Supplemental Report: Household Beverage Purchases: Trends and Insights from Nielsen Homescan Panel Data (2024 compared to 2023)

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Introduction

This annual report explores the dynamic landscape of the retail beverage category for the years 2023 and 2024, utilizing Nielsen Homescan panel data, with a specific focus on 100% orange juice (OJ) and 100% grapefruit juice (GJ). Unlike Nielsen retail scanner data, which tracks item purchases at the point-of-sale, this study tracks household purchases of multiple beverage items simultaneously as part of a basket of goods. This allows us to include a broader range of household purchase metrics such as market penetration, purchase frequency, and perceived promotional deals of purchases. In addition to insights into consumer behavior and market trends, the report also acts as a critical gauge for evaluating the implications of an increasing variety of beverages in a market in which overall beverage sales are contracting.

Comparing 100% OJ and 100% GJ to other items in the beverage market underscores their role in consumer diets and sensitivity to market trends and supply side challenges. Over the past decade, for example, the Florida citrus industry and the orange juice category have navigated unprecedented challenges, including Huanglongbing (HLB or citrus greening disease), increased demand spurred by the Covid-19 pandemic, record high inflation, and global supply chain issues. Inflationary pressures notably affected the 'food at home' category, altering spending patterns and consumer preferences. From December 2023 to December 2024, food prices increased 2.5 percent, reflecting a 1.8-percent increase in prices for food at home and a 3.6-percent increase in prices for food away from home.[3] The demand for 100% OJ and GJ was affected amid these evolving market trends along with the beverage category.

This report will provide industry stakeholders with an overview of current trends in the beverage market. By examining various beverage subcategories, the report seeks to deliver additional insights that support informed decision-making. It includes a comparative analysis of 100% orange juice and 100% grapefruit against both other 100% juices as well as against other beverages such as bottled water, sparkling water, smoothies, and tea. Additionally, the annual report tracks demographic shifts, such as trends among various age groups and households with children versus without children. This report will also provide details about the performance of the beverage category as a whole and select subcategories of importance to the industry.

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[3]Bureau of Labor Statistics, U.S. Department of Labor, The Economics Daily, Consumer Price Index: 2023 in review at https://www.bls.gov/opub/ted/2025/consumer-price-index-2024-in-review.htm (visited March 10, 2025).

Report Design Summary

Each year, the Florida Department of Citrus receives aggregated consumer data for the non-alcoholic beverage category from Nielsen IQ, which includes information from the two most recent calendar years, 2024 and 2023, surveying approximately 47,000 households. These households are demographically and geographically balanced to represent the U.S. population. This report analyzes scanned receipts from these households to summarize and assess beverage purchases and trends across the majority of U.S. retail outlets, specifically known as "Total US – xAOC" (Expanded All Outlets Combined).

This includes not only traditional grocery stores with annual revenues exceeding $2 million in business per year, but also includes mass merchandisers (e.g. Walmart, Target), warehouse stores (e.g. Costco, Sam's Club), dollar stores (e.g. Dollar General, Family Dollar), drug stores (Walgreens, CVS), convenience stores (Wawa, 7Eleven), and military/ DECA. It does not include smaller grocers under $2 million per year, vending machines, school/ hospital/ institutional sites, or food services/ restaurant outlets.

The data includes subcategories within the beverage category, excluding alcohol and beer. The wide array of beverages and beverage materials feature more than 8,000 unique UPCs. Included are carbonated soft drinks (CSD), milk (white and flavored), bottled water, fruit juices, energy drinks, sports beverages (isotonics), coffee (dry and ready to drink [RTD]), tea (dry and RTD), milk alternatives (e.g. almond, oat, soy), blended fruit juices and drinks, vegetable juices, smoothies, sparkling water, noncarbonated soft drinks (including powders and water additive drops), coffee creamers, and lemonade.

In addition to dollars and volume (equivalent gallons) sold, the report measures household penetration (percentage of U.S. households buying product at retail), buying rate (average number of gallons purchased annually by households), purchase frequency (average number of times per year product was purchased at retail by households), purchase size (average volume amount [in equivalent gallons] purchased at each retail transaction)[4], and percentage of items purchased on a perceived deal (when buyer thought it was on sale through a display or feature or used a coupon). The Nielsen Homescan calculations can be expressed as follows: The total volume sold is calculated by multiplying the household penetration by the buying rate. The buying rate is determined by multiplying the purchase frequency (how often the product is bought) by the purchase size (the quantity purchased each time).

Summary of Findings

Beverage Category Purchase Patterns and Trends

Overall, the beverage category contracted in 2024 compared to the previous year. Total beverage sales volume (in terms of equivalent gallons) declined by 10.4% in 2024 compared to 2023. Although all major categories of beverages fell in terms of volume sold, some had steeper drops than others. The "all other" beverage products had the steepest decline of 14.1% compared to

[4] Purchase size does not necessarily represent container size.

2023. Fruit juices were down 13.8% and bottled water was down 8.1%. Non-carbonated soft drinks had the smallest volume decline of just 4.8%. CSD had a milder decline of 6.7% and refrigerated cows' milk declined by 5.4%.

Dollar sales declined by 8.5% in 2024. Some categories experienced modest declines in dollar sales whereas others faced steeper declines. For instance, CSDs were down by 3.7% in dollar sales but sparkling water was down by 11.1%. The steepest decline in dollar sales was alternative milk products with a decline of 16.6%. Fruit juices were down 12.2% whereas bottled water was down 4.3%. Non-carbonated drinks were down 2.4%.

Zooming in on volume sales of fruit juices, apple juice declined less sharply than other juices with a 7.9% decline. Orange juice was down 17.3% year-over-year, grapefruit juice was down 19.0%, and pineapple juice was down 16.6%. While OJ is still the most popular juice in the 100% fruit juice category, the share of the fruit juice market held by OJ shrank from 46.8% to 44.9%. Apple juice held the next highest share at 25.6%, up from 23.9% in 2023. Cranberry juice's share rose from 6.5% to 6.7% while GJ's share fell from 1.55% to 1.46%.

Demographics

The households surveyed in the receipt scans are categorized by generational cohorts. Specifically, they are labelled as Greatest Generation (before 1946), Boomers (1946-1964), Gen X (1965-1980), and Millennials (1981-1996). The cohort after 1996 ("Gen Z") was determined by Nielsen IQ as not having enough respondents to create a statistically meaningful cohort. This will likely change in future years as more people born after 1996 form households. The Gen X and Millennials cohorts are further divided into households with and without children for a total of six demographic groups.

When reviewing broadly popular beverage types, carbonated soft drinks (CSD) are the most popular singular type of beverage across all cohorts by dollar share. Roughly 21 percent (Millennials with Kids) to 28 percent (Gen X without Kids) of all beverage dollars go to CSD. After CSD, Refrigerated Milk is the second most purchased beverage by dollars. Both of the "with kids" cohorts and the Greatest Generation cohort purchase more milk than households without kids and Boomers. *Similarly, fruit juice follows the same pattern as milk where households with children and those born before 1946 drink more fruit juice than the other cohorts.* Importantly, the "All Other Beverages" category makes up between 27 percent (Millennials with kids) and 34 percent (Greatest Generation) of beverage dollars.

Last year, this report claimed that Millennials (both with and without kids) spent about 2 to 8 percent more on the "All Other Beverages" than their peer group with kids and older cohorts. Further study into these "other beverages," including functional beverages, revealed that **energy drinks** was a large portion of these "other beverages" by dollar share. About 11.7% of all beverage purchases by **Millennials without kids** and 9.5% of beverage purchases by **Millennials with kids** were a type of energy drink. The Gen X cohort displayed about a six percent dollar share of purchases going into energy drinks. Boomer and Greatest Generation cohorts stood at a three percent dollar share on energy drinks. Isotonic drinks (e.g., Gatorade, Powerade) held a steady two to four percent dollar share of beverage purchases across all age cohorts.

In terms of volume sales (by gallons), CSD, milk, and bottled water are roughly equal to one another in terms of volume share, ranging from 10.6 percent (Milk – Gen X w/o kids) to 17.8 percent (Bottled water – Millennials w/out kids) across all demographic cohorts. With all three of these beverage types summed together, Millennials w/ kids are the highest at 46.1 percent and Greatest Generation is lowest at 37.4 percent. For fruit juice, volume share ranges from 1.8 percent (Gen X w/o kids and Millennials w/out kids) to 2.9 percent (Millennials w/ kids). In the "All Other Beverages" category, Greatest Generation (50.6%) and Boomers (48.2%) have the highest shares where the other four cohorts range from 35.9 percent (Millennials w/ kids) to 43.8 percent (Gen X w/o kids).

Zooming in on OJ by type and container size across generational cohorts, households with children are more likely to buy larger sized containers of not-from-concentrate (NFC) orange juice (over 70 ounces) than those without children. This is especially true of Millennials w/ kids buying 21.3 percent of their NFC OJ volume in containers larger than 70 ounces. Even so, the 50 to 60 ounce size category is still the dominant container size for retail sales of NFC OJ, ranging from 87.7 percent of volume (Greatest Generation) to 72.0 percent (Millennials w/out kids).

For reconstituted orange juice (Recon OJ), larger sizes appear to be more popular with Gen X cohorts, both with and without kids, than the other four cohorts. About 36.6 percent of Gen X w/ kids buy Recon OJ in sizes 70 ounces or larger as well as 31.1 percent of Gen X w/out kids. All of the other cohorts range from 18.0 percent (Greatest Generation) to 25.0 percent (Millennials w/ kids). *It is unclear why Gen X cohorts prefer larger sized Recon OJ containers.* The 60 to 70 ounce container size consists of between 7.2 percent (Millennials w/out kids) and 16.1 percent (Boomers) of Recon OJ volume sales. The majority of Recon OJ is sold in the 50 to 60 ounce container size, ranging from 69.0 percent (Greatest Generation) to 52.6 percent (Gen X w/ kids).

Household Penetration and Purchasing on Perceived Deals

Household Penetration (HP) is defined as the percentage of U.S. households buying a certain product at retail. Percent Purchased on a Perceived Deal (PPD) is the percentage of a certain product bought at retail when the buyer thought it was on a deal, such as using a coupon, seeing a promotional discount on shelf labels, or reading a promotional advertisement on a store display or featured store flyer.

Between 2023 and 2024, all beverage categories saw HP drop. Refrigerated cows' milk dropped the least at 0.7 percent (from 88.1 percent to 87.4 percent) while refrigerated 100% orange juice dropped the most at 5.3 percent (from 52.0 percent to 46.7 percent). HP for orange juice is at its lowest in the 14 years recorded in the report (down from 67.4 percent in 2011). For comparison, CSD dropped by 1.4 percent (from 86.6 percent to 85.2 percent), apple juice dropped 3.0 percent (from 32.0 percent to 29.1 percent), grapefruit juice dropped 0.8 percent (from 3.5 percent to 2.7 percent), and bottled water dropped 1.8 percent (from 72.0 percent to 70.2 percent).

The majority of the beverage categories analyzed experienced increases in PPD with only orange juice (from 14.2 percent to 13.6 percent), lite OJ (from 23.4 percent to 21.1 percent), grapefruit juice (from 16.8 percent to 15.0 percent) and Ref milk (from 14.0 percent to 13.7 percent) experiencing a decline. PPD for conventional orange juice is at its second lowest in 14 years at 14 percent, only higher than the PPD for 2023 of 13 percent and down from 31 percent in 2011. For reference, CSD bought on a PPD rose from 27.8 percent to 29.3 percent, Apple juice increased from 12.1 percent to 13.3 percent, and bottled water rose from 10.7 percent to 11.2 percent.

When reviewing HP of OJ by retail channel, traditional grocery stores lead the way at 34.2 percent (down from 38.3 percent in 2023). Supercenters (e.g. Wal-Mart, Target) had a HP of 14.6 percent (down from 17.3 percent in 2023). **Warehouse clubs** (e.g. Costco, Sams Club) had a HP of 5.1 percent (down from 5.3 percent in 2023). It should be noted that when considering the **volume share** by retail channel, warehouse clubs have shown an **increase** from 10.2 percent to **15.0 percent of volume share** from 2023 to 2024. This growth was primarily driven by an increase in buying rate and purchase size per trip within this channel. Further inquiry may be useful to determine whether this shift in volume share and other key metrics in warehouse clubs is a response to the relative decline in the availability of OJ on a perceived deal.

Online channels (e.g. Amazon) had a HP of 2.6 percent (down from 2.9 percent in 2023). Dollar stores HP was down from 2.0 percent to 1.3 percent. Convenience stores and Drug stores were both under one percent for 2024. It would be interesting to monitor the online channel of trade, as this is a rapidly evolving retail market in the beverage category.

The report data also breaks out buyers into three groups: Heavy OJ buyers (those buying more than 10 gallons of OJ per year); Medium/ Light OJ buyers (those buying less than 10 gallons per year); and Non-OJ Buyers (did not report a purchase of OJ within a year). For the year 2024, 5.9 percent of households were Heavy OJ buyers (down from 7.7 percent in 2023), 79.4 percent were Medium/ Light OJ buyers (down from 81.4 percent in 2023), and 14.8 percent were Non-OJ buyers (up from 10.9 percent in 2023). Heavy buyers comprised of 36.5 percent of all OJ sales and Medium/ Light buyers bought 63.5 percent of all OJ at retail in the U.S.

When their scanned receipts were queried for other beverage purchases, Heavy buyers spent (on a dollar basis) 17.6 percent of their beverage dollars on CSD, 19.8 percent on fruit juices (including OJ), 12.3 percent on cows' milk, 1.9 percent on alternative milks, 6.6 percent on bottled water, and 26.9 percent on "All Other" beverages not included in the nine discrete categories analyzed. *Medium/ Light buyers bought (on a dollar share) more CSD as a share of their beverage expenditures (at 23.7 percent).* They also only spent 6.3 percent on fruit juices as a whole. For cows' milk, alternative milk, and bottled water, Medium/ Light OJ buyers are similar to Heavy OJ buyers at 12.4 percent, 2.3 percent, and 6.6 percent, respectively. *For "All Other" beverages, Medium/ Light buyers are at 33.3 percent.*

Conclusion

The overall beverage category experienced a contraction from 2023 to 2024, indicating a challenging environment for traditional and emerging beverage segments alike. The data revealed weaker household penetration and fewer purchases on a perceived deal in the 100% orange juice and grapefruit juice categories. When considering supply shortages and increased competition from various beverage options such as CSD, refrigerated milk, bottled water, energy drinks, other 100% fruit juices, and emerging options such as functional and probiotic beverages, long-term performance remains uncertain, OJ risks losing shelf space to other beverages in a crowded market.

Despite increases in reporting a perceived deal in the majority of the beverage categories analyzed, the decline in the beverage category is attributed to both declines in market penetration and buying rates. The report also described key demographic trends specific to the category, noting differences in beverage preferences across generational cohorts. These insights into demographic preferences are useful for targeted marketing strategies.

Looking forward, the beverage industry must continuously adapt to the ongoing shifts in consumer preferences in a broader economic landscape of inflationary sentiments and deal seeking. Marketing strategies that emphasize the health benefits of 100% orange and grapefruit juices, along with competitive pricing and promotions, will be crucial for maintaining market share in this competitive category.