 2.7 (7,687 products), compared to 2.4 (16,399 products) for 24 leading manufacturers selling food and beverage products in the US (Table 3).

These findings are consistent with evidence from other markets. A study from New Zealand found that private-label products had a higher proportion of items with an estimated HSR \geq 3.5 compared to branded packaged foods.⁸⁸ Similarly, an Australian study analyzing the sodium content of 15,680 private-label and branded products sold across four major supermarkets (2011–2013) reported that private-label products generally performed better than branded equivalents on sodium levels.⁸⁹

TABLE 3

COMPARISON OF MEAN HSR BETWEEN US RETAILERS AND US MANUFACTURERS ASSESS IN ATNI'S GLOBAL INDEX 2024

Category	US Retailers				US Manufacturers ⁱ			
	Mean HSR	% healthy products	Healthy products	Total products	GI - Mean HSR	GI - % healthy products	GI - % healthy products	GI - Total products
Baked Goods	2.1	20%	144	713	2.6	47%	426	912
Bottled Water	4	94%	107	114	3.9	93%	235	252
Breakfast Cereals	2.9	30%	67	225	2.7	23%	69	296
Carbonates	1.4	21%	11	53	1.4	25%	158	635
Concentrates	1.6	28%	33	116	1.1	4%	8	180
Confectionery	1.1	1%	4	267	1.1	6%	167	2731
Dairy	3.3	64%	515	811	3.7	73%	1926	2652
Ice Cream	2.3	9%	20	230	2.1	6%	53	841
Juice	2.2	18%	24	136	2.1	26%	88	342
Other Hot Drinks	0.6	0%	0	54	1.4	6%	1	17
Plant-based Dairy	2.9	65%	32	49	2.5	35%	69	196
Processed Fruit and Vegetables	4.2	94%	727	770	4.2	97%	177	182
Processed Meat and Seafood	2.6	46%	236	514	2.6	48%	352	728

ⁱ This includes manufacturers featured in ATNI's Global Index 2024 that are active in the US, both US-based companies and those for which the US ranks among their top five markets by sales

TABLE 3 (CONT).

COMPARISON OF MEAN HSR BETWEEN US RETAILERS AND US MANUFACTURERS ASSESSED IN ATNI'S GLOBAL INDEX 2024

Category	US Retailers				US Manufacturers			
	Mean HSR	% healthy products	Healthy products	Total products	GI - Mean HSR	GI - % healthy products	GI - % healthy products	GI - Total products
Ready Meals	3	49%	217	442	2.8	38%	1036	2751
Rice, Pasta and Noodles	3.6	78%	242	311	4.1	82%	268	325
RTD Coffee	1.7	24%	7	29	1.4	19%	5	27
RTD Tea	1.8	26%	11	42	2.1	34%	21	61
Sauces, Dips and Condiments	2.2	27%	309	1129	2.3	27%	217	816
Savory Snacks	2.5	29%	175	608	2.2	17%	209	1225
Soup	3.1	39%	56	142	3.5	73%	216	295
Sweet Biscuits, Snack Bars and Fruit Snacks	1.7	9%	38	423	1.9	11%	93	866
Sweet Spreads	2.2	22%	45	201	2.4	35%	24	69
Total	2.7	41%	3020	7379	2.4	35%	5818	16399

FORTIFICATION

Based on the mapping approach outlined in the [methodology report](#), fortification standards were identified for: maize meal, maize masa flour, rice, salt, and wheat flour.

BOX 11 FORTIFICATION POLICIES

Food fortification in the US is primarily voluntary, guided by the FDA's Fortification Policy under 21 CFR §104.20.⁹⁰ The policy outlines principles for the addition of nutrients to foods to improve public health, while discouraging indiscriminate fortification that could lead to nutrient imbalances or misleading claims. The FDA discourages fortification of fresh produce, meat, poultry, fish, sugars, and snack foods like candies and carbonated beverages

In addition, certain staple foods—such as wheat flour, maize meal, rice, and iodized salt—are subject to standards of identity that require fortification with micronutrients when labeled as “enriched” or “iodized.” In addition, fortified versions of staples like rice and wheat flour are required in certain federal food assistance programs, such as USDA's McGovern-Dole School Feeding Program.

An overview of food categories and fortification details can be found in Table 4.

TABLE 4
OVERVIEW OF FORTIFICATION POLICIES IN THE US

Food category	Voluntary/ Mandatory	Specified micronutrients
Maize meal and corn masa flour	Voluntary	For meal: vitamin B1, B2, B3, B9, Iron (+ optional addition of calcium and vitamin D) ⁹¹ For masa flour: optional addition of vitamin B9 ⁹²
Rice	Voluntary, with additional requirements for use in federal programs ⁹³	Vitamin B1, B3, B9, Iron (+optional addition of calcium and vitamin D) ⁹⁴
Salt	Voluntary	Iodine ⁹⁵
Wheat flour	Voluntary, with additional requirements for use in federal programs ⁹⁶	Vitamin B1, B2, B3, B9, Iron (+ optional addition of Calcium) ⁹⁷

Source: United States Food and Drug Administration. Code of Federal Regulations.

Across the three US retailers, 86 private label products were identified as potentially eligible for fortification or enrichment under national standards (see Table 5). This includes products where maize meal, maize masa flour, rice, salt or wheat flour was either the sole ingredient, or the clearly identifiable primary ingredient. Of these, 27 eligible products were from Walmart, 35 from Kroger, and 24 from Food Lion (Ahold Delhaize USA).

Analysis showed only 37 of the 86 products (43%) were fortified or enriched. This varied by retailer: 52% for Walmart, 29% for Kroger, and 54% for Food Lion; and by category, ranging from 100% enrichment of maize meal products to only 27% for rice. Fortification generally aligned with the minimum standards required to carry an 'enriched' label but rarely went beyond these specifications.

In addition to required levels of iron and B vitamins, fortification guidelines also specify optional levels for calcium and vitamin D. Uptake of these optional levels was limited: only 40% of maize meal and 21% of wheat flour products contained calcium, and none included vitamin D.

Similarly, salt iodization remained relatively low (37%), suggesting that mandatory labeling of non-iodized salt ("this salt does not supply iodide, a necessary nutrient") may not effectively drive consumer demand for more widespread iodization by manufacturers.⁹⁸ Overall, voluntary fortification appears largely confined to meeting minimum 'enriched' standards. Given the small sample size, these findings should be interpreted with caution. ATNi intends to conduct larger scale analysis on this topic in future research.

TABLE 5
LEVEL OF FORTIFICATION IN PRIVATE LABEL PORTFOLIOS FROM THE THREE US RETAILERS

Food category	Percentage of applicable products fortified/enriched	Percentage adding optional calcium	Percentage adding optional vitamin D
Maize meal	100%	40%	0%
Wheat flour	79%	21%	N/A
Rice	27%	0%	0%
Salt	31%	N/A	N/A

Source: ATNi analysis based on Innova product data, complemented by additional desk research



PROMOTIONS

As part of ATNi's Retail Assessment 2025, an independent analysis was conducted of food and beverage promotions by the three retailers featured in US grocery retailers' flyers and e-commerce websites. The Retailer Profile (Chapter 5), which examined whether companies have policies or campaigns to increase the share of promotions on 'healthier' products, found that none of the retailers assessed have a clear commitment, policy, or program to ensure that a greater share of price promotions is applied to 'healthier' products -relative to unhealthy ones- throughout the year. Only Food Lion (Ahold Delhaize USA) was found to have some relevant initiatives in place, and these were limited to specific consumer groups.

This research component explores how frequently healthy', 'unhealthy in excessive amounts', and 'unhealthy' products are promoted in practice, highlighting the balance of promotional emphasis across key food categories. The categorization approach builds on the Global Diet Quality Score (GDQS) framework, adapted for the purposes of this assessment. Details of the methodology and this framework are outlined in the overarching [**Methodology Report**](#); a summary of the main findings for Walmart, Kroger, and Food Lion is provided below.

A total of 1,777 food products were analyzed from three weekly flyers each from Food Lion and Kroger, and from Walmart's Rollback listing webpage. On average, Food Lion flyers featured more products per issue ($n = 218$) compared with Kroger ($n = 168$). Walmart products assessed via its Rollback webpage yielded 618 products in total.

Figure 9 summarizes the proportion of promoted foods categorized as healthy, unhealthy in excessive amounts, unhealthy, and others. Overall, each retailer allocated less than one-fifth of their flyer space to the promotion of healthy products. Food Lion featured the highest share of healthy items (18%), followed closely by Kroger (17%). In contrast, Walmart promotions had the lowest proportion of healthy foods (5%) and the highest proportion of unhealthy foods (80%).

FIGURE 9
PROPORTION OF HEALTHY, UNHEALTHY IN EXCESSIVE AMOUNT, UNHEALTHY, AND OTHER PRODUCTS

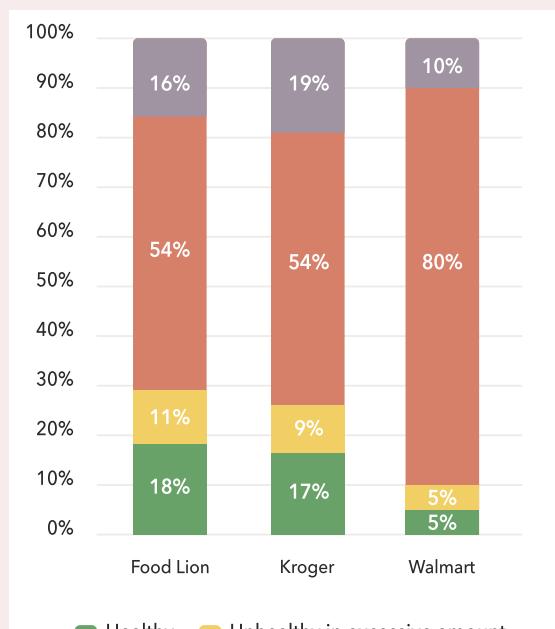


Table 6 presents the proportion of specific groups of healthy foods promoted in each flyer. Food Lion, which had the highest overall percentage of healthy foods, devoted more than half of its healthy food promotions to fruits (5%) and vegetables (5%), followed by fish (3%) and poultry (2%). Kroger displayed a similar pattern, although vegetables were promoted less frequently (2%).

By contrast, Walmart's healthy food promotions were mostly shelf-stable products, such as (canned) fish (1%), nuts and seeds (1%), and unsweetened beverages (1%). While Walmart does sell fresh perishable produce and occasionally offers temporary

price promotions, its Rollback listing pages are curated and tend to favor non-perishable foods. Also interesting to note, among all three retailers, none promoted dark green leafy vegetables or whole grain products in their flyers during the three weeks of data collection.

Table 7 summarizes the promotion of unhealthy food groups across the retailers. Refined grains, baked goods, and snacks were the most frequently featured items, particularly at Walmart (26.9%), followed by Food Lion (15.7%), and Kroger (13.5%). Sweets and ice cream were also prominently featured, again highest at Walmart (20.2%) compared with Kroger (13.7%) and

TABLE 6
MEAN PERCENT OF HEALTHY FOOD INCLUDED IN FLYERS

Healthy Food Group	Walmart	Kroger	Food Lion
All fruits	0.32%	6.22%	5.36%
Citrus fruits	0.00%	0.20%	0.16%
Deep orange fruits	0.00%	1.53%	1.85%
Other fruits	0.32%	4.49%	3.35%
All vegetables	0.65%	1.96%	4.76%
Dark green leafy vegetables	0.00%	0.00%	0.00%
Cruciferous vegetables	0.00%	0.00%	0.49%
Deep orange vegetables	0.00%	0.00%	0.61%
Other vegetables	0.65%	1.96%	3.66%
Legumes	0.16%	0.00%	0.29%
Deep orange tubers	0.00%	0.18%	0.00%
Nuts and seeds	1.13%	0.38%	0.76%
Whole grains	0.00%	0.00%	0.00%
Fish and shellfish	1.29%	3.18%	3.08%
Poultry and game meat	0.00%	3.16%	2.33%
Low fat dairy	0.00%	0.43%	0.61%
Eggs	0.00%	0.18%	0.00%
Healthy ready meals	0.00%	0.58%	0.76%
Unsweetened beverages	1.13%	1.13%	0.60%

TABLE 7
MEAN PERCENT OF UNHEALTHY IN EXCESSIVE AMOUNT AND UNHEALTHY FOOD INCLUDED IN FLYERS

Unhealthy Food Group	Walmart	Kroger	Food Lion
High-fat dairy*	0.00%	6.12%	5.54%
Red meat*	0.00%	4.44%	3.03%
Oils and fats*	5.34%	0.38%	0.91%
Processed meat	0.16%	4.58%	7.12%
Sauces, dips, and condiment	8.90%	6.13%	4.04%
Refined grains, baked goods, and snacks	26.86%	15.68%	13.46%
Sweets and ice cream	20.23%	11.33%	13.73%
Sugar-sweetened beverages	18.77%	5.62%	6.89%
Juice	3.07%	2.29%	1.20%
White roots and tubers	0.00%	0.92%	0.78%
Purchased deep fried foods and unhealthy ready meals	2.10%	7.44%	6.94%

* Foods that are unhealthy in excessive amount.

Food Lion (11.3%). SSBs were also more prominently advertised by Walmart (18.8%), nearly triple the proportion seen at Food Lion (5.6%) or Kroger (6.9%). Overall, these findings indicate broadly comparable promotional trends among retailers, though Walmart places greater emphasis on the same types of unhealthy foods promoted by Kroger and Food Lion.

Our findings are consistent with existing research on supermarket promotions in the US. Another study on supermarket flyers reported that fruits, vegetables, greens, beans, and dairy products were less prominent in flyers compared to their share in the population's diet.⁹⁹ Whole grains were also underrepresented, both in flyers and in dietary intake.⁹⁹ In-store promotions further amplified this imbalance, with unhealthy foods more frequently featured through placement at end-of-aisle and checkout displays.¹⁰⁰

On average, stores offered only 5-10 weekly promotions for fruits, vegetables, and beans, compared with 130 for sweet and salty snacks, 68 for baked goods, and 41 for SSBs¹⁰⁰ More importantly, across all food groups, sales were on average higher when products were promoted than when they were not.¹⁰⁰





COST AND AFFORDABILITY

The pricing analysis compares the cost and affordability of healthier versus less healthy diets across the six countries included in ATNi's Retail Assessment 2025 –the US, France, Indonesia, South Africa, Kenya, and the Philippines– using a standardized food basket approach. Retail food baskets were constructed based on the EAT-Lancet reference diet, representing “healthier” and “less healthy” baskets. The full report, including details of the methodology, data sources, analytical framework, results, and recommendations, is available in the ATNi Retail Assessment 2025 [Pricing Analysis Report](#).

Pricing data was available for nine of the eighteen retailers assessed. For the US, the analysis covered two of the three retailers included in the overall assessment: Walmart and Kroger. Ahold Delhaize USA (Food Lion) was excluded, due to data

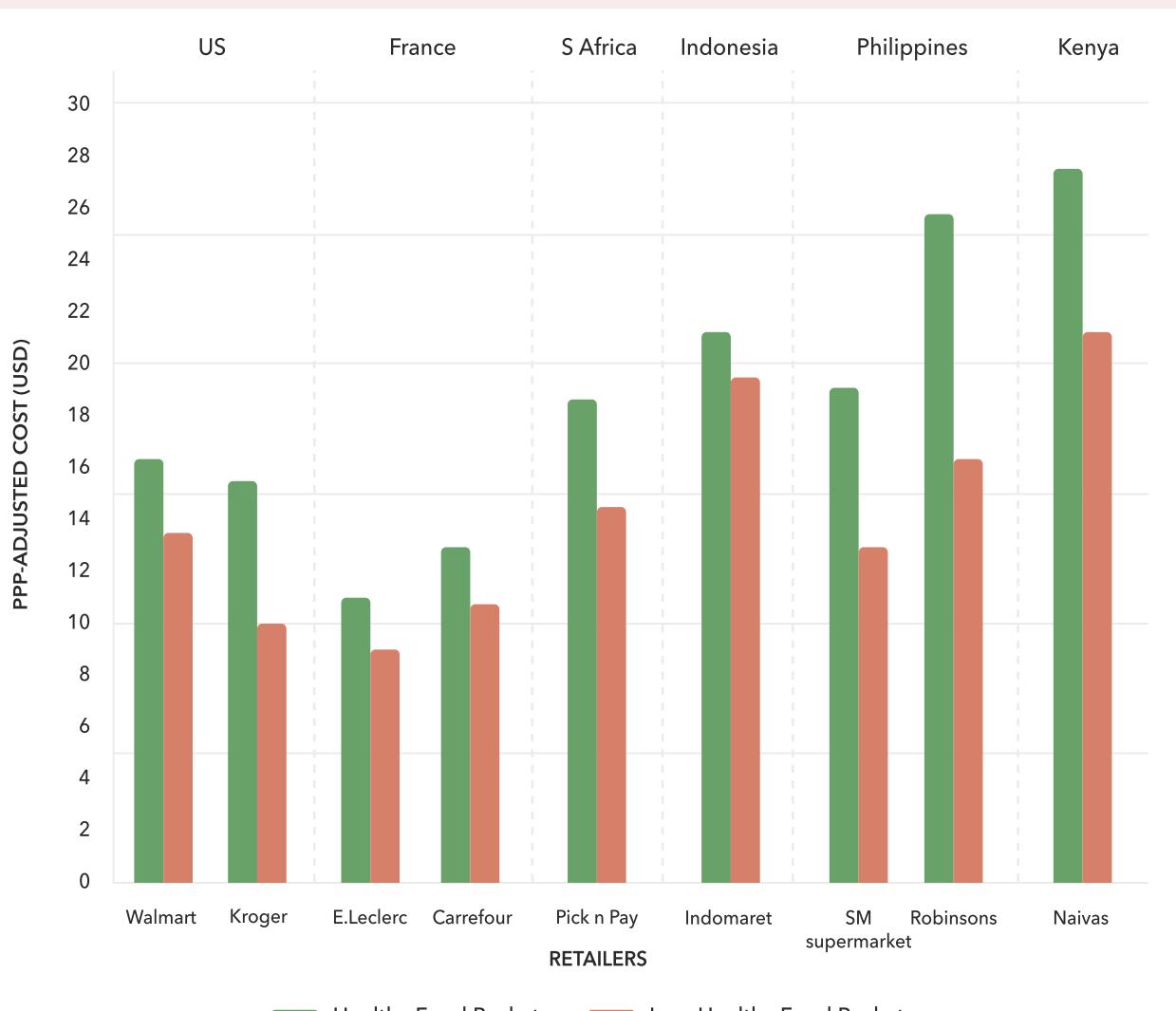
collection constraints linked to the company's strict data protection systems, which prevent automated price scraping. Mean 2024 retail prices from Euromonitor International's VIA Platform were used to estimate the cost of both baskets for each retailer.

The Retailer Profile assessment (Section 5) found that both US retailers emphasize the affordability of their product offerings—particularly fruits and vegetables—as part of their broader commitments to healthy food access. However, neither company provides specific details on how these commitments are implemented. In practice, the pricing analysis found that the healthier food basket was consistently more expensive than the less healthy one across both US retailers – a pattern also observed across all nine retailers in the six countries assessed (Figure 10, see next page)



FIGURE 10

**THE COST OF HEALTHIER AND LESS HEALTHY RETAIL FOOD BASKETS
PER PERSON PER DAY AMONG SELECTED**



While food prices in the US are generally lower in absolute terms than in the upper-middle- and lower-middle-income countries included in the assessment, the relative cost difference between healthier and less healthy baskets remains substantial, with the healthier basket costing on average 18.4% higher at Walmart. This points to a structural issue: even where healthier foods may be available, they are not necessarily affordable for all income groups.

The analysis also highlights differences between retailers. While overall price levels were broadly comparable, Kroger generally offered the lowest-cost baskets, whereas Walmart showed slightly higher costs

for both healthier and less healthy baskets. However, the relative price gap between the two baskets was larger for Kroger.

Overall, these findings suggest that differences in affordability between healthier and less healthy options reflect broader, systemic pricing dynamics rather than company-specific factors. At the same time, they expose a critical weakness in retailers' affordability strategies, which fail to account for the higher relative cost of healthier products. Overall, low-income households are especially likely to choose cheaper, calorie-dense foods rather than more expensive lean proteins or fresh produce.²²

BOX 12

POLICY: FISCAL POLICIES AFFECTING NUTRITION IN THE US

Fiscal policies, such as taxes and subsidies, can influence dietary choices by discouraging the purchase of unhealthy foods, and lower financial barriers to purchase healthier foods. In the US however, currently agricultural subsidies favor commodity crops (e.g. corn, soy, wheat) commonly used in processed foods, while fruits and vegetables receive minimal funding.²¹ This imbalance contributes to lower ingredient costs for high-calorie processed foods, making them significantly cheaper than healthier alternatives. Research also indicates that Americans now pay an estimated 40% more for fruits and vegetables than they would in a more efficient market, contributing to their under-consumption.¹⁵

At the federal level, the US does not impose excise taxes on foods high in sugar, salt, or fat. However, several cities –including Boulder (Colorado), Philadelphia (Pennsylvania), Oakland and San Francisco (California), and Seattle (Washington) – have enacted SSB taxes, which research links to substantial declines in SSB purchases.¹⁰¹

In the US, both the healthier and less healthy retail food baskets were among the most affordable across all countries assessed. When expressed as a percentage of daily per capita gross national income (GNI) and net income, both baskets required a relatively small share of income compared to retailers in upper middle- and LMICs (Table 8, see next page). However, the healthier basket consistently represented a slightly higher share of income than the less healthy one across both US retailers.

TABLE 8
AFFORDABILITY OF HEALTHIER AND LESS HEALTHY RETAIL FOOD BASKETS

Income	Country	Retailer	Healthier retail food basket		Less healthy retail food basket	
			% daily per capita GNI	% daily per capita net income	% daily per capita GNI	% daily per capita net income
Upper	US	Walmart	6.89	11.10	5.82	9.37
		Kroger	6.66	10.72	4.20	6.76
	France	E.Leclerc	6.27	8.99	5.10	7.30
		Carrefour	7.69	11.01	6.21	8.89
Upper-middle	Indonesia	Indomaret	48.90	100.10	44.16	90.38
	South Africa	Pick n pay	44.72	28.28	34.35	21.72
Lower-middle	Philippines	SM supermarket	52.63	31.91	35.68	21.63
		Robinsons	71.19	43.16	44.32	26.87
	Kenya	Naivas	154.40	64.58	116.69	48.81

*GNI: gross national income

These results are comparable to those observed in France, reflecting the higher income levels and purchasing power in high-income countries. However, the relative affordability gap persists, indicating that cost remains a barrier to healthier diets for lower-income households.

The findings highlight clear opportunities for retailers to address affordability gaps through more strategic pricing and promotion policies. Integrating affordability considerations into corporate nutrition strategies, setting measurable targets to narrow price differentials between healthier and less healthy products, and improving transparency in tracking progress are key priorities. Continued monitoring of cost and affordability across retailers and markets

remains essential to track progress over time and inform evidence-based action. At the policy level, fiscal measures that help reduce price gaps between healthier and less healthy foods are critical to ensure that healthier diets are accessible and affordable for all.

An update to this analysis is scheduled for early 2026, incorporating the EAT-Lancet 2025 reference diet and include two additional retailers from the overall Retail Assessment, for which data are currently being collected by EMI at ATNi's request. The full report, including details of the methodology, data sources, analytical framework, results, and recommendations, is available in the ATNi Retail Assessment 2025 [Pricing Analysis Report](#).



CONCLUSION AND RECOMMENDATIONS

The US Retail Assessment underscores the significant influence grocery retailers have on consumers choice and identifies clear opportunities to foster healthier, more equitable food environments. The recommendations below outline priority actions for US retailers, supported by enabling measures for policy makers and investors, to accelerate progress on nutrition, transparency, and accountability across the grocery retail sector.

FOR RETAILERS

1 Strengthen nutrition governance and accountability

- Integrate nutrition into enterprise risk and ESG frameworks, with explicit executive accountability and board oversight.
- Link remuneration to progress against measurable nutrition indicators, such as the share of private-label sales meeting “healthier” criteria, reductions in nutrients of concern, or an increased share of promotions featuring healthier products.
- Report publicly on nutrition governance and progress annually, disaggregated by retail banner and channel (in-store and e-commerce).

2 Set measurable targets and report transparently

- Establish specific, time-bound targets to increase the share of “healthier” private-label sales, using a government-endorsed or internationally recognized NPM
- Disclose the NPM applied, including its thresholds and alignment with government guidance, and publish baseline data and annual progress to enable accountability and independent comparison. Improve portfolio composition through reformulation.

3 Improve portfolio composition through reformulation

- Strengthen the nutritional quality of private-label portfolios through product innovation and reformulation, ensuring a higher proportion of products meet ‘healthier’ thresholds.
- Set specific reformulation targets for reducing sodium, sugars, and saturated fat in high-volume private-label categories—particularly those identified as less healthy in the Product Profile (e.g. baked goods, breakfast cereals).
- Retailers should aim to reduce unnecessary additives and promote more minimally processed options within their assortments.
- Collaborate with suppliers to improve the nutritional quality of branded products, encouraging reformulation and innovation across the supply chain through shared targets, incentives, and transparent monitoring of progress.

4 Rebalance promotions toward healthier products

- Set measurable targets to increase the share of flyer and e-commerce promotions featuring healthier products.
- Track and publicly report the annual distribution of promotions by product healthfulness, ensuring clarity and transparency on definitions and methodology.
- Enhance the in-store and online shopping experience to promote healthier choices through strategic product placement, shelf positioning, and distribution, ensuring healthier options are visible, accessible, and attractively presented across all store formats.

5 Strengthen responsible marketing, particularly to children

- Adopt or update responsible marketing policies to align with international standards such as WHO recommendations, covering all media and retail channels.
- Adopt a company policy to prohibit marketing of products that do not meet nutrition standards to children under 18 and ensure audit compliance through independent third parties.

6 Address affordability gaps

- Integrate affordability into the company's nutrition strategy by setting measurable targets, clear definitions, and transparent reporting. Report regularly on progress toward improving the availability and affordability of healthier products, disclosing methods and results to support accountability and comparability across retailers, with specific attention to lower-income consumers.
- Implement targeted strategies to narrow price gaps between healthier and less healthy products, including more affordable private-label options, produce discounts, and loyalty or SNAP-linked incentives that encourage healthier purchases.
- Expand retail access in underserved areas by increasing store presence or partnerships in food deserts and enhancing the availability of fresh produce and other nutritious options in convenience and discount store formats.

- Encourage companies to increase transparency and accountability by reporting on the percentage of sales from healthier product portfolios using the FDA's definition of 'healthy'.

FOR INVESTORS

- Use ATNi's data and the [Investor Expectations on Nutrition, Diets and Health](#) to integrate nutrition into sustainable investment strategies, enabling them to:
 - Assess the extent to which retailers are exposed to nutrition-related risks and opportunities;
 - Prioritize investments in retailers expanding access to healthy food; and
 - Identify opportunities for investments in new technologies and innovations that deliver healthier foods to consumers.
- Regularly engage with retailers to encourage them to:
 - Publicly set and report against timebound targets to drive portfolio healthiness, using recognized NPMs; Use promotional techniques to drive sales of healthier products relative to less healthy products, and to ensure only healthier products are marketed to children;
 - Assign oversight and accountability for nutrition to a senior executive, including by linking executive remuneration to nutrition KPIs; and
 - Address affordability gaps between healthy and less healthy products, particularly for low-income consumers.

- Engage policymakers and standards-setters to create enabling environments which:

- Drive investments towards shaping healthier food environments;
- Expand healthy food retail in food deserts and low-income settings; and
- Foster transparent and standardized reporting by food retailers on nutrition.

FOR POLICYMAKERS

A policy brief will be published separately including more details. [See here.](#)

- Finalize and implement mandatory FOPL with clear thresholds and easy to understand labeling, underpinned by the extensive research already carried out by the FDA. Ensure that this moves from proposal to implementation as quickly as possible.
- Require online platforms to incorporate 'healthy' filters to allow consumers to easily filter for healthier product offerings.

REFERENCES

1 Scapin T, Romanuk H, Feeley A, Corrêa KP, Kupka R, Gomez-Donoso C, et al. Global food retail environments are increasingly dominated by large chains and linked to the rising prevalence of obesity. *Nat Food.* 2025 Mar;6(3):283-95.

2 Age-standardized prevalence of obesity among adults (18+ years) [Internet]. World Health Organization Data. [cited 2025 Jun 12]. Available from: <https://data.who.int/indicators/i/C6262EC/BEFA58B>

3 WHO Data. Prevalence of obesity among children and adolescents aged 5 to 19 years [Internet]. World Health Organization Data. 2025 [cited 2025 Jun 6]. Available from: <http://data.who.int/indicators/i/C6262EC/EF93DDB>

4 Reider CA, Chung RY, Devarshi PP, Grant RW, Hazels Mitmesser S. Inadequacy of Immune Health Nutrients: Intakes in US Adults, the 2005-2016 NHANES. *Nutrients.* 2020 Jun 10;12(6):1735.

5 FAO; IFAD; UNICEF; WFP; WHO; The State of Food Security and Nutrition in the World 2025 – Addressing high food price inflation for food security and. FAO ; IFAD ; UNICEF ; WFP ; WHO ;, editor. Rome, Italy; 2025. 234 p. (The State of Food Security and Nutrition in the World (SOFI)).

6 DeSilver D. What's on your table? How America's diet has changed over the decades [Internet]. Pew Research Center. 2016 [cited 2025 Jul 28]. Available from: <https://www.pewresearch.org/short-reads/2016/12/13/whats-on-your-table-how-americas-diet-has-changed-over-the-decades/>

7 Juul F, Parekh N, Martinez-Steele E, Monteiro CA, Chang VW. Ultra-processed food consumption among US adults from 2001 to 2018. *Am J Clin Nutr.* 2022 Jan 11;115(1):211-21.

8 Wolfson JA, Tucker AC, Leung CW, Rebholz CM, Garcia-Larsen V, Martinez-Steele E. Trends in Adults' Intake of Un-processed/ Minimally Processed, and Ultra-processed foods at Home and Away from Home in the United States from 2003-2018. *J Nutr.* 2025 Jan 1;155(1):280-92.

9 Williams AM, Ogburn DF, Couch C, Emmerich S. Ultra-processed Food Consumption in Youth and Adults: United States, August 2021-August 2023 [Internet]. Hyattsville: Centers for Disease Control (CDC); 2025 Aug [cited 2025 Aug 8] p. 11. Report No.: 536. Available from: <https://www.cdc.gov/nchs/data/databriefs/db536.pdf>

10 Wang L, Martinez Steele E, Du M, Pomeranz JL, O'Connor LE, Herrick KA, et al. Trends in Consumption of Ultraprocessed Foods Among US Youths Aged 2-19 Years, 1999-2018. *JAMA.* 2021 Aug 10;326(6):519-30.

11 GAIN, The Columbia Climate School, Cornell University College of Agriculture and Life Sciences. Food Systems Dashboard [Internet]. [cited 2025 Apr 22]. Available from: <https://www.foodsystemsdashboard.org/>

12 EMI Data. Euromonitor International, Staple Foods Industry edition.

13 CSPI. Dietary Guidelines for Americans [Internet]. Center for Science in the Public Interest. 2020 [cited 2025 Oct 9]. Available from: <https://www.cspinet.org/advocacy/nutrition/dietary-guidelines-americans>

14 GDQP. United States: Diet Quality Profile, 2021 [Internet]. Global Diet Quality Project; 2021 [cited 2025 Jul 23]. Available from: https://drive.google.com/file/d/1YheFii-0jDYJvk0nIAw-4RV_50HwCVwi/view?usp=embed_facebook

15 Emmerich SD, D.V.M., Fryar CD, M.S.P.H., Stierman B, M.D., et al. Products - Data Briefs - Number 508 - September 2024 [Internet]. 2024 [cited 2025 Jul 23]. Available from: <https://www.cdc.gov/nchs/products/databriefs/db508.htm>

16 Baraldi LG, Martinez Steele E, Canella DS, Monteiro CA. Consumption of ultra-processed foods and associated sociodemographic factors in the USA between 2007 and 2012: evidence from a nationally representative cross-sectional study. *BMJ Open.* 2018 Mar 9;8(3):e020574.

17 Santoro C. The High Cost of Healthy: How Grocery Prices Shape American Diets and Health [Internet]. AJMC. 2025 [cited 2025 Aug 6]. Available from: <https://www.ajmc.com/view/the-high-cost-of-healthy-how-grocery-prices-shape-american-diets-and-health>

18 Kern DM, Auchincloss AH, Stehr MF, Roux AVD, Moore LV, Kanter GP, et al. Neighborhood Prices of Healthier and Unhealthier Foods and Associations with Diet Quality: Evidence from the Multi-Ethnic Study of Atherosclerosis. *Int J Environ Res Public Health.* 2017 Nov 16;14(11):1394.

19 Denny S. Is There Research to Support the Statement that Healthy Diets Cost More? *J Acad Nutr Diet.* 2012 Sep;112(9):1504.

20 Rao M, Afshin A, Singh G, Mozaffarian D. Do healthier foods and diet patterns cost more than less healthy options? A systematic review and meta-analysis. *BMJ Open.* 2013 Dec 5;3(12):e004277.

21 USDA. Retailing & Wholesaling - Retail Trends | Economic Research Service [Internet]. USDA Economic Research Service. 2025 [cited 2025 Jul 29]. Available from: <https://www.ers.usda.gov/topics/food-markets-prices/retailing-wholesaling/retail-trends>

22 Trejo-Pech CJO, White S. Financial Ratios of the U.S. Grocery Sector in a Changing Industry Landscape. *Agric Appl Econ Assocation.* 2024 Jan 1;6(2).

23 Kendall JJ. How grocery stores are expanding from food retailers to one-stop shopping destinations [Internet]. SmartBrief. [cited 2025 Jul 29]. Available from: <https://www.smartbrief.com/original/bread-milk-and-a-toaster-how-grocery-stores-are-expanding-from-food-retailers-to-one-stop-shopping-destinations>

24 Ozburn T. U.S. food retail industry - statistics & facts [Internet]. Statista. 2025 [cited 2025 Jul 29]. Available from: <https://www.statista.com/topics/1660/food-retail/>

25 Ataman D. How are consumers shopping in stores? [Internet]. FoodNavigator-USA.com. 2024 [cited 2025 Aug 5]. Available from: <https://www.foodnavigator-usa.com/Article/2024/12/04/premium-discount-chains-drive-instore-purchases/>

26 Daily R. US private-label groceries to hit 25-30% market share in next 10 years, RaboResearch projects [Internet]. FoodNavigator-USA.com. 2024 [cited 2025 Aug 5]. Available from: <https://www.foodnavigator-usa.com/Article/2024/12/04/premium-discount-chains-drive-instore-purchases/>

27 foodnavigator-usa.com/Article/2024/10/16/US-private-label-grocery-market-to-hit-25-30-share/

28 Bailey T. With wind in its sails, US private label charts its path to growth [Internet]. Rabobank. 2024 [cited 2025 Aug 5]. Available from: <https://www.rabobank.com/knowledge/q011443795-with-wind-in-its-sails-us-private-label-charts-its-path-to-growth>

29 Friesen G. Walmart, Target And Nordstrom Boost Sales By Expanding Private Labels [Internet]. Forbes. 2024 [cited 2025 Oct 22]. Available from: <https://www.forbes.com/sites/garthfriesen/2024/08/30/walmart-target-nordstrom-see-boost-from-expanding-private-labels/>

30 Food Systems for the Future, Global Food Institute, Greater Chicago Food Depository, Harvard Law School Food Law and Policy Clinic, Reinvestment Fund, Food Trust. Grocery Retail For All: Affordable, Nutritious Food in Every Neighborhood [Internet]. 2024 Dec [cited 2025 Oct 23]. Available from: <https://www.fsfinstitute.net/report-grocery-retail-for-all>

31 Lee M. Kroger's Earnings Highlight Private Label Power in a Cost-Conscious World [Internet]. Ainvest. 2025 [cited 2025 Oct 22]. Available from: <https://www.ainvest.com/news/kroger-earnings-highlight-private-label-power-cost-conscious-world-2506/>

32 Ahold Delhaize. Ahold Delhaize introduces 500 new own-brand products in Central and Southeastern Europe region [Internet]. Ahold Delhaize introduces 500 new own-brand products in Central and Southeastern Europe region. [cited 2025 Oct 22]. Available from: <https://newsroom.aholddelhaize.com/ahold-delhaize-introduces-500-new-own-brand-products-in-central-and-southeastern-europe-region/>

33 Volpe R, Kuhns A, Jaenicke T. Store Formats and Patterns in Household Grocery Purchases [Internet]. USDA Economic Research Service; 2017 Mar [cited 2025 Aug 5] p. 34. Report No.: 167. Available from: https://ers.usda.gov/sites/default/files/_laserfiche/publications/82929/EIB-167.pdf

34 Dollar General. Dollar General Surpasses Milestone of 5,000 Stores Nationwide Offering Fresh Produce [Internet]. 2024 [cited 2025 Oct 23]. Available from: <https://newscenter.dollargeneral.com/news/dollar-general-surpasses-milestone-of-5000-stores-nationwide-offering-fresh-produce/574ca4cc-d234-4a6c-8b4b-3c66d3956659>

35 McTaggart J. 75th Consumer Expenditures Study: Taking the Pulse of Shopper Attitudes [Internet]. Progressive Grocer. 2024 [cited 2025 Aug 6]. Available from: <https://progressivegrocer.com/75th-consumer-expenditures-study-taking-pulse-shopper-attitudes>

36 IBISWorld Inc. Supermarkets & Grocery Stores in the US - Market Research Report (2015-2030) [Internet]. <https://www.ibisworld.com/>. 2025 [cited 2025 Jul 29]. Available from: <https://www.ibisworld.com/united-states/industry/supermarkets-grocery-stores/1040/>

37 Rhone A, Williams R, Dicken C. Low-Income and Low-Foodstore-Access Census Tracts, 2015-19 [Internet]. USDA Economic Research Service; 2022 Jun [cited 2025 Aug 5] p. 25. Report No.: 236. Available from: https://ers.usda.gov/sites/default/files/_laserfiche/publications/104158/EIB-236.pdf?v=19299

38 FoodSystemsDashboard. Number of modern grocery retailers per 10,000 population [Internet]. [cited 2025 Mar 21]. Available from: <https://www.foodsystemsdashboard.org/indicators/food-environments/vendor-properties/modern-grocery-retailers-per-100000-population/table>

39 Stevens A, Cho C, Çakır M, Kong X, Boland M. The Food Retail Landscape Across Rural America [Internet]. USDA Economic Research Service; 2021 Jun [cited 2025 Aug 5] p. 45. Report No.: 223. Available from: https://ers.usda.gov/sites/default/files/_laserfiche/publications/101356/EIB-223.pdf?v=73498

40 Bonderson A. Rural grocery stores are dying. Here's how some small towns are trying to save them. NPR [Internet]. 2023 Apr 19 [cited 2025 Aug 5]; Available from: <https://www.npr.org/sections/health-shots/2023/04/19/1170757257/rural-grocery-stores-are-dying-heres-how-some-small-towns-are-trying-to-save-the>

41 Mitchell S. The Great Grocery Squeeze [Internet]. The Atlantic. 2024 [cited 2025 Aug 5]. Available from: <https://www.theatlantic.com/ideas/archive/2024/12/food-deserts-robinson-patman/680765/>

42 Healthy Food Financing Initiative [Internet]. Rural Development. 2021 [cited 2025 Oct 20]. Available from: <https://www.rd.usda.gov/about-rd/initiatives/healthy-food-financing-initiative>

43 Reinvestment Fund. About the Healthy Food Financing Initiative [Internet]. America's Healthy Food Financing Initiative. [cited 2025 Oct 23]. Available from: <https://www.investinginfood.com/about-hffi/>

44 Ver Ploeg M, Larimore E, Wilde PE. The Influence of Food Store Access on Grocery Shopping and Food Spending [Internet]. U.S. Department of Agriculture, Economic Research Service; 2017 [cited 2025 Oct 16]. Report No.: EIB-180. Available from: <https://www.ers.usda.gov/publications/pub-details?pubid=85441>

45 Mentzer Morrison R, Mancino L. Most U.S. Households Do Their Main Grocery Shopping at Supermarkets and Supercenters Regardless of Income [Internet]. USDA Economic Research Service: Amber Waves. 2015 [cited 2025 Aug 6]. Available from: <https://www.ers.usda.gov/amber-waves/2015/august/most-u-s-households-do-their-main-grocery-shopping-at-supermarkets-and-supercenters-regardless-of-income>

46 CSPI. Introduction to SNAP [Internet]. 2022 [cited 2025 Sep 22]. Available from: https://www.cspinet.org/sites/default/files/2022-02/Introduction_to_SNAP.pdf

47 Supplemental Nutrition Assistance Program (SNAP) | Economic Research Service [Internet]. [cited 2025 Sep 22]. Available from: <https://www.ers.usda.gov/topics/food-nutrition-assistance/supplemental-nutrition-assistance-program-snap>

48 USDA Economic Research Service. Three-quarters of WIC benefits are redeemed in large stores. [Internet]. Available from: <https://www.ers.usda.gov/topics/food-nutrition-assistance/supplemental-nutrition-assistance-program-snap>

ers.usda.gov/data-products/chart-gallery/chart-detail?chartId=78925
 49 Assistant Secretary for Public Affairs (ASPA). Secretary Kennedy Celebrates More States Removing Junk Food from SNAP at MAHA Monday on the National Mall [Internet]. 2025 [cited 2025 Oct 21]. Available from: <https://www.hhs.gov/press-room/maha-monday-snap-waivers.html>

50 What is the WIC program and what does WIC provide? | No Kid Hungry [Internet]. 2025 [cited 2025 Oct 20]. Available from: <https://www.nokidhungry.org/blog/what-is-wic-program-women-infants-and-children>

51 Cho C, Volpe R. Independent Grocery Stores in the Changing Landscape of the U.S. Food Retail Industry | Economic Research Service [Internet]. USDA Economic Research Service; 2017 Nov [cited 2025 Aug 4]. Report No.: 240. Available from: https://ers.usda.gov/sites/default/files/_laserfiche/publications/85783/ERR-240.pdf?v=36678

52 Volpe R, Cai X, Scharadin B, Stevens A. Mergers and Acquisitions in Food Retailing: Evidence of Impacts and Policy Implications [Internet]. Yale; 2022 Jun [cited 2025 Aug 4]. (CONFERENCE COMPENDIUM: Reforming America's Food Retail Markets). Available from: https://som.yale.edu/sites/default/files/2023-05/grocery-compendium_may2023.pdf

53 Rahkovsky I, Volpe R. Structure and Food Price Inflation. J Agric Food Ind Organ. 2018;16(1):1-16.

54 Zeballos E, Dong X, Islamaj E. A Disaggregated View of Market Concentration in the Food Retail Industry [Internet]. Washington, DC: USDA Economic Research Service; 2023 Jan [cited 2025 Aug 5] p. 27. Report No.: ERR-314. Available from: <https://ageconsearch.umn.edu/record/333546>

55 Meyersohn N. How Wegmans and H-E-B outmatched Amazon | CNN Business [Internet]. CNN. 2019 [cited 2025 Aug 4]. Available from: <https://www.cnn.com/2019/11/13/business/heb-wegmans-publix-hy-vee-regional-grocery>

56 Kaufman P. Consolidation in Food Retailing: Prospects for Consumers & Grocery Suppliers. USDA Econ Res Serv [Internet]. 2000 Aug [cited 2025 Aug 4]; Available from: https://www.iatp.org/sites/default/files/Consolidation_in_Food_Retailing_Prospects_for_.pdf

57 Litovsky D. How a cheap, brutally efficient grocery chain is upending America's supermarkets [Internet]. CNN Business. 2019 [cited 2025 Aug 4]. Available from: <https://www.cnn.com/interactive/2019/05/business/aldi-walmart-low-food-prices/index.html>

58 Waters M. A bevy of discount European grocers are expanding into the U.S. [Internet]. Modern Retail. 2021 [cited 2025 Aug 4]. Available from: <https://www.modernretail.co/retailers/a-bevy-of-discount-european-grocers-are-expanding-into-the-u-s/>

59 Fallon J, Zwiebach E. WHO'S CONSOLIDATING AMERICA? [Internet]. Supermarket News. 1999 [cited 2025 Aug 4]. Available from: <https://www.supermarketnews.com/independents-regional-grocers/who-s-consolidating-america>

60 Lombardo J. Walmart's Organizational Structure & Company Culture [Internet]. Panmore Institute. 2015 [cited 2025 Aug 5]. Available from: <https://panmore.com/walmart-organizational-structure-organizational-culture>

61 Doering C. 'No second thoughts': Assessing the Ahold Delhaize merger two years later | Grocery Dive [Internet]. Grocery Dive. 2018 [cited 2025 Aug 5]. Available from: <https://www.grocerydive.com/news/no-second-thoughts-assessing-the-ahold-delhaize-merger-two-years-later/542275/>

62 Databahn. Kroger Organizational Structure Report in 2025 [Internet]. Databahn. 2025 [cited 2025 Aug 5]. Available from: <https://www.databahn.com/pages/kroger-organizational-structure>

63 Ahold Delhaize. Growing Together: Annual Report 2024 [Internet]. 2025 [cited 2025 Sep 12]. Available from: https://www.aholddelhaize.com/media/wcqil04n/ad_annual-report_2024_interactive.pdf

64 Walmart. Delivering Shared Value: FY2025 ESG Report [Internet]. Walmart; 2025 [cited 2025 Sep 12]. Available from: <https://corporate.walmart.com/content/dam/corporate/documents/esgreport/2025/FY2025-Walmart-ESG-Report.pdf>

65 Ahold Delhaize. Koninklijke Ahold Delhaize N.V. Q4 2024 Report [Internet]. 2025 Feb [cited 2025 Sep 12]. Available from: <https://www.aholddelhaize.com/media/hcrihdg4/ahold-delhaize-interim-report-q4-2024.pdf>

66 Kroger. Kroger: 2024 Environmental, Social & Governance Report [Internet]. 2025 [cited 2025 Sep 12]. Available from: <https://www.thekrogerco.com/wp-content/uploads/2025/03/Kroger-Co-2024-ESG-Report.pdf>

67 Kroger. UNITED STATES SECURITIES AND EXCHANGE COMMISSION: FORM 10-K: The Kroger Co. [Internet]. 2025 Apr [cited 2025 Sep 12]. Available from: https://s202.q4cdn.com/463742399/files/doc_financials/2024/ar/c0206a59-56d3-47f8-b351-ca7535161f99.pdf

68 Ahold Delhaize USA. Ahold Delhaize USA Announces Sustainability Goals to Drive Local Impact, Greater Purpose [Internet]. newsroom.aholddelhaize.com/. 2021 [cited 2025 Sep 12]. Available from: <https://newsroom.aholddelhaize.com/ahold-delhaize-usa-announces-sustainability-goals-to-drive-local-impact-greater-purpose/>

69 PHA. Corporate Commitments: Ahold Delhaize USA; 2023 Progress Report [Internet]. Partnership For A Healthier America. 2023 [cited 2025 Oct 20]. Available from: <https://www.ahealthieramerica.org/progress-reports/2023/partners/ahold-delhaize-usa>

70 Ahold Delhaize launches its Growing Together strategy building on its core strengths [Internet]. Ahold Delhaize launches its Growing Together strategy building on its core strengths. [cited 2025 Sep 12]. Available from: <https://newsroom.aholddelhaize.com/ahold-delhaize-launches-its-growing-together-strategy-building-on-its-core-strengths/>

71 Program HF. Sodium Reduction in the Food Supply. FDA [Internet].

2024 Nov 1 [cited 2025 Sep 22]; Available from: <https://www.fda.gov/food/nutrition-food-labeling-and-critical-foods/sodium-reduction-food-supply>

72 Catherine Douglas Moran. Inside Kroger Health's food-as-medicine playbook [Internet]. Grocery Dive. 2022 [cited 2025 Oct 20]. Available from: <https://www.grocerydive.com/news/inside-kroger-healths-food-as-medicine-playbook/633060/>

73 BBB National Programs. CFBAl Core Principles - 7th Edition [Internet]. [cited 2025 Oct 20]. Available from: https://assets.bbbprograms.org/docs/default-source/cfbai/cfbai_coreprinciples_7th-edition.pdf

74 WHO. Policies to protect children from the harmful impact of food marketing: WHO guideline [Internet]. Geneva: World Health Organization; 2023. Available from: <https://iris.who.int/bitstream/handle/10665/370113/9789240075412-eng.pdf?sequence=1>

75 Healthy Eating Research. Assessing the Public Health Impacts of the Children's Food and Beverage Advertising Initiative [Internet]. Robert Wood Johnson Foundation; 2021 Oct p. 1-5. Available from: <https://healthyeatingresearch.org/wp-content/uploads/2021/10/HER-CFBAl-brief-101421.pdf>

76 Lovelace Jr. B, Kopf M. FDA proposes putting nutrition info on the front of food packages [Internet]. NBC News. 2025 [cited 2025 Oct 31]. Available from: <https://www.nbcnews.com/health/health-news/fda-proposes-putting-nutrition-info-front-food-packages-rcna175977>

77 Program HF. Use of the 'Healthy' Claim on Food Labeling. FDA [Internet]. 2025 Mar 14 [cited 2025 Sep 22]; Available from: <https://www.fda.gov/food/nutrition-food-labeling-and-critical-foods/use-healthy-claim-food-labeling>

78 Program HF. FDA Finalizes Updated "Healthy" Nutrient Content Claim. FDA [Internet]. 2025 Feb 24 [cited 2025 Sep 22]; Available from: <https://www.fda.gov/food/hfp-constituent-updates/fda-finalizes-updated-healthy-nutrient-content-claim>

79 Program HF. The Nutrition Facts Label [Internet]. FDA. FDA; 2025 [cited 2025 Sep 22]. Available from: <https://www.fda.gov/food/nutrition-education-resources-materials/nutrition-facts-label>

80 FDA. Front-of-Package Nutrition Labeling [Internet]. FDA. FDA; 2025 [cited 2025 Sep 22]. Available from: <https://www.fda.gov/food/nutrition-food-labeling-and-critical-foods/front-package-nutrition-labeling>

81 Popkin BM, Miles DR, Taillie LS, Dunford EK. A policy approach to identifying food and beverage products that are ultra-processed and high in added salt, sugar and saturated fat in the United States: a cross-sectional analysis of packaged foods. Lancet Reg Health - Am. 2024 Apr 1;32:100713.

82 ATNi. Classification of Processed Foods: Opportunities and Gaps [Internet]. 2024 p. 1-18. Available from: <https://accesstonutrition.org/app/uploads/2024/04/ATNI-Discussion-Paper-Classification-of-Processed-Foods-Final-2.pdf>

83 Dunford EK, Galligan TM, Taillie LS, Musicus AA. All the Colors of the Rainbow: Synthetic Dyes in US Packaged Foods and Beverages in 2020. J Acad Nutr Diet. 2025 Sep 1;125(9):1207-1217.e9.

84 Track U.S. Food Chemical Bans with EWG's Interactive Map [Internet]. 2025 [cited 2025 Oct 15]. Available from: <https://www.ewg.org/news-insights/news/2025/10/interactive-map-tracking-state-food-chemical-regulation-us>

85 Company GSL, Road 145 Pleasant Hill, Sort 9900 M, Scarborough, USA M 04074. Request Our White Paper [Internet]. Guiding Stars. [cited 2025 Oct 15]. Available from: <https://guidingstars.com/request-our-white-paper/>

86 Why Simple Truth®- Free From 101 Artificial Ingredients [Internet]. Kroger. [cited 2025 Oct 15]. Available from: <https://www.kroger.com/b/simple-truth/free-from>

87 Walmart U.S. Moves To Eliminate Synthetic Dyes Across All Private Brand Food Products [Internet]. [cited 2025 Oct 15]. Available from: <https://corporate.walmart.com/news/2025/10/01/walmart-u-s-moves-to-eliminate-synthetic-dyes-across-all-private-brand-food-products>

88 Castro T, Mackay S, Young L, Ni Mhurchu C, Shaw G, Tawfiq E, et al. Comparison of Healthiness, Labelling, and Price between Private and Branded Label Packaged Foods in New Zealand (2015-2019). Nutrients. 2021 Aug 9;13(8):2731.

89 Trevena H, Neal B, Dunford E, Haskelberg H, Wu JHY. A Comparison of the Sodium Content of Supermarket Private-Label and Branded Foods in Australia. Nutrients. 2015 Aug;7(8):7027-41.

90 21 CFR 104.20 -- Statement of purpose. [Internet]. [cited 2025 Oct 31]. Available from: <https://www.ecfr.gov/current/title-21/part-104/section-104.20>

91 21 CFR 137.260 -- Enriched corn meals. [Internet]. [cited 2025 Oct 21]. Available from: <https://www.ecfr.gov/current/title-21/part-137/section-137.260>

92 Fortifying Corn Masa Flour Products with Folic Acid | FDA [Internet]. [cited 2025 Oct 21]. Available from: <https://www.fda.gov/food/food-additives-petitions/fortifying-corn-masa-flour-products-folic-acid>

93 RICE PRODUCTS FOR USE IN DOMESTIC PROGRAMS.

94 21 CFR 137.350 -- Enriched rice. [Internet]. [cited 2025 Oct 21]. Available from: <https://www.ecfr.gov/current/title-21/part-137/section-137.350>

95 21 CFR 100.155 -- Salt and iodized salt. [Internet]. [cited 2025 Oct 21]. Available from: <https://www.ecfr.gov/current/title-21/part-100/section-100.155>

96 USDA. USDA Commodity Requirements [Internet]. 2016 Mar. Available from: <https://www.ams.usda.gov/sites/default/files/media/wf15.pdf>

97 21 CFR 137.165 -- Enriched flour. [Internet]. [cited 2025 Oct 21]. Available from: <https://www.ecfr.gov/current/title-21/part-137/section-137.165>

98 Trumbo PR. FDA regulations regarding iodine addition to foods and labeling of foods containing added iodine. Am J Clin Nutr. 2016 Sep;104(Suppl 3):864S-867S.

99 Jahns L, Scheett AJ, Johnson LK, Krebs-Smith SM, Payne CR,

Whigham LD, et al. Diet Quality of Items Advertised in Supermarket Sales Circulars Compared to Diets of the US Population, as Assessed by the Healthy Eating Index-2010. *J Acad Nutr Diet.* 2016 Jan 1;116(1):115-122.e1.

100 Petimar J, Moran AJ, Grummon AH, Anderson E, Lurie P, John S, et al. In-store marketing and supermarket purchases: associations overall and by transaction SNAP status. *Am J Prev Med.* 2023 Oct;65(4):587-95.

101 Kaplan S, White JS, Madsen KA, Basu S, Villas-Boas SB, Schillinger D. Evaluation of Changes in Prices and Purchases Following Implementation of Sugar-Sweetened Beverage Taxes Across the US. *JAMA Health Forum.* 2024 Jan 5;5(1):e234737.