

Sales and Brand Loyalty

by

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Consumers surprisingly exhibit little loyalty to either national brands or private labels for orange juice. Consumers also switch frequently between frozen and refrigerated orange juice. Switching is enhanced when stores hold frequent sales of orange juice products. È

Some consumers, known as loyals, always buy a particular brand-name food. Other consumers, called switchers, chose which brand they buy in a given shopping trip depending on relative prices of the products. Stores try to induce these consumers to switch to a given brand by putting it on sale.

Is switching common? Which types of households switch between food brands? How does the frequency with which stores hold sales affect whether households buy on sale? Does a sale on one good affect which brands of related goods are purchased? We answer these questions for frozen and refrigerated orange juice (OJ), using grocery store scanner data: Information Resources Incorporated's (IRI) InfoScan® Household Panel data for 1997 through 1999.

Orange juice is a good choice for studying brand loyalty because the industry is moderately concentrated. The top two brands in the industry, Tropicana and Minute Maid, account for more than half of the market share in terms of dollar sales in either the frozen concentrate market or the refrigerated juice market.

We examine whether consumers switch between brands among only refrigerated OJ, only frozen OJ, and between both refrigerated and frozen OJ. We categorize consumers based on their loyalty or brand-switching behavior over a year. For the frozen and refrigerated samples, the first group consists of loyal consumers who purchase a top-selling national brand; the second group consists of consumers who are loyal to the store's private-label product; and the other two include people who switch between top national brands and private labels or who purchase other brands. The combined sample has customers who are loyal to a national brand, those who switch within a type, and those who switch between types.

How Common is Switching?

To our surprise, switching behavior is extremely common and brand loyalty is relatively uncommon for orange juice. Sixty-one percent of the frozen OJ customers and 77 percent of the refrigerated OJ

customers switch or buy minor brands. Overall, 92 percent of the consumers switch within or between types of juice. Perhaps most striking is that 60 percent of all consumers switch between refrigerated and frozen orange juice products. If we look at loyalty for more than one year, we find that virtually no household is loyal to a single brand.

Roughly twice as many consumers of refrigerated or frozen juice are loyal to the leading national brands as to a private label. Of frozen orange juice consumers, 25 percent are loyal to a leading brand-name product and 14 percent to the private label. In contrast for those who consume refrigerated orange juice, only 16 percent are loyal to the top brand name and only six percent to the private label.

Looking only within frozen or within refrigerated juices provides a misleading picture that there is more loyalty than when we take account of switching between types. We find substantially less national brand loyalty if we allow consumers to switch between frozen and refrigerated products than if we look at just one or the other type of juice: The share of consumers who buy only leading national brands drops from 25 percent to three percent for frozen and from 16 percent to five percent for refrigerated.

What Affects Switching?

Is brand loyalty determined by household characteristics, the frequency of sales, or both? To answer this question, we used a statistical analysis. Among the consumer characteristics we considered were age, race, education, employment and occupation of female and male household heads, age of children, household size, household income and where they live.

For a given set of household characteristics, when the frequency of sales rises, fewer consumers of orange juice remain loyal to a national brand and switching behavior increases. If a store were to increase its frequency of sales from zero percent to 15 percent (the observed range), the probability of its refrigerated orange juice customers being loyal to a national brand, falls from eight percent to two

percent, the probability of being loyal to a private label drops negligibly, so the share who are switchers rises from 86 percent to 93 percent. The comparable figures for frozen juice consumers are: 20 percent to four percent, 12 percent to six percent, and 68 percent to 90 percent.

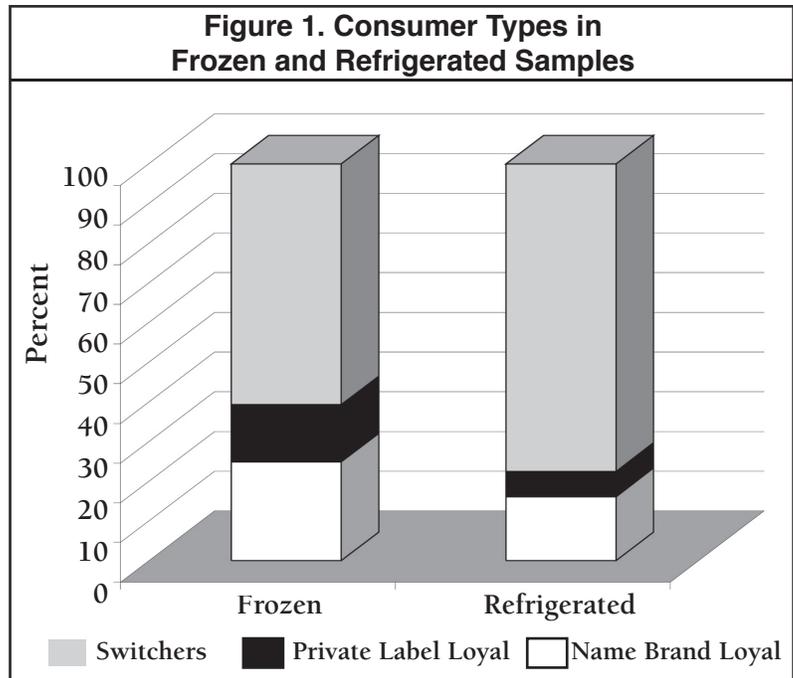
We found that household characteristics generally affect whether a household is likely to switch in the manner that we expected, but the effects were generally relatively small. We calculated the effects of changing only one characteristic at a time, holding the other characteristics and the frequency of sales constant.

As household income rises, consumers are more likely to be loyal to a national brand, less likely to be loyal to a private label and less likely to switch. In short, wealthy households buy a leading national brand and stick with it, even though it may cost more than other brands. As household income rises from \$30,000 to over \$100,000, the share of refrigerated juice consumers who are loyal to the national brand nearly doubles from seven to 13 percent, while the share who buy frozen drops from six to three percent. The comparable figures for frozen juice consumers are 17 to 27 percent and 14 to nine percent.

As household size increases, consumers are more likely to buy a private label. The reward to buying inexpensive brands rises with family size. This increase comes at the expense of leading national brands; however, the share of switchers remains relatively unchanged. As the household size rises from two to five people, the share that are loyal to the national brand falls from eight to six percent and the share that buys the private label rises from five to seven percent for the refrigerated sample. The comparable figures for the frozen sample are 20 to 14 percent and 13 to 16 percent.

Renters are more likely to be loyal than are home owners. Surprisingly, renters are slightly more likely to be loyal to both leading national brands and to a private label than are home-owners. Consequently, renters are less likely to be switchers.

Race affects loyalty to a national brand for refrigerated orange juice. For refrigerated OJ, the probability that a white consumer is loyal to a leading national brand is eight percent compared to seven percent for Hispanic consumers, and six percent for black con-



sumers. Race has negligible effects on loyalty to a private label or for frozen juice.

Senior citizens exhibit less brand loyalty for refrigerated orange juice than do younger consumers. In the refrigerated sample, older consumers are less likely to be loyal to either a name brand juice or a private label. This result contrasts with pharmaceuticals, where older consumers were more likely than others to buy a name brand instead of a generic drug. Age has virtually no effect on switching behavior in the frozen or combined samples.

Summary

Loyalty to brands of orange juice is rare. Consumers not only switch between brands for a particular type of orange juice; they also switch between frozen and refrigerated brands. There is relatively little difference across households' orange juice consumption due to income, family size, race, age of family heads, age of children, education, occupation or other factors. However, loyalty decreases substantially as sales become more frequent.

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