

**Consumers' Use of Money-Saving Strategies in the Purchase
of Pet Food During an Economic Recession**

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Cents-off coupons, refunds, coupon cross-merchandising, and buying on sale were investigated for pet food purchasing. Consumers made little use of these. Greater use of money-saving strategies was influenced by greater importance of: (a) using a coupon, (b) price, and (c) refund offer. Respondents employed in service and professional, technical, or managerial occupations used money-saving strategies much less frequently than those not employed. Nutrition and pet's preference were most important to consumers.

Background Information

A recurring trend during economic hard times is increased consumer use of coupons, cents-off promotions, refunds/rebates, sweepstakes, and similar offers from companies attempting to maintain customer loyalty despite declining consumer resources (Hume, 1991). The current recession period is no exception with 7.3 billion coupons redeemed in 1990, a 2.8% increase over 1989 (Kerwin, 1991). In a 1990 grocery shopping behavior study, 83% of respondents said they used coupons. Direct Marketing (1991) reports that consumer use of coupons and cents-off promotions is increasing while use of money-back/cash refunds, sweepstakes, and premiums is decreasing. This suggests that consumers want instant gratification through immediate, rather than delayed, savings which seems more likely during economic hard times.

To date, studies of money-saving strategies such as use of coupons and refunds have focused on food shopping in general (see, for example, Avery & Bautista, 1991; Avery & Haynes, 1991; Maynes, 1991; Warne & Maynes, 1991). It is possible, though, that money-saving strategies vary by product. Studies of coupon and refund use by specific products were not found in the literature review for this study.

One particular product is pet food. (Consistent with the industry's usual custom, pet food in this study refers to dog and cat food and snacks.) Examination of use of money-saving strategies related to pet food shopping during an economic recession is especially important because pet ownership is a discretionary purchase. However, once the pet is owned costs ensue. It is possible that consumers perceive the pet food area

as one way of reducing costs without sacrificing the satisfaction of other family needs and wants.

The pet food portion of a household's budget can be sizeable. Dogs and cats consumed over \$8.6 billion worth of food and snacks in 1991 (Packaged Facts, 1991). The pet snacks category (biscuits, rawhide, etc.) increased 6.3% in sales for 1988 and continues to be a growing section of the supermarket where pet foods usually are purchased (Crispell, 1991). A recent Gallup survey found that Americans on the average spend approximately \$1,300 per year for pet food, snacks, health care, toys, and other expenses (Consumer Reports, 1991). Calculated for the whole economy, that totals to more than \$70 billion annually.

Of all 1990 U.S. households, 37% had at least one dog; 31% had at least one cat (Packaged Facts, 1991). Both figures were slight increases over 1989. Further, there are approximately 51-58 million dogs and 49-60 million cats in the United States (Crispell, 1991).

Thus, the overall focus of this study is consumers' use of money-saving strategies in the purchase of pet food. Specific objectives were:

1. To investigate the determinants of frequency of money-saving strategies used in pet food purchases.
2. To investigate how the economic recession has affected purchase behavior related to pet food and snacks; e.g., spending less, switching brands, etc.

Previous studies could give guidance in the formulation of hypotheses, but as stated earlier, no studies of money-saving strategies used for pet food purchases were found. This study will provide such baseline data. Studies of coupon use in general might be useful in predicting relationships. For example, Waldrop (1988) reported that coupon use was more likely for homemakers than for other occupational groups and for those with incomes of \$30,000 or more than for those earning below \$10,000. Warne and Maynes (1991) found that coupon use was low for those who were single, childless, career-oriented, younger than age 32, and in the income bracket of below \$10,000 or above \$40,000. But, pet food consumers might be somewhat different from the general

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shopping consumer so previous studies on coupon use in general food shopping were not used to formulate hypotheses.

Theory, on the other hand, can help to predict relationships. It is assumed that shoppers wish to optimize their resource use. Money-saving strategies can give more utility by decreasing price of pet food. The overall hypothesis, then, was that frequency of money-saving strategies used in pet food purchases is influenced by selected variables, all of which indicate differing utility levels. Number of pets and perceived importance of money-saving strategies are two such variables. Use of money-saving strategies to purchase pet food is likely to increase with number of pets because of the greater utility for consumers with more pets. Perceived importance of money-saving strategies like coupon use and refunding is likely to predict frequency of use. Respondents placing a greater level of importance on such strategies are assumed to do so because of the higher perceived utility from use of money-saving strategies.

Procedures

Sample

The study was conducted in grocery stores/supermarkets in Champaign-Urbana, Illinois. Convenience market and specialty stores were eliminated from the study because of the more specialized nature of items at these stores. To maximize representation of pet food shoppers, a purposive sampling technique was used. There were 15 grocery stores or supermarkets representing 6 different chains in the two cities; one store from each chain was chosen as a data collection site. Further, to ensure a wide sampling of the twin-city grocery store/supermarket population, sites were selected from the north, south, east, west, and center parts of the twin-city area.

Consumers shopping (browsing, making selections) in the pet food aisle during the scheduled interview time were eligible for the study. Although every individual was eligible for the study, not everyone was approached, given the interviewer's constraint of being able to conduct one interview at a time. Further, the study was limited to adults, aged 18 and over. A screening question for age was used to determine eligibility before the respondent was interviewed. All possible interviews were conducted during the scheduled interview times, resulting in 118 completed interviews. Interviewers were unable to obtain 83 interviews because they were interviewing someone else. Six individuals refused to participate.

Data Collection

Data were collected by trained interviewers who used an interview schedule designed by the principal investigator. Interviews were conducted April 30, May 1 and 2, 1992 at varying times of the day. Days chosen included: (a) both weekday and weekend to ensure interviewing individuals who shop

only weekdays or weekends and (b) morning, afternoon, and evening hours to avoid possible time-of-day bias in the sample.

Statistical Analysis

Data were analyzed using the IBM-PC and statistical software, SPSS/PC+. Statistical analyses consisted of frequencies and regression tests. Alpha was set at the .05 level of significance.

Variables

Variables measuring specific money-saving strategies were: (a) cents-off coupon use, (b) free coupon use, (c) refund offer use, (d) coupon cross-merchandising use, and (e) purchasing pet food on sale. Coupon cross-merchandising use was measured by asking the respondent the frequency with which he/she buys a product because it has a coupon for another product. (This is a common marketing strategy used by pet food manufacturers.) Respondents were asked to indicate the frequency of use of each money-saving strategy on a scale of: 1=never, 2=seldom, 3=often, 4=usually, and 5=always. Borgatta and Bohrnstedt (1980) suggest this is an imperfect interval scale that is suitable for regression analysis because of the robustness of the regression test.

For the regression analysis, the dependent variable was created by summing responses for all the money-saving strategies. This resulted in an overall measure of money-saving strategies for each respondent. The independent variables consisted of both demographic and social-psychological variables. The demographic variables were: (a) sex, (b) household income, (c) age, (d) number of pets, (e) household size, (f) marital status, and (g) occupation. Social-psychological variables were: (a) importance of price, (b) importance of pet's preference, (c) importance of nutrition, (d) importance of refund offer, and (e) importance of using a coupon. The independent variables were tested for possible multicollinearity by submitting them to a correlation analysis. Criteria to establish high correlation between variables were set at $r \geq .6$.

One independent variable, occupation, was measured on a nominal scale and was converted to a set of dummy variables for use with the regression procedure. The set of dummy variables consisted of: (a) professional, technical, managerial; (b) clerical, sales; (c) blue-collar (skilled and unskilled); (d) service; and (e) not employed (including homemakers, retired, and students). The not employed group was treated as the omitted category in the regression analysis. Each dummy variable was coded 0=absence of trait and 1=presence of trait. For example, the dummy variable, service, was coded: 0=respondent not employed in a service occupation and 1=respondent is employed in a service occupation.

One other independent variable, household income, was converted for the regression analysis.

Because data were collected in income ranges, rather than on an interval scale, income was recoded to a proportional scale with interval properties. The midpoint of each income range was determined and divided by the midpoint of the lowest income range.

Results and Discussion

Sample Characteristics

The average respondent was a married female, 44 years old with an income of \$37,618 and a household size of 2.5 persons. Fifty-five percent of all respondents had at least 1 dog, and slightly more than 70% had at least 1 cat. Number of dogs per household ranged from 0 to 12 with 40% of respondents having 1 dog and 12% having 2 dogs. Likewise, 40% of all respondents had 1 cat, and 16% had 2 cats. Households had from 0 to 20 cats. In terms of occupation, respondents typically were employed in professional, technical, or managerial jobs (29%), service jobs (17%), or clerical or sales jobs (12%). Thirteen percent of the respondents were students, and 11% were retired.

Money-Saving Strategies in Pet Food Purchases

Respondents were asked how often they used the following money-saving strategies in the purchase of pet foods: (a) cents-off coupons, (b) free coupons, (c) refund offers, (d) buy product because it has a coupon on another product (coupon cross-merchandising), and (e) buy pet food on sale (see Table 1). Less than 20% of the respondents

Table 1
Use of Money-Saving Strategies in Purchase of Pet Foods

Variable	Never	Seldom	Often	Usually	Always	Missing
Use cents-off coupons	35* (29.7) ^b	36 (30.5)	24 (20.3)	9 (7.6)	12 (10.2)	2 (1.7)
Use free coupons	56 (47.5)	29 (24.6)	16 (13.6)	5 (4.2)	9 (7.6)	3 (2.5)
Use refund offers	71 (60.2)	29 (24.6)	7 (5.9)	6 (5.1)	2 (1.7)	3 (2.5)
Buy product because it has coupon on another product	94 (79.7)	13 (11.0)	6 (5.1)	3 (2.5)	0 (0)	2 (1.7)
Buy pet food on sale	29 (24.6)	25 (21.2)	30 (25.4)	18 (15.3)	14 (11.9)	2 (1.7)

*Frequency of responses.

^bPercentage of responses.

usually or always used any of the money-saving strategies, except for buy pet food on sale. Twenty-seven percent usually or always bought pet food on sale. There was a high percentage of respondents who seldom or never used any of the following money-saving strategies: (a) cents-off coupons, 60%; (b) free coupons, 72%; and (c) coupon cross-merchandising, 91%. Forty-six percent seldom or never bought pet food on sale. These results suggest that consumers do not regularly take

advantage of money-saving strategies in the pet food aisle of the grocery store. Not surprising, the respondents were much more likely to buy pet food on sale and to use cents-off coupons and free coupons than to use refunds or coupon cross-merchandising. This is consistent with findings reported by Direct Marketing (1991) about the use of coupons and cents-off promotions over money-back/cash refunds as a means of instant gratification rather than delayed savings. Buying on sale, too, gives instant gratification, while coupon cross-merchandising results in delayed savings. Further, buying pet food on sale requires little effort on the consumer's part, perhaps some planning to take advantage of sales. Coupons take not only planning but also effort in clipping and organizing coupons for later use and cost-comparisons in the store to see if the coupon lowers the product's cost over other available brands. Refunds, though, take more effort as the consumer must accumulate the required proofs of purchase and often the grocery receipt, then complete the mail-in form, add postage and mail. Coupon cross-merchandising had the highest frequency of never responses. The added effort here is to redeem the coupon later on another product. If this is a product the consumer does not regularly purchase, the perceived return will be nil.

Some respondents, though, used a combination of money-saving strategies. For analysis purposes, cents-off coupons and free coupons were collapsed into one category, use coupons. Combined strategies listed by respondents were: (a) coupon plus buy on sale, (b) coupon plus refund, (c) coupon plus coupon cross-merchandising, (d) coupon plus refund plus buy on sale, (e) coupon plus refund plus coupon cross-merchandising, and (f) coupon plus refund plus coupon cross-merchandising plus buy on sale. Slightly less than 2/3 of the respondents used no combination of money-saving strategies. By far, the most commonly used combined strategy was use coupon plus buy product on sale (20%). Only a small percentage of respondents used the other combined strategies. These results are not too surprising when considered in light of the cost/return relationship to the consumer. More effort is required to combine more strategies, but the return can be quite great; for example, if the product is on sale, a cents-off coupon is used, and the product proof of purchase is used to obtain a refund, the total savings can be sizeable, even equal to or greater than the original price. Thus, combining as many strategies as possible can lower the final cost of the product greatly. But, if the consumer does not perceive the possible savings, the combined strategies will not be used, and potential savings will be lost to the consumer. Another explanation for lack of money-saving strategy use is that the cost of using the strategies may be perceived as higher than the resulting savings; thus, total utility would not increase with money-saving strategies use.

Determinants of Money-Saving Strategies Use

At the next stage of analysis, a multiple regression equation was developed to investigate the determinants of frequency of money-saving strategies used in pet food purchases. All independent variables were entered at once because the correlation matrix of the independent variables showed no multicollinearity problems. Results are reported in Table 2.

Table 2
Determinants of Frequency of Money-Saving Strategies Used in Pet Food Purchases

Variable	Beta
Sex	.101
Household income	.095
Importance of price	.273**
Importance of pet's preference	.042
Importance of nutrition	-.003
Age	-.054
Importance of refund order	.176*
Total number of pets	-.059
Household size	.139
Marital status	-.010
Importance of using a coupon	.429***
Occupation	
Professional, technical, managerial	-.253*
Clerical, sales	-.093
Blue-collar	-.041
Service	-.187*
Not employed (omitted category)	

R² = .521; p ≤ .001

*p ≤ .05
**p ≤ .01
***p ≤ .001

The adjusted R² was .521 and significant at the .001 level. Thus, 52% of the variance in frequency of money-saving strategies used in pet food purchases was explained by the independent variables. Five variables had significant beta coefficients. The most important determinant was importance of using a coupon (p ≤ .001) followed by importance of price (p ≤ .01); professional, technical, managerial occupations (p ≤ .05); service occupations (p ≤ .05); and importance of refund offer (p ≤ .05). The more importance respondents attached to using a coupon, price, and refund offer, the greater their use of money-saving strategies. Of these, importance of using a coupon is the major factor in determining whether pet owners use money-saving strategies. When compared to those respondents who were not employed, the two occupational groups of service and professional, technical, or managerial used money-saving strategies much less frequently. This finding is

not surprising; those who are employed have less time to use money-saving strategies than those who are not employed. The results about importance of using a coupon, price, and refund offer confirm the cost/return relationship between money-saving strategies and consumers' use of them. Consumers who perceive the returns will recognize the importance of money-saving strategies and will use them.

Reasons for Pet Food Purchases

To further understand pet food shopping behavior and low use of money-saving strategies, it is helpful to examine the reasons respondents gave for buying the brand of pet food they usually do. As shown in Table 3, respondents' perception of pet's preference is by far the most frequent reason given for buying a certain brand of pet food with slightly more than 60% of the respondents identifying this as the reason they bought a certain brand.

Table 3
Reasons Respondents Buy Certain Brand of Pet Food, n=118

Variable	Frequency	Percentage
Pet's preference	72	61.0
On sale	3	2.5
Coupon or refund	1	0.8
Professional recommendation	10	8.5
Nutrition	6	5.1
Price; it's cheap	10	8.5
Miscellaneous reasons*	10	8.5
Missing information	6	5.1

*These included: (a) family/friend's preference, (b) sounds good, (c) good size, (d) dog is chunky, (e) easy to store, (f) lowest fish content, and (g) previously used.

A similar result was found when respondents were asked to indicate the importance of selected factors related to pet food shopping: (a) nutrition, (b) price, (c) coupon, (d) refund offer, and (e) pet's preference (Table 4).

Table 4
Importance of Selected Factors in Pet Food Purchases

Variable	Not important	Important	Very important
Nutrition (n=115)	13 ^a (11.3) ^b	50 (43.5)	52 (45.2) ^c
Price (n=117)	39 (33.3)	47 (40.2)	31 (26.5)
Coupon (n=118)	70 (60.9)	37 (32.2)	8 (7.0)
Refund offer (n=116)	95 (81.9)	17 (14.7)	4 (3.4)
Pet's preference (n=115)	14 (12.2)	26 (22.6)	75 (65.2)

^aFrequency of responses.

^bPercentage of responses.

^cTotals may not sum to 100% due to rounding.

Slightly less than 90% of the respondents reported that pet's preference, as well as nutrition, was important or very important in their shopping. Price was important or very important to 67%, while coupons and refunds were far less important with the majority of respondents saying they were not important (61% and 82%, respectively).

The overwhelming importance of nutrition and pet's preference helps to explain the low importance attached to coupons and refunds. Price, though, still seems to be more than moderately important for many consumers. Possibly, the same respondents indicating nutrition and pet's preference as important would use coupons, refunds, or other money-saving strategies if they were assured of good nutrition and their pet would like the pet food.

Respondents were asked what changes they had made in their pet food shopping in response to the economic recession (Table 5). Respondents

Table 5
Changes in Pet Food Shopping in Response to the Economic Recession

Variable	Made change	No change
Spending less	7 ^a (5.9) ^b	111 (94.1)
Using coupons more	31 (26.3)	87 (73.7)
Using rebates/refunds more	11 (9.3)	107 (90.7)
Buying different brands than before	15 (12.7)	103 (87.3)
Made other changes ^c	6 (5.1)	112 (94.9)

^aFrequency of responses; n=118.

^bPercentage of responses; may not sum to 100% due to rounding.

^cResponses given were: (a) going to larger bags, buying less often; (b) special diet; (c) shop for sales; (d) not as many treats; (e) fewer cats; and (f) buy turkey breast and cook for cat.

mostly reported no change in their use of pet food money-saving strategies, contrary to Hume's (1991) report about increased use of money-saving strategies for shopping in general during economic

hard times. The largest change was in the use of coupons, but only 26% reported using them more. Some brand switching was evident but in only 13% of the sample. Thus, it can be concluded that pet food consumers are somewhat brand loyal even in economic hard times. Nine percent of the respondents said they were using rebates/refunds more, and 6% said they were spending less on pet food. Five percent indicated they had made other changes: (a) going to larger bags, buying less often, (b) special diet, (c) shop for sales, (d) not as many treats, (e) fewer cats, and (f) buy turkey breast and cook for cat. Apparently, consumers are cutting back on non-pet food expenditures rather than using money-saving strategies in the pet food aisle.

Implications

Results of this study are important in providing knowledge about pet food shopping and money-saving strategies consumers use in their shopping. Consumer use of money-saving strategies is different for pet food shopping than for food shopping in general. An important finding of this research is that consumers do not regularly use money-saving strategies in pet food shopping, even in economic hard times.

For educators, this indicates that educational materials and programs are needed in this area. Consumers need help in assessing the cost/return relationship of money-saving strategies in the pet food aisle. They need to understand how to use money-saving strategies in combination so as to obtain the greatest return. Planning and organizing are needed skills for the maximum use of purchasing sale items and using coupons, and lessons could be developed to teach these skills with direct application to pet food shopping. Further, consumers need to understand shelf life of pet food and the effect on the product's nutrition. Although stocking up on pet food on sale and buying in large quantities can maximize savings, these can be diminished if nutritional value decreases because the food is not used within its shelf life. Some costs of couponing and refunding could be decreased by enlisting all family members in these activities. Children who learn how to comparison shop and use coupons and refund offers wisely learn a lot about financial management. And, shopping for the children's pet is another aspect of pet responsibility for children to learn.

For marketing experts, these findings suggest that coupons, coupon cross-merchandising, and refunds need to be set up so consumers can more easily take advantage of them. For example, the increasing practice of requiring an original grocery receipt is frustrating for consumers who accidentally discard the receipt before reading the terms of the refund offer. Or, the consumer has two different refund offers requiring an original receipt, but both items were purchased on the same grocery receipt. Or, coupons could be used instead of refunds if increased consumer use of the money-

saving strategy is desirable. Finally, marketing experts could discontinue coupons, refunds, and coupon cross-merchandising in favor of lowered product prices.

One of the most important findings of this study is that consumers are concerned about nutrition for their pets. Price is a consideration but not nearly as important as nutrition. The principal investigator's assessment of product choices available to shoppers during this survey indicates there are price breaks available in nutritionally adequate pet food. Consistent use of special offers and sale prices could result in considerable savings annually while still purchasing nutritionally adequate products. Some consumer education might be needed to help consumers to plan ahead so they can take advantage of sales, for example.

Further, investigation of consumer knowledge about pet nutrition is advised, especially in regard to price and money-saving strategies. Although respondents in this study reported that nutrition was important or very important, no questions were asked to determine whether consumers understand their pets' nutritional needs or how to determine the nutritional adequacy of pet food. This is an area for further study. If such a study finds that consumers do not understand pet nutrition, then educational materials addressing nutrition and money-saving strategies could be developed and provide a valuable service to pet food consumers.

Respondents also were aware of their pet's preference in pet food, and this is another area of consumer education. Consumers need to understand how to change pet's preference if money-saving strategies are to be maximized. It is possible to change a pet's food to another brand, even though the pet seems to prefer a particular brand. Pet nutritionists recommend this be done gradually. If not, the pet is likely to reject the new product and reinforce the concept of the preferred brand.

Consumers spend sizeable amounts of money on pet food each year, yet do not necessarily use money-saving strategies to get the most for their money. Often, people become so emotionally attached to their pets that it is possible they do not get the best buy in the pet food aisle of the grocery store. They may assume that certain kinds of food are good for their pets because of labeling and advertising claims. Still others may purchase pet food at specialized stores or from veterinarians assuming the food is better for the pet. These aspects of pet food purchasing were not covered in this study but would provide important insight into consumer pet food purchasing, especially as they relate to the use of money-saving strategies.

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