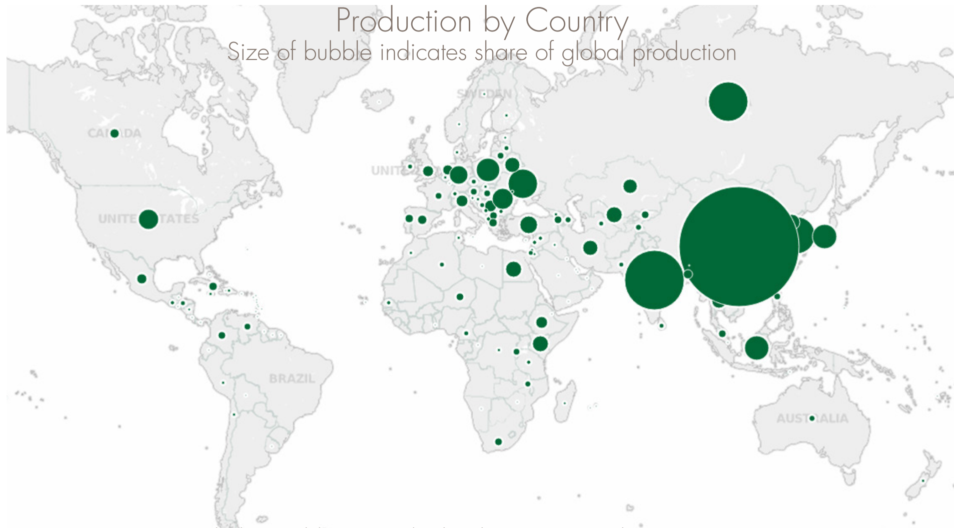
GREENS

consumer & commodity insights

category insights team

As the demographic make-up of our world changes, so do consumer trends and the commodity landscape. This article addresses consumer trends, global production and consumption, the retail and promotional landscape in the US, and patterns in demand.



*Note: Includes Cabbage and other brassicas production per FAOSTAT.org

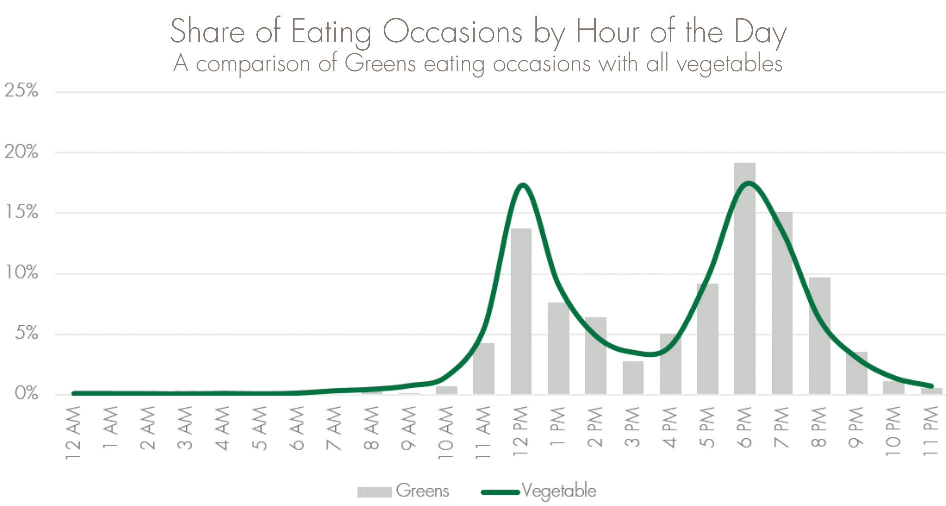
bout Tableau maps: www.tableausoftware.com/mapdata

consumer insights

More than ever before, consumers are component shopping for occasion-based meals. These meals are decided upon less than an hour before consumption, making them increasingly driven by mood and impulse desires. While consumers may have an idea about what they're looking for prior to entering the store, they are more likely to try new things that look or sound good in the moment, and they're responding favorably to quick and easy prep solutions. Retailers are expected to guide them toward a unique eating experience.

Snacking is now the number one eating occasion, and eating alone is on the rise, both of which are driving a need for smaller portions. Consumers are continually demanding convenient, healthy options for quick, small meals or snacks throughout the day.[1]

Greens are traditionally consumed very similarly to the rest of the vegetable category, with the primary eating occasions occurring over the lunch and dinner hours.[2] While this is certainly true for traditional cooking greens (like Collards), there has been a recent trend in using greens in smoothies, salads, and even prepared as a snack (like Kale chips). Don't miss out on the attention the category has been getting by merchandising greens in traditional formats. While options for placement within the store might be limited, there are certainly things that can be done to cross-merchandise and/or give consumers new ideas about how they might use greens to add variety and nutritional benefits to their diets. Using in-store signage or recipe cards to suggest uses for each variety will be well received.



production & consumption

Global data sources group cabbage and other brassicas (like Mustards, Collards, Turnip Greens, Kale) production together. Within this collective whole, China is the largest producer, accounting for almost half (47.1%) of total production. India also accounts for a sizeable share at 11.6%. Rounding out the top five producers globally are Russia, South Korea, and Ukraine. Collectively, the top five represent just over 70% of production.

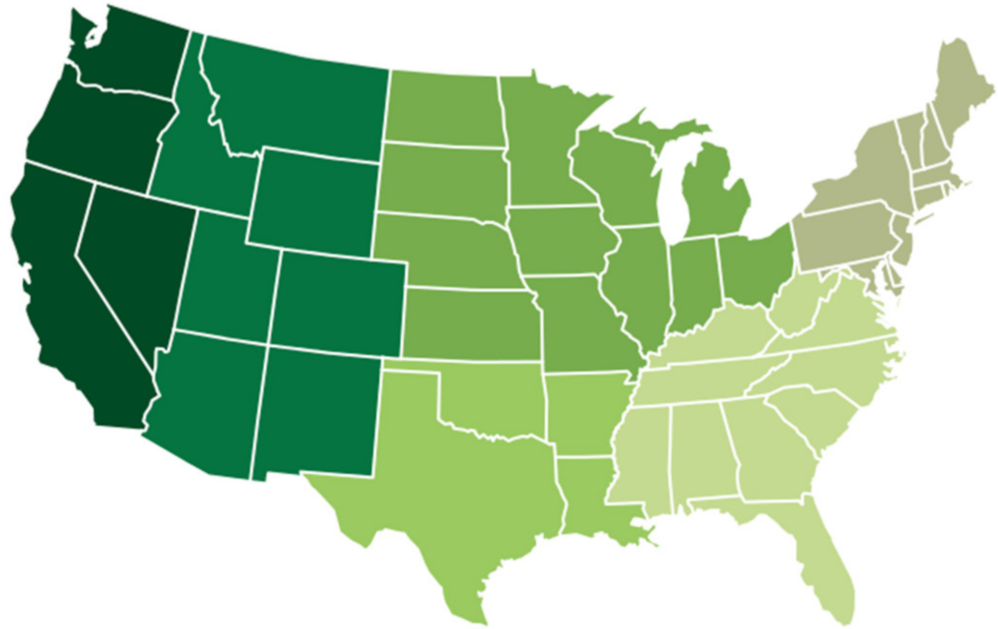
Very little is traded within this category, but of what is, most comes from China, the Netherlands, and the US. The largest importers include China, Russia, the US, Germany, and Canada. Per capita, the largest consumers of cabbages and greens consist mostly of eastern European and Asian countries.[3] Globally, enough is produced for every person on the planet to have the equivalent of 111 cups of chopped product. Within the US, consumption only equates to 37 chopped cups per person. To put this into perspective, consumption in China would allow for every person within the country to have 263 cups each year![4]

Regional Trend in Retail Sales Dollars, Pounds & ASP
Current 52 Weeks vs. Prior 52 Weeks

WEST	
Sales Dollars	35.1%
Sales Pounds	37.5%
ASP	-1.8%

MOUNTAIN	
Sales Dollars	56.5%
Sales Pounds	50.6%
ASP	3.9%

SOUTH	
Sales Dollars	33.2%
Sales Pounds	18.5%
ASP	12.5%



MIDWEST	
Sales Dollars	19.2%
Sales Pounds	14.7%
ASP	3.9%

NORTHEAST	
Sales Dollars	26.1%
Sales Pounds	25.0%
ASP	0.9%

SOUTHEAST	
Sales Dollars	45.8%
Sales Pounds	38.8%
ASP	5.1%

retail trends

Traditional grocery sales of greens were positive 33.3% in dollars and 28.0% in pounds in 2013. This trend was consistent across all US regions, though the West, Mountain, and Southeast regions experienced the most growth year-over-year. While Kale growth has certainly driven the greens category as a whole, the remaining cooking greens varieties saw positive growth as well (up 8.1% in dollars and 4.2% in pounds collectively).

The West region has the highest greens consumption rates per capita. Within particular varieties, Kale over-indexes in the West and Mountain regions, as does Chard. Varieties like Collard, Turnip, and Mustard greens index 'very high' in the South and 'high' in both the West and Midwest for consumption per capita.[5]

The $/MM ACV (All Commodity Volume) for greens differs by variety but is generally on the low side when compared with other vegetable commodities. Collard ACV is $108, Mustard is $33, Turnip is $40, Chard is $41, and Kale is the largest at $229. When greens are compared with other vegetables, ACV figures are similar to items ranging from parsnips and leeks to peas and brussels sprouts.

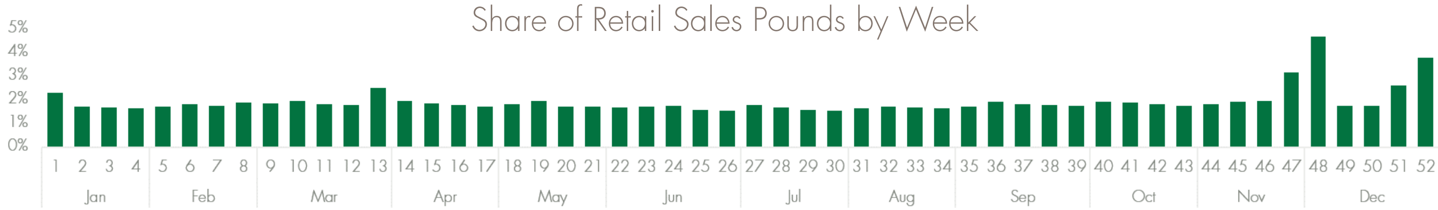
Week-to-week sales volume for the greens category is relatively consistent throughout the year, with the exception of holiday periods, where huge sales spikes are seen. Thanksgiving and Christmas post the highest sales of the year, with those weeks more than doubling typical weekly sales volume. New Year's and Easter also see sales lifts of about 40% from an average week.

Bulk product accounts for nearly two-thirds of the greens category sales pounds, but only 36.9% of dollars. Packaged options make up the remaining third of volume and two-thirds of dollars, and both bulk and bags sales growth have been very positive year-over-year.

In 2013, 41.1% of the category volume came from Kale, followed by 26.3% Collard, 9.3% Mustard, 8.5% Turnip, 8.0% Mixed greens, and the remaining share from Chard and other smaller varieties. Sales dollars follow a similar breakdown, with the exception of the Mixed category, which captures a higher share of category sales (28.1%) because it's comprised almost exclusively of packaged product.

When the greens category is viewed as a whole, the breakdown of packaged product sizing leans heavily on the 16oz pack (48.6% of sales pounds in 2013). While larger pack sizes like the 32oz account for a sizable share of sales (9.7%), smaller packs like the 5 or 6oz are accounting for a surprisingly high share of sales (26.0%) and are growing substantially year-over-year (up 82.5%

Share of Retail Sales Pounds by Week



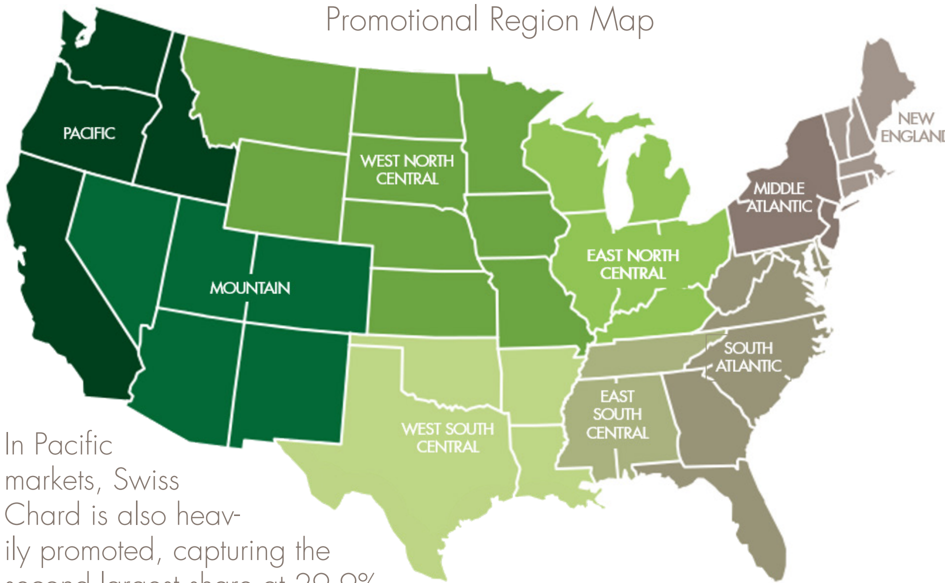
in pounds and 37.9% in dollars). This small pack segment is split about 50/50 between Kale and Mixed greens options.

Organic greens account for 15.6% of category sales pounds and 30.0% of dollars in 2013. There is a 131% price premium attached to organic greens over conventional. Organic Kale captures 62.3% of sales pounds, followed by organic Mixed greens at 27.7%, and the remaining share comes mostly from organic Chard and Collards.[6]

promotional trends

While promoted throughout the year, greens promotions are heaviest around Thanksgiving and Christmas holidays. Print promotions featuring Collards are most common, capturing 60.7% of the total promotional count. Kale also accounts for a sizable share at 26.2%, followed by Swiss Chard at 11.3%. Mustard and Turnip greens are also promoted, although they represent a much smaller share of the overall category. While most regions follow this general trend, there are some idiosyncrasies between regions that should be noted. Greens promotions in the West and West North Central regions are attributed about half of the time to Kale.

Promotional Region Map



In Pacific markets, Swiss Chard is also heavily promoted, capturing the second largest share at 29.9%. The table below details the average promoted price per pound by month and region for bulk Collard greens.

Greens are promoted almost equally by the each (bunch) and by the pound, with only 8.1% of greens promotions advertising packaged product. The most commonly promoted packaged greens is a 16oz bag, mostly Collards, but some Kale, Mustard and Turnip greens as well. This pack size is most frequently promoted between $1.99 and $2.50/bag.

Organics actually account for a very large share of greens promotions, 28.0%! The primary driver in this segment is Kale, which captures 55.5% of organic greens promotions. Swiss Chard is also a popular organic greens option with 27.6% of ads. Collards complete the picture with 16.9% of organic greens print promotions.[7]

demand patterns

Anticipating when the consumer will purchase, combined with product availability, is the key to successful product flow strategy both during promoted and non-promoted time frames. With an item like greens, retailers tend to promote both bag and bulk during key holiday time periods like Thanksgiving, Christmas and New Year's. Despite the per-

Regional Average Promoted Price by Month - Bulk Collard Greens Per Pound

REGION	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Central	$0.95	$0.75	$0.82	$0.80	$0.57	$0.87	$0.93	$0.79	$0.81	$0.82	$0.85	$0.84	$0.83
East North Central	$0.86	$0.74	$0.82	$0.80	$0.57	$0.87	$0.99	$0.79	$0.81	$0.76	$0.85	$0.84	$0.82
West North Central	$1.29	$0.79					$0.91			$1.29			$1.00
East	$0.94	$0.90	$0.89	$0.98	$0.89	$0.95	$1.20	$1.18	$0.97	$0.90	$0.93	$0.94	$0.95
Middle Atlantic	$0.91	$0.87	$0.89	$0.98	$0.90	$0.94	$1.13	$1.07	$0.89	$0.89	$0.90	$0.92	$0.93
New England	$1.16	$1.99	$0.89	$0.96	$0.87	$1.15	$1.46	$1.68	$1.64	$1.00	$1.03	$1.25	$1.13
South	$1.00	$1.02	$0.93	$0.93	$0.92	$0.98	$0.77	$0.98	$0.98	$1.09	$1.08	$1.02	$0.98
East South Central	$1.14	$0.79	$0.76	$0.79	$0.84				$0.89	$0.64	$0.99	$0.66	$0.82
South Atlantic	$0.98	$1.06	$0.99	$0.98	$0.93	$0.98	$0.77	$0.98	$0.99	$1.20	$1.17	$1.07	$1.01
West South Central											$0.46	$0.79	$0.63
West			$0.68								$0.99	$2.50	$1.21
Mountain			$0.68										$0.68
Pacific			$0.68								$0.99	$2.50	$1.39
TOTAL	**$0.95**	**$0.91**	**$0.88**	**$0.94**	**$0.88**	**$0.96**	**$1.10**	**$1.05**	**$0.96**	**$0.92**	**$0.92**	**$0.94**	**$0.94**
Share of Print Ads	*5%*	*6%*	*7%*	*9%*	*7%*	*6%*	*5%*	*4%*	*8%*	*6%*	*19%*	*19%*	*100%*

ishability of greens, it is generally suggested that approximately 35% of the forecasted needs for the promotion arrive in store 1 to 2 days ahead of time. This will allow for proper merchandising set and maintenance during the critical beginning stages of the promotion. Plan for 45% to be in-store during the middle phase of the promotion and 20% to support the last leg, maintaining a presence coming off the promotion as the items return to their modular positions within the department.

Consumer demand for greens is also impacted by causal factors such as weather, competitor pressures, and product quality/availability. While greens in general see a lift during the winter holidays, Kale is a variety that has experienced significant growth over the last few years due to its health benefits. Positioning Kale with other produce items like grapes, spinach and apples provides consumers options for smoothies and fresh juice.

Having a mix of blends, bagged and bulk greens gives consumers the right option to fit their consumption needs. If sales of a specific variety of greens begin to exceed supply, reduce the size of the display, and substitute with a complementary variety.

By maximizing merchandising opportunities both in and outside the produce department based on current inventory on-hand and aligning with causal impacts, greens will flow more consistently. Thus, lowering inventory backups or out of stocks, as well as potential shrink. This will help ensure the department remains fresh and full, providing the best customer experience.

As consumer desires move away from cooking in the home in the traditional sense (less pantry stocking, more frequent shopping trips for occasion-based meals), the items they shop for and the factors that most influence their purchases change. The trends we see in global production and consumption of our fresh commodities, coupled with the sales patterns we see in the retail space, help drive innovative ideas for fresh, new products. More than ever, consumers are willing to try new things, so long as they engage with their immediate desires and add convenience and excitement around their eating experience.

The Category Insights Team at C.H. Robinson drives results and influences the performance of its customers through consumer-focused analytics, industry benchmarking, trends, and collaborative plan development.

Additionally, this team is highly focused on the individual commodity space, and their efforts deliver forward-thinking solutions and tools for growers and industry members alike.

For more information about the Category Insights Team, e-mail us at: categorydevelopment@chrobinson.com

[1] Cooper, Carla, and Harvey Hartman. (2013) *Reframing Retail through the Lens of Changing Food Culture*. Study by FMI, Daymon Worldwide, and the Hartman Group

[2] What We Eat in America Survey. CDC/USDA. Survey years 2003 - 2010. Day 1 Dietary Data. Includes items identified as 'raw' or 'from fresh' or 'unspecified' but likely to fall within the first two categories.

[3] FAOSTAT.org. Food & Agriculture Organization of the United Nations. Consumption figure is equal to production totals plus imports less exports. All figures include Cabbages and other brassicas.

[4] FAOSTAT.org. Food & Agriculture Organization of the United Nations. All figures include Cabbages and other brassicas. Eaches per person calculations based on 89 grams per chopped cup of greens and cabbage.

[5] Freshlook IRI, WE 12/29/13. Regions classified using traditional grocery data from 19 metro markets. Index baseline = 100, values above 150 grouped as 'very high,' values between 120 and 150 grouped as 'high,' and values below 60 grouped as 'low.'

[6] Freshlook IRI, WE 12/29/13. All reported ACV, sales trends, weekly sales volume, and pack size figures from MULO (US Traditional Grocery, Mass, Club, Walmart, and DeCA, Dollar, and Drug)

[7] MarketTrack Promo Data, 2011 - 2013