

Do Promotions for New Wines Contribute to or Cannibalize Beverage Sales?

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Do Promotions for New Wines Contribute to or Cannibalize Beverage Sales?

A controlled field study of wine promotions in a mid-price chain restaurant generated three key findings: 1) selected wine recommendations increased sales by 12%, 2) food-wine pairing recommendations increased sales by 7.6%, and 3) wine tastings increased sales by 48%. In general, most (69-87%) of the increase in sales of promoted wines come from diners who would likely have ordered a non-promoted wine. Specific implications for responsible restaurateurs are outlined, including the caveat to not cannibalize sales by promoting a lower margin, lower profit wine.

Despite the health benefits associated with one glass of wine a day,¹² restaurant wine sales still lag behind that of other alcoholic beverages.³⁻⁴ Given the 200-300% margins on restaurant wine sales,⁵ it is important to identify how on-site promotions might increase the sales of new wines. Doing so could increase profits while reducing the likelihood of overconsumption of alcohol that is more associated with beer and liquor. It could also help a novice wine drinker to make a more confident, healthy, responsible, and satisfying wine selection.

A unique, 12 week field study with a mid-priced chain restaurant explores the use of three types of table-tent advertised wine promotion strategies: 1) wine

¹ MH Criqui and BL Ringel, "Does Diet or Alcohol Explain the French Paradox," *Lancet*, Vol. 344 (1994), pp. 1719-1723.

² D. McGregor, R.P. Murray, and GE Barnes, "Personality Differences Between Users of Wine, Beer and Spirits in a Community Sample: The Winnipeg Health and Drinking Survey," *Journal of Studies on Alcohol*, Vol. 64, 2003, pp. 634-640.

³ "Consumer Insights," *Restaurant Business*, July 2004, pp. 28-30.

⁴ "Libation Liberation," *Restaurant & Institutions*, August 2005, pp. 43-50.

⁵ "Restaurateurs Enjoy Higher Sales With Lower Markups on Bottled Wine," *Nation's Restaurant News*, November 2005, pp. 4,82

recommendations (one vs. three vs. five wines), 2) recommended wine-food pairings (one vs. three vs. five pairs), and 3) low priced tasting portions (one vs. five available tastings). All three of these promotional strategies were chosen to address one possible barrier to ordering wine in restaurants:⁶ risk-aversion.⁷

Reducing the Risk of Ordering Wine

Ordering wine can be both financially and socially risky.⁸ Even if a diner is reasonably knowledgeable about wines, there are wide variations between varietals, vineyards, countries, and years. This can make choosing the wrong wine socially embarrassing or financially disappointing.⁹ In contrast, the production, control, and brand familiarity associated with beer and spirits generally guarantees that repeated experiences will be consistent with expectations.

To help diners reduce their risk of ordering wine, responsible restaurateurs might consider three ways to reduce the perceived risk of ordering wine. They could suggest a wine, suggest a food-wine pairing, or they could offer relatively low-priced tasting portion. All of these would help reduce both the financial and social risk associated with ordering wine.¹⁰

⁶ T. Spawton, "Of Wine and Live Asses: An Introduction to the Wine Economy and State of Wine Marketing," *European Journal of Wine Marketing*, Vol. 25, 1991, pp. 1-48.

⁷ See: V.W. Mitchel and M. Grotorex, "Risk Reducing Strategies Used in the Purchase of Wine in the UK," *European Journal of Marketing*, Vol. 23, 1988, pp. 31-46.

⁸ R.F. Pohl, S. Schwarz, S. Sczesney, and D Stanhbert, "Hindsight Bias in Gustatory Judgments," *Experimental Psychology*, Vol. 50, 2003, pp. 107-115.

⁹ "CIA at Greystone Helps Operators Uncork Higher Wine Sales," *Nation's Restaurant News*, April 2005, pp. 30-31.

¹⁰ P. Chandon, B. Wansink, and G. Laurent, "A Benefit Congruency Framework of Sales Promotion Effectiveness," *Journal of Marketing*, Vol. 64, 2000, pp. 65-81.

One reason why these risk-reduction promotional strategies have not been empirically tested is because past efforts have not had the ability to provide an effective control. To accomplish this, we conducted a controlled, balanced, 12-week field study to examine how these various promotions influenced wine sales. The promotions involved minimal server involvement so their implementation could be accomplished consistently across two separate restaurants within this chain.

Method: The 12 Week Field Experiment

We introduced these three risk-reducing wine promotion strategies during a 12-week field experiment at two Rockfish Seafood Grill restaurants (22 miles apart) located in Houston, Texas. The Rockfish Seafood Grill is a casual neighborhood restaurant serving lunch and dinner. With the help of management, five relatively new or unfamiliar wines were selected to be used in the different wine promotions. These promotions were introduced in the two restaurants in a staggered manner to help reduce unwanted variation that might have otherwise been attributable to weather. If we provided one wine promotion in Week 1 and a different wine promotion in Week 2 at one location, we would provide these same promotions in the reverse order at the second location (see Table 1). Some of the weeks within the wine promotion test period were skipped because of idiosyncrasies that would not have allowed appropriate comparison (such as the weeks with Father's Day and the Fourth of July).

[Insert Table 1]

The promotions were communicated through the use of table tents. The first set of tests compared one, three, or five wine recommendations to see which had the biggest

impact on sales. The second set of tests compared one, three, or five wine-food pairing recommendations to see which was most effective. The third set of tests compared a \$2 wine tasting portion for either one wine or for five wines.¹¹

Operations were conducted with minimal disturbance. Once a week (Sunday after closing), the changes in the conditions were made, and they were diligently followed through the week until the next Sunday after closing when the next change was made. Daily operations continued with no other change. At the end of each day, the sales records for each drink and food item was collected and compiled. The key variables of interest were the sales of the target (promoted) wine, sales of all other wines, sales of beer and liquor, and sales of non-alcoholic drinks. In evaluating the results, sales figures were aggregated and averaged between both restaurants.

To understand sales of beverages without wine promotions, we first collected sales records from both Rockfish restaurants for four weeks before the beginning the study. These sale records served as a control (or baseline) condition by which we could compare the effectiveness of wine promotions on the promoted wines and on other alcoholic beverages. For each of the four weeks, we combined sales for both restaurants for each beverage category and then computed an average for that beverage category. Baseline results suggest that wine sales, without promotions, comprise 28%, beer and liquor comprise 46%, and non-alcoholic drinks comprise 26% of total beverage sales between restaurants. In total, wine sales comprise approximately 4.6% of total restaurant

¹¹ Wines & Wines Paired with Food: 1. RM Coastal Chardonnay "SC" & Maryland Crab Cakes 2. Hogue Riesling & Santa Fe Fish Tacos 3. Rancho Zabaco "Dancing Bull" Zinfandel & Shrimp Parmigiana 4. Ecco Domani Pinot Grigio & Rockfish Combo 5. Sterling "Vintner's Collection" Cabernet Sauvignon & Steak.

sales, while beer and liquor, non-liquor, and food comprise approximately 7.5%, 4.3%, and 83.6% respectively.

More Wine Recommendations = More Wine Sales

Does simply promoting a new wine with a table tent improve wine sales? Figure 1 shows this partly has to do with how many different pairings are promoted.¹² At the levels examined here (one, three, or five), the table tent promotion of five wines increased sales of the promoted wines more than promotions recommending either three wines or one wine. Specifically, these promotions with five wines increased promoted wine sales by 39% (\$473.04 to \$657.06) and also increased total wine purchases by 12% (\$1,748.33 to \$1,956.07) and total restaurant sales by 4% (\$38,279.69 to \$39,739.23). All of these increases are statistically significant¹³⁻¹⁴.

Importantly, the table tent promotion of five wines did not significantly cannibalize sales of all other wine sales. This may be because more risk-adverse restaurant patrons may have felt more comfortable choosing and buying the promoted wines, while less risk-adverse patrons continued to buy wine at frequencies not significantly different than when no promotions were given (see Figure 1).

¹² To be able to statistically test these wine and food promotional results, a two-way (6-wine promotions x 7-wine and food categories) contingency table analysis was conducted on the individual sale figures shown in Exhibit 3. The overall chi-square for this contingency table was significant, $\chi^2 = 777.04, p < .001$. This result suggests that the wine promotions had a significant affect on sales.

¹³ See D. Whitlark and S.M. Smith, "Using Correspondence Analysis to Map Relationships," *Marketing Research*, Vol. 13, pp. 22-28.

¹⁴ To further examine the statistical significance of individual sale figures within the aforementioned contingency table, we computed adjusted standardized chi-square residual scores, which are akin to "z-scores". The "z-scores" pertaining to the 5-wine promotion results for the promoted wines, total wine purchases, and total restaurant sales were all significantly different from what was expected from the corresponding baseline sale figures (all p 's < .05).

[Insert Figure 1 about Here]

If recommending five wines is good, would recommending 10 wines be even better? Although the data will not let us make this inference, it might be that there is a limit to how many wines should be promoted. If too many are being promoted, it might compromise how special the wines are viewed. In turn, the promotion might not be effective in reducing the risk of choosing wine.

Food Pairings are Effective . . . in Small Doses

If some people are hesitant to order wine because of the financial or social risk (the embarrassment if they appear ignorant), such wine-food pairing recommendations should reduce this hesitancy. This restaurant's use of food-wine promotions supports this notion (see Figure 1). It generated an increase in sales for the target wines by 44.5% (\$473.04 to \$683.71) and increase in total wine purchases by 7.6% (\$1748.33 to \$1880.81). Furthermore, total restaurant sales increased by 21% (\$38,279.69 to \$46,364.47). All of these increases are statistically significant from what was expected from baseline sales figures (all p 's < .05).

However, if too many pairing options are given, they do not increase wine sales. As Figure 1 illustrates, the promotion that paired five wines with five foods significantly decreased target wine sales by 11% and all other wine sales by 14%.¹⁵ In contrast to wine promotions without food pairings, too many wine-food combinations may confuse people or lead them to question how special wine and food pairings actually are.

¹⁵Both p-values related to adjusted chi-square residual "z-scores" for the decrease in sales of target wines and all other wines were less than .05.

Tasting Portions Increase Sales – The More the Merrier

During one week, a test was conducted where one small taste of the wine was offered for \$2. In the next week, five different wines were available to taste (each for \$2).¹⁶ We compared how the sales of the targeted wines differed in the weeks they were not offered in tasting portions compared with the weeks when they were offered.

When there was just one target tasting of wine, the subsequent sales of full glasses of wine increased 18.2% from \$148 per week to \$175 per week. However, when five glasses were offered, the total increase in sales for all five wines grew 47.3% from a combined total of \$465 per week up to \$685 per week (which was an average per wine increase of \$93 to \$137 per week). All of these increases are statistically significant from what was expected from baseline wine sale figures (all p 's < .05).

[Insert Figure 2 Here]

This suggests that tasting portions may be very effective in increasing wine sales for promoted wines. Much like wine promotions without food pairings, it was important to note that sales increased with the number of wines offered.¹⁷ Not only do these tastings make the promoted wine more noticeable, but they also increase the likelihood that a person would purchase an additional tasting of wine.

¹⁶ The single target wine was RM Coastal Chardonnay "SC", and the additional wines included Ecco Domani Pinot Grigio, Hogue Riesling, Rancho Zabaco "Dancing Bull" Zinfandel, and Sterling "Vintner's Collection" Cabernet Sauvignon.

¹⁷ This comparison was also conducted with three promoted wines, but an inventory stock-out made this condition noncomparable. This situation also did not allow us to make global evaluations of the effect of "tasting" promotions on total wine purchasing nor total sales of the restaurant.

Promoting New Wine Often Cannibalizes the Sale of Other Wines

Many investigations of tradeoffs between the sales of different beverages are longitudinal and do not benefit from cross-sectional controls. With twelve weeks of data, there are some key initial observations we can make about what may have lead to increases in wine sales and total beverage sales. Over the course of the study, three wine promotions (1 wine-no food, 5 wine-no food, 3 wine- 3 food) resulted in a statistical significant increase in total beverage sales as compared to what was expected from baseline sales figures (all p 's < .05). In contrast, two wine promotions (3 wine-no food, 1 wine-1 food) resulted in a non-significant increase or decrease in total beverage sales as compared to what was expected from baseline sales figures (all p 's > .05). Last, the wine promotion of 5 wine-5 food resulted in a statistical significant decrease in the in total beverage sales as compared to what was expected from baseline figures (p < .05).

Based on comparisons with the four-week baseline averages, the impact of these wine promotions did not have a major impact on aggregate beverage sales. People pretty much drank however much they would have otherwise drank. What the promotions did do, however, was to switch around to switch around the mix of the what was ordered and drank.

Although there were some variations across the different promotions, they were consistent enough to make important conclusions about how the promotion of new or unfamiliar wines influences beverage sales. An average of 78% (range of 69-87%) of the sales in new or unfamiliar wine sales was cannibalized from the sale of the other wines people would have been likely to otherwise buy. Of the remaining increase in new wine sales, 9% (0-18%) can be attributed to foregone beer sales, 8% (4-13%) to non-alcoholic

drink sales, and 4% (0-8%) to liquor sales (see Figure 3). Given that wine can have higher margins than these other beverages, this could suggest greater total profits for a restaurant.¹⁸

[Insert Figure 3 Here]

Nevertheless, it is estimated that of this increase in promoted wine sales, approximately 78% came from people who would have ordinarily purchased non-promoted wines. It is important to realize that these trade-off percentages may be specific for this chain only. Yet this also suggests that care be taken to not promote low-margin wines that could cannibalize the sales of higher margin wines.

Implications for Responsible Restaurateurs

Because of the health benefits associated with consuming one glass of wine a day, it may be in the interest of restaurants to encourage patrons to responsibly and pleurably experience wine. Unfortunately, many consumers do not have the experience with wine nor the confidence to do so.

This study shows that recommendations of wine, recommendations of wine paired with food, and tasting portions can all effectively boost wine sales. Recommending five wines can increase total wine sales by 12%, and making three wine-food recommendations can increase wine sales by 7.6% and is easy to implement. Interestingly, too many wine-food pairings may increase the likelihood of cannibalizing other wine sales, can be overwhelming if there are many of them, and may actually hurt

¹⁸ "Pouring on Profits: Global Glut, By-The-Glass Boom Boost Wine Sales," *Nation's Restaurant News*, November 2004, pp. 46-48, 50.

total restaurant sales. Wine-food pairing recommendations appear to be most effective when used with limited number of wines (such as three plus or minus one).

Offering small-portion tasting menus, can provide 18-47% boosts in wine sales. They can be priced at a generous margin and may help introduce novice customers to wine. The drawback is that it can be logistically difficult, and to minimize overpouring, they require either special-sized pouring glasses or careful waiter education.

[Insert Table 2 Here]

There are a number of limitations to this study. Although carefully planned, executed, and controlled, random variation can still occur. For instance, a large unreported anniversary party at one location might skew one day's data. Because the balanced design helps minimize these effects, we are confident these promotions can be cost-effective as long as profit margins for wine are higher than other beverages. Again, the goal of these promotions is to help a person, who is risk-adverse with purchasing wine, make a more confident, healthy, responsible, and satisfying wine selection.

In addition to the promotions investigated here, there are additional promotions that should be considered, such as waiter recommendations, and putting wine bottles or glasses on the table. Further investigations of noninvasive promotions can be examined in a wider range of restaurants and with a wider range of waitstaff involvement. Because point-of-sale is critical when it comes to beverage decisions, a best-practices study would certainly add additional insights that would be valuable and cost-effective in promoting the enjoyment of one glass of wine with dinner.

Promotions for new wines are profitable for these wines, but are they profitable for a restaurant? It depends on what other beverages are being cannibalized.

In this restaurant chain, only an average of 21% of the sales of the promoted wines came from beverages other than wine. They came from people who would have otherwise have ordered a beer, a mixed drink, or a soft drink. In the other 79% of most cases, patrons purchased the promoted wine instead of a different wine they would otherwise have bought. If the foregone wine purchase had been a lower margin wine, the promotion would have been profitable for the restaurant. In general, these findings suggest three specific suggestions when making wine promotion decisions:

1. Promote higher margin wines
2. Promote wines that are mid-priced or above
3. Avoid margin-cutting price promotions

Figure 1. Average Restaurant Sales per Wine & Food Promotion

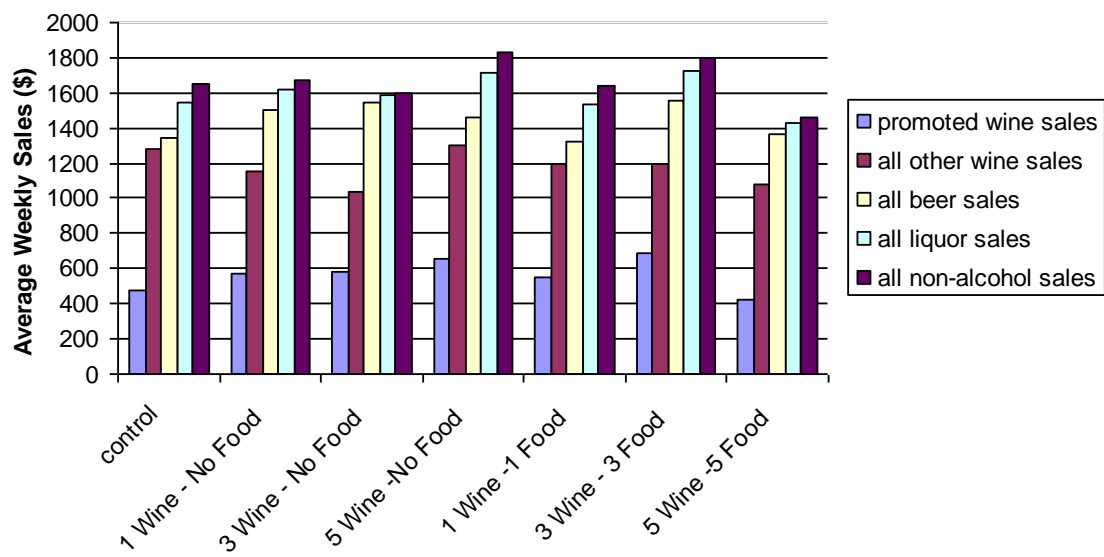


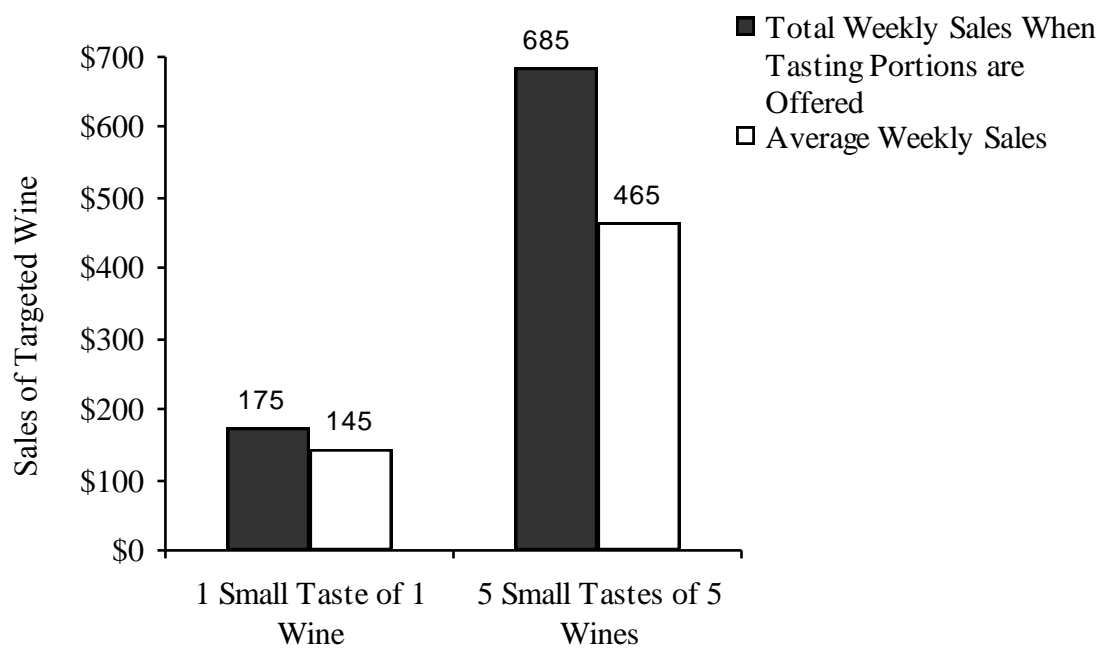
Figure 2. Tasting Portions Increase Weekly Sales of Targeted Wine

Figure 3. Holding Total Beverage Sales Constant, From Where Do Promoted Wine Sales Come?

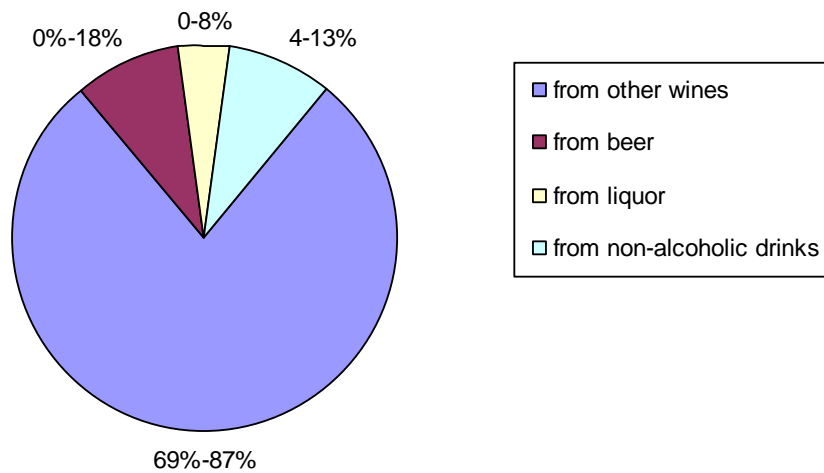


Table 1.**The Wine Promotion Schedule Across Both Restaurants**

	Four Week Baseline Control				Wine Recommendation Study + Wine/Food Promotion Study						Wine Tastings Study	
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Restaurant 1	Control	Control	Control	Control	1 Wine	3 Wines	5 Wines	1 Wine 1 Food	3 Wines 3 Foods	5 Wines 5 Foods	1 wine	5 wines
Restaurant 2	Control	Control	Control	Control	5 Wines 5 Foods	3 Wines 3 Foods	1 Wine 1 Food	5 Wines	3 Wines	1 Wine	5 wines	1 wine

Table 2.
Wine Promotion Suggestions

	Advantages	Disadvantages	Recommendations
Table Tents Promoting Handful of Wines	<ul style="list-style-type: none"> • Can increase wine sales by 12% • Easy to implement • Does not cannibalize other wine sales • May reduce risk-aversion by providing socially acceptable wine choice (“by the chef”) • Can increase total restaurant sales 	<ul style="list-style-type: none"> • Too few recommendations may not impact wine sales • May be difficult to choose specific wines to promote • Can cannibalize other wine sales 	<ul style="list-style-type: none"> • Promote at least 3-5 wines with high margins • Do not change the price of the promoted wines • Use table tents for medium level restaurants
Table Tents Promoting Food-Wine Pairings	<ul style="list-style-type: none"> • Can increase wine sales by 7.6% • Easy to implement • May reduce risk-aversion by providing ready-made wine-food decisions. • Can increase total restaurant sales 	<ul style="list-style-type: none"> • Can cannibalize the sales of other wines • Too many pairings overwhelm customers and they default to their normal beverage 	<ul style="list-style-type: none"> • Consider doing with two or three featured dishes • Do not discount the price • For medium level restaurants, table tents are fine
Offer Wine Tastings	<ul style="list-style-type: none"> • Can provides a 18-47% boost to sales • Tastings work for 1-5 wines, but appear to work best when more wines are available to taste • May help introduce nervous customers to wine • Can be priced at a generous margin 	<ul style="list-style-type: none"> • Perhaps a logistical hassle for establishments • Proper waiter education is necessary to prevent overpouring and to control costs 	<ul style="list-style-type: none"> • Test with 1-2 wines and work up to 5 when logistics and waitstaff experience allow • Use special tasting glasses to control pouring and to underscore a person hasn’t had a full glass of wine