ORIDA DEPARTMENT OF CITRUS

Economic & Market Research Committee Report

Presented to the Florida Citrus Commission December 18, 2024

Marisa L. Zansler, PhD
Director, Economic and Market Research
Florida Department of Citrus

Florida Citrus™



EMRD Agenda

- Orange Juice and Grapefruit Juice Retail Sales Trends Report
- Florida Citrus Movement Trends December Update

Handouts

- 1. Nielsen Topline Report #2 of 13 (11-30-2024)
- 2. FDOC Retail Sales Trends Report #2 of 13 (11-30-2024)
- 3. Economic Indicators Report (December 2024)
- 4. Summary: Orange Juice Elasticity Analysis

Agenda Item:

OJ/GJ Retail Sales Trends

FDOC Nielsen Topline Report # 2 2024-25 Season + OJ Elasticity



OJ/GJ at Retail — 4-Weeks ending 11/30/24

Total US - xAOC	Gallons			Dollars			Price per EQ Gallon		
4-WEEKS ENDING 11/30/2024	4 WEEKS YA	4 WEEKS	% Chg	4 WEEKS YA	4 WEEKS	% Chg	4 WEEKS YA	4 WEEKS	% Chg
TL OJ	26.48 M	24.68 M	-6.78%	\$244.39 M	\$243.27 M	-0.46%	\$9.23	\$9.86	6.78%
TL OJ REF NFC	16.22 M	16.31 M	0.55%	\$165.60 M	\$170.08 M	2.71%	\$10.21	\$10.43	2.14%
NFC <11oz	0.28 M	0.27 M	-2.46%	\$5.01 M	\$5.08 M	1.32%	\$17.89	\$18.59	3.88%
NFC 11-20oz	0.38 M	0.32 M	-14.42%	\$8.33 M	\$7.58 M	-8.99%	\$22.03	\$23.42	6.34%
NFC 20-40oz	0.11 M	0.14 M	32.98%	\$2.27 M	\$2.90 M	27.91%	\$21.21	\$20.40	-3.81%
NFC 40-70oz	11.01 M	11.61 M	5.46%	\$107.15 M	\$116.07 M	8.33%	\$9.73	\$10.00	2.72%
NFC 70-110oz	3.75 M	3.15 M	-16.00%	\$37.27 M	\$31.81 M	-14.66%	\$9.93	\$10.09	1.60%
NFC >110oz	0.69 M	0.80 M	16.77%	\$5.57 M	\$6.64 M	19.27%	\$8.09	\$8.26	2.13%
TL OJ REF RECON	8.58 M	6.99 M	-18.46%	\$65.34 M	\$60.72 M	-7.07%	\$7.62	\$8.68	13.97%
TL GJ	0.75 M	0.72 M	-4.74%	\$7.93 M	\$7.90 M	-0.47%	\$10.53	\$11.00	4.48%

Data Source: FDOC Custom Database Nielsen. xAOC = Expanded All Outlets Combined.

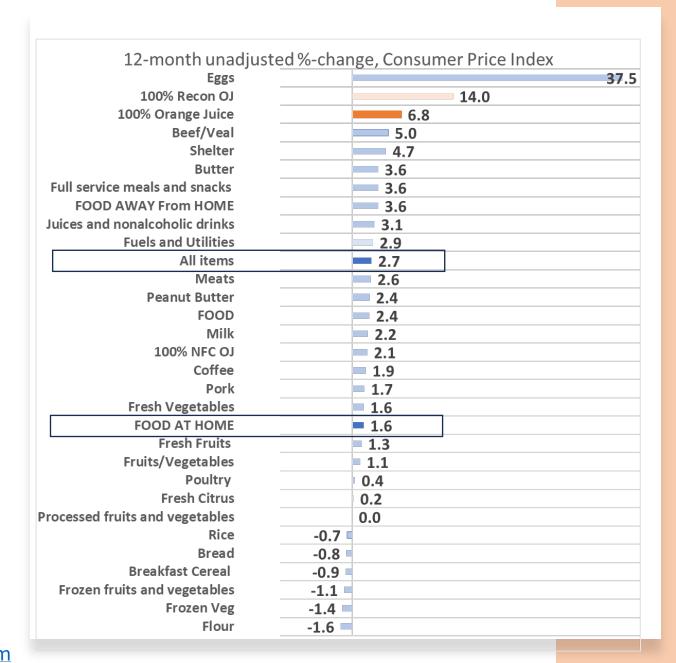
OJ/GJ at Retail — Season-YTD through 11/30/24

Total US - xAOC	Gallons		Dollars			Price per EQ Gallon			
Season-YTD through 11/30/2024	S-YTD 2023-24	S-YTD 2024-25	% Chg	S-YTD 2023-24	S-YTD 2024-25	% Chg	S-YTD 2023-24	S-YTD 2024-25	% Chg
TL OJ	50.34 M	46.51 M	-7.59%	\$465.59 M	\$460.01 M	-1.20%	\$9.25	\$9.89	6.92%
TL OJ REF NFC	30.31 M	30.27 M	-0.13%	\$312.57 M	\$319.21 M	2.12%	\$10.31	\$10.55	2.26%
NFC <11oz	0.55 M	0.54 M	-2.82%	\$9.92 M	\$9.98 M	0.63%	\$17.95	\$18.59	3.55%
NFC 11-20oz	0.72 M	0.64 M	-11.64%	\$15.94 M	\$14.92 M	-6.39%	\$22.09	\$23.40	5.94%
NFC 20-40oz	0.20 M	0.29 M	43.08%	\$4.33 M	\$5.72 M	32.02%	\$21.51	\$19.85	-7.73%
NFC 40-70oz	20.47 M	21.28 M	3.94%	\$201.56 M	\$215.20 M	6.77%	\$9.85	\$10.11	2.73%
NFC 70-110oz	7.06 M	6.04 M	-14.36%	\$70.20 M	\$61.02 M	-13.08%	\$9.95	\$10.10	1.49%
NFC >110oz	1.30 M	1.48 M	13.84%	\$10.62 M	\$12.37 M	16.49%	\$8.15	\$8.34	2.33%
TL OJ REF RECON	16.76 M	13.57 M	-19.04%	\$126.86 M	\$116.68 M	-8.03%	\$7.57	\$8.60	13.61%
TL GJ	1.49 M	1.42 M	-4.47%	\$15.61 M	\$15.64 M	0.21%	\$10.47	\$10.99	4.90%

Data Source: FDOC Custom Database Nielsen. xAOC = Expanded All Outlets Combined.

Inflation

- Overall inflation in November 2024 continues to stabilize (up by 2.7%).
- Food prices are up by 2.4%.
- Food at Home prices up by 1.6%.
- Food Away from Home prices up <u>3.6%</u>.
- Juices and non-alcoholic drinks up <u>3.1%.</u>

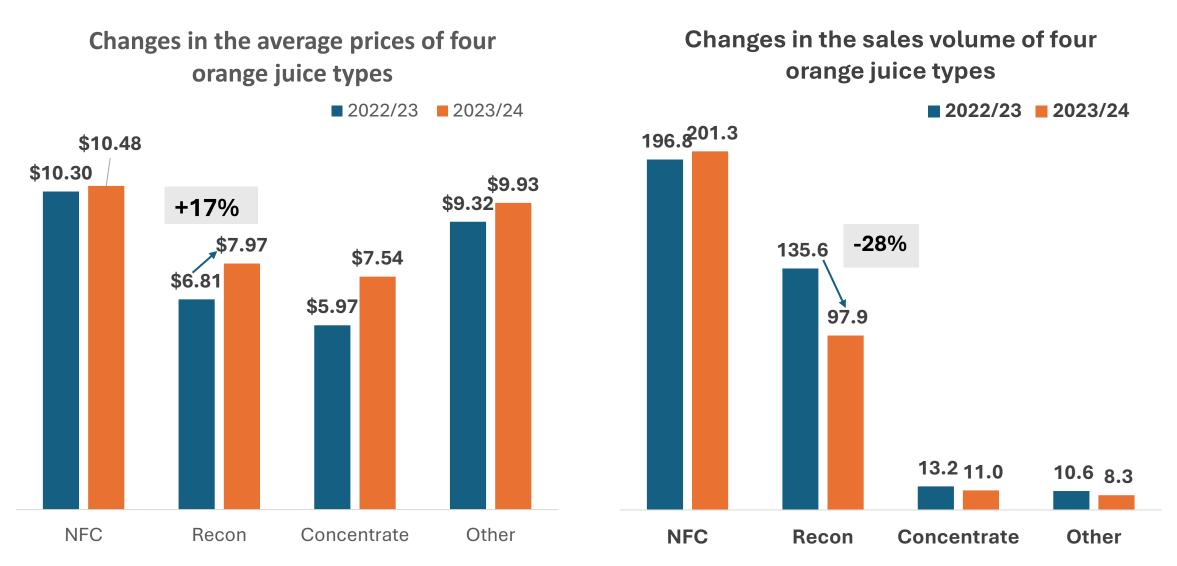


For more info: https://www.bls.gov/news.release/cpi.nr0.htm

Orange Juice Elasticity Analysis

- Data
 - Nielsen orange juice product-level sales Data
 - 10/08/2022 10/05/2024 (2022/23 and 2023/24 seasons)
 - Aggregated into weekly sales for four process types (NFC, Recon, Concentrate, Other)
- Methods
 - Quadratic Almost Ideal Demand System (QUAIDS)
 - How the demand for the four different types of orange juice responds to changes in their own prices and the prices of other process types

Changes in Prices and Sales Volume



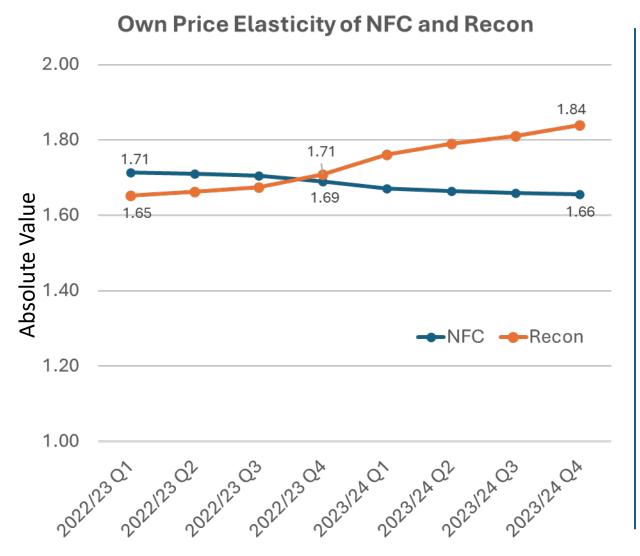
Orange Juice and Grapefruit Juice Demand Elasticity

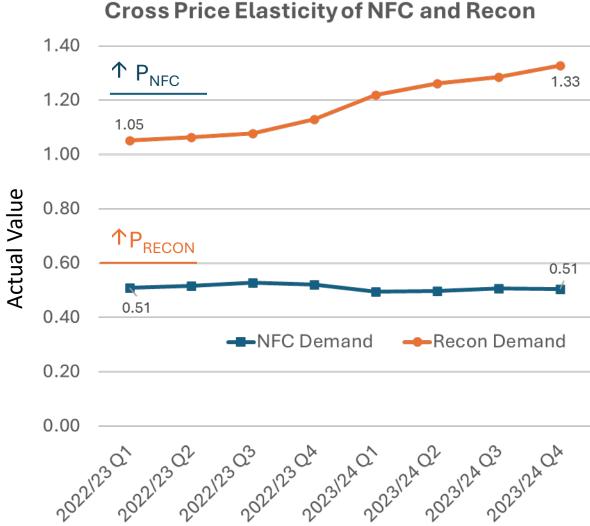
	OJ	GJ
Own Price Elasticity	-1.029	-1.177

Consumer demand for orange juice is elastic

- For every 1% increase in the price of Orange Juice, demand decreases by 1.029% for Total OJ category.
- For every 1% increase in the price of Grapefruit Juice, demand decreases by 1.177% for Total GJ category.

Changes in Elasticity of NFC and Recon OJ





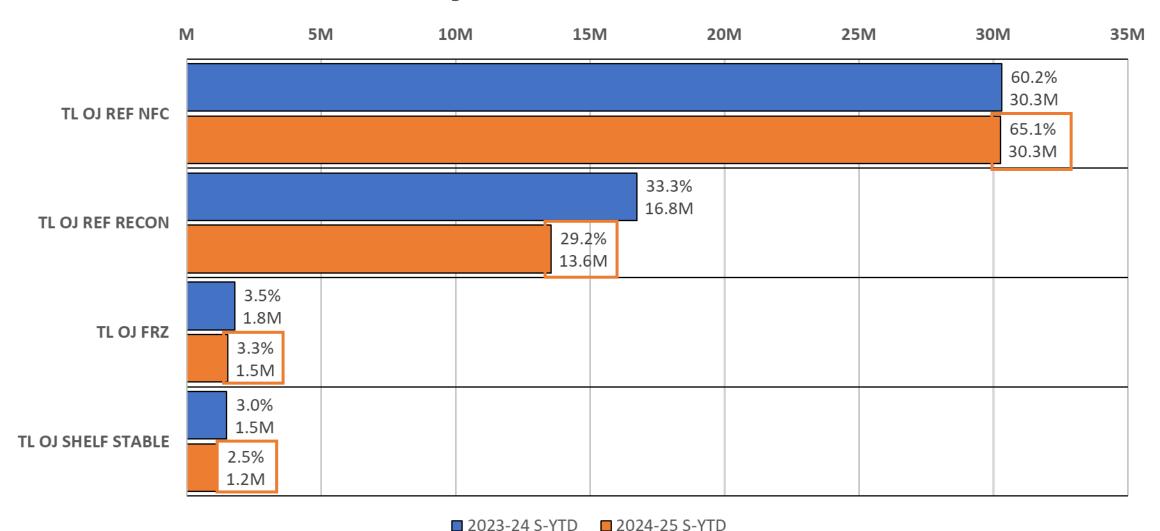
Summary

- Consumer demand for orange juice is elastic
 - Elasticity Estimates of -1.029% for Total OJ category
 - Elasticity estimates of -1.68% for NFC volume and -1.74% for Recon volume
 - Elasticity of demand for Recon has intensified with its increased price, while NFC remained relatively stable.
- Asymmetric price effects between NFC and Recon
 - NFC and Recon are substitutes for each other whereby consumers will switch between the two depending on price changes.
 - As NFC prices increase, more people switch to Recon, but the opposite isn't as strong—fewer people switch back to NFC when Recon prices increase.
 - Consumers are sensitive to prices and often choose the lower-cost Recon when NFC becomes more expensive.
 - If Recon prices rise, some consumers switch back to NFC, especially if they see the price gap narrowing.

Implications

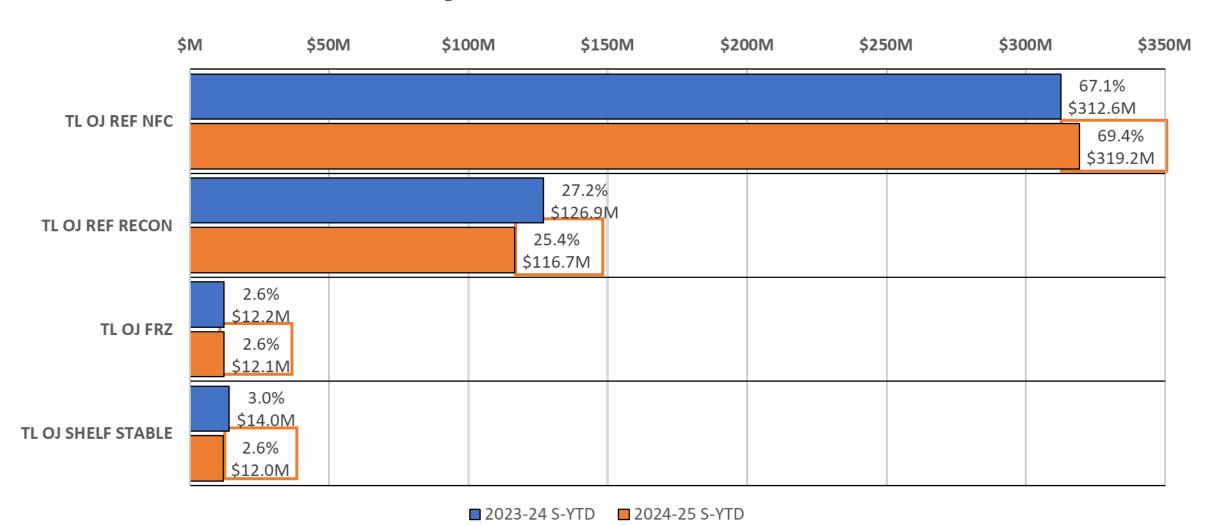
- Heightened price sensitivity of consumers
 - Increased own and cross price elasticity of Recon
- Demand for Reconstituted OJ decreased, due to
 - Heightened sensitivity of its own price increase
 - Relatively stable price levels of NFC orange juice,
 - i.e., consumers are switching to Recon less in response to price increase of NFC
- Demand for NFC OJ is slightly increased, due to
 - Relatively stable price over the seasons
 - Substitution effect to NFC due to the rising price of Recon
- Increasing cross price elasticity of Recon in response to NFC price change
 - More consumers shifting to NFC as the *price gap between Recon and NFC narrows*
 - Showing increased price sensitivity among consumers, who are willing to substitute NFC with Recon with a price increase of NFC, which is still lower priced relative to NFC.

OJ Volume Share by Product



Orange Juice at Retail – Season-YTD through 11/30/24

OJ Dollar Share by Product



Orange Juice at Retail – Season-YTD through 11/30/24

Decline in NFC Distribution Oct to Nov '24

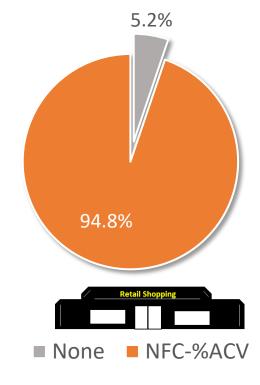
NFC Total Distribution Points down 5.26%

All Commodity Volume

NFC -

• NFC OJ Percent ACV Distribution — 94.8% Percentage of retail stores where product is available (down 0.3% compared to year ago)

• NFC OJ Average Number of Items per Store (UPCs) down 4.93% compared to a year ago.



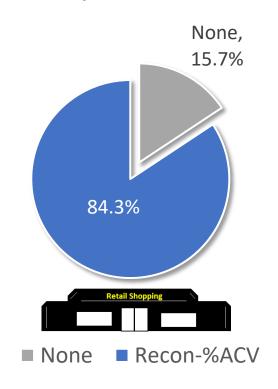
Decline in Recon Distribution Oct to Nov '24

Recon Total Distribution Points down 9.94%

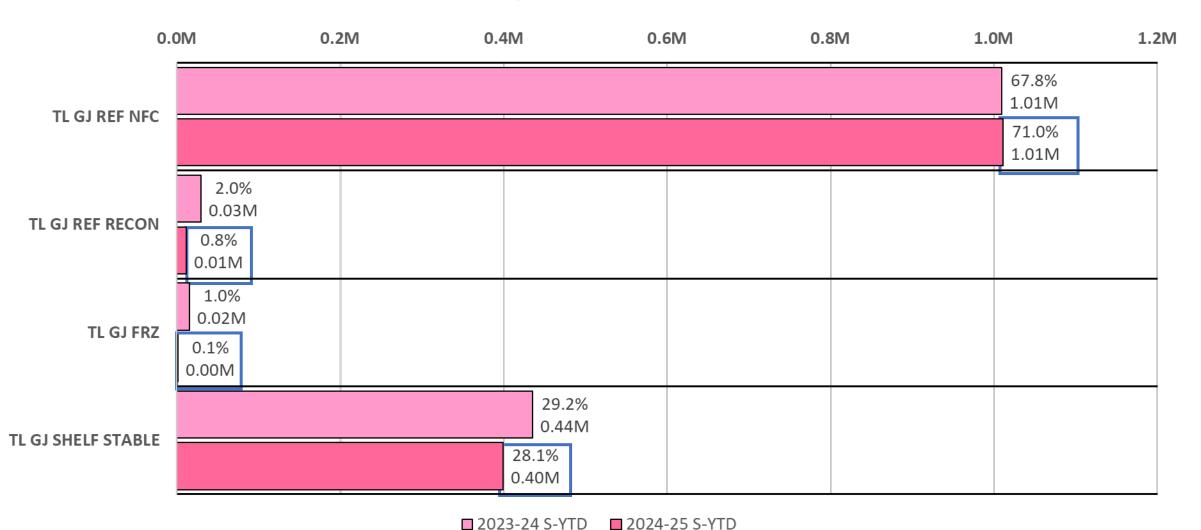
 Recon OJ Percent ACV Distribution — 84.3%
 Percentage of retail stores where product is available (down 0.3% compared to year ago)

 Recon OJ Average Number of Items per Store (UPCs) down 9.62%

Recon – All Commodity Volume

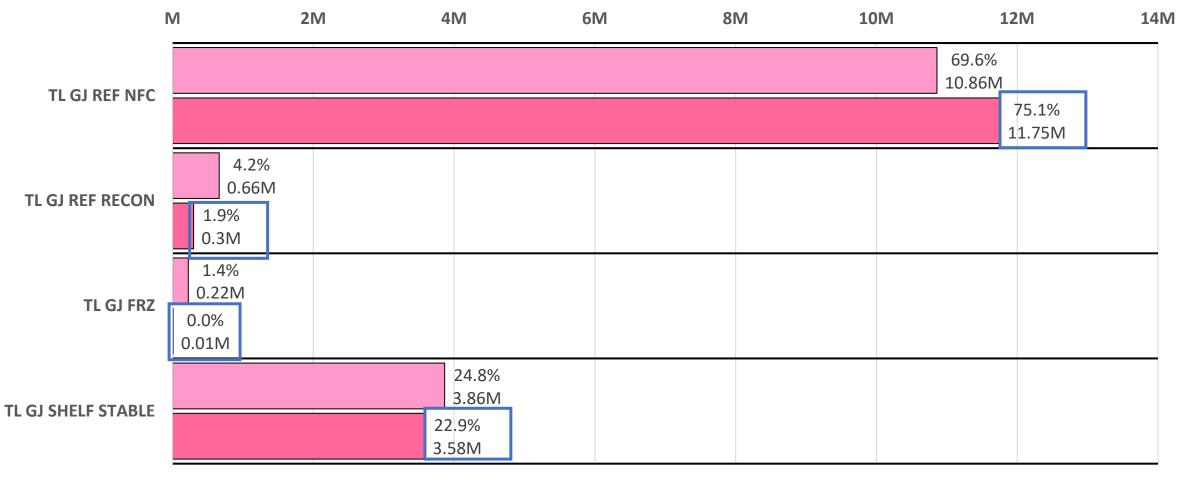


GJ Volume Share by Product



Grapefruit Juice at Retail – Season-YTD through 11/30/2024

GJ Dollar Share by Product



■ 2023-24 S-YTD ■ 2024-25 S-YTD

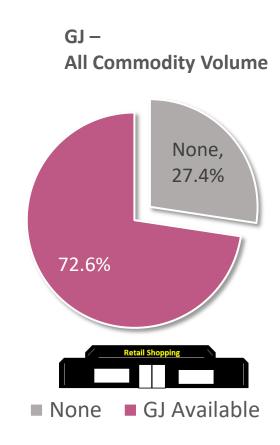
Slight decrease in GJ Distribution Oct to Nov '24

Total Distribution Points down 0.3%.

Grapefruit Juice Percent ACV Distribution –
 72.6%

Percentage of retail stores where product is available (down 1.5% compared to year ago)

 Average Number of Items per Store (UPCs) up 1.9%.



Agenda Item:

2024-25 Florida Citrus Season: December Update



Utilization of Florida Crop – 2024-25 Dec

Variety	Certified	Non-Cert		Total			
	Fresh ^a	Fresh	Frozen Concentrate b	Single- Strength ^b	Other	23-24 Estimates ^c	
Millions 90-lb boxes							
Oranges	1.154	0.080	1.615	9.151	<0.000	12.000	
Grapefruit	0.780	0.030		0.390	<0.000	1.200	
Specialty	0.238	0.025	0.087			0.350	
Total	2.172	0.135	1.702	9.541	<0.000	13.550	

^a Source: FDOC Database – FDACS Certified; ^b Source: FDOC Florida Processor Database; ^c Non-cert and Other are residuals derived from USDA Estimates

www.floridacitrus.org/grower/economic-market-resources/ Thank You