AN ASSESSMENT OF CONSUMER PREFERENCES REGARDING HONEY PURCHASES: THE CASE OF CANADIAN HONEY IN THE DALLAS-FORT WORTH, TEXAS MARKET AREA*

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Dr. G.W. Williams**

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*Report prepared under contract for Canadian Honey Producers.

**H.L. Goodwin, Jr. is Associate Professor and TAMRDC Assistant Coordinator and Gary W. Williams is Professor and TAMRDC Coordinator
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Report on contract research for Canadian honey producers. Texas Agricultural Market Research and Development Center Confidential Report No. C-1-89 by Dr. H.L. Goodwin and Dr. Gary W. Williams, TAMRDC Assistant Coordinator and Coordinator, respectively, Department of Agricultural Economics, Texas A&M University, College Station, Texas 77843-2124.

ABSTRACT: This report presents the results of a study of consumer behavior and attitudes regarding Canadian honey which focused on the Dallas-Fort Worth, Texas (DFW) market. Since the introduction of Canadian honey into this area, sales have lagged behind those in other U.S. markets. TAMRDC developed a survey instrument to elicit consumer perceptions of and behavior toward honey, most specifically Canadian honey and its primary competitor in the DFW market, Texas honey. A scientifically drawn sample of twelve stores of three chains was used after consultation with and approval of appropriate chain management personnel and store managers. TAMRDC economists structured the survey, designed the interview process and closely supervised graduate students utilized in interviewing. Resultant data was screened and analyzed.

The Texas Agricultural Market Research and Development Center (TAMRDC) celebrated its 20th anniversary of providing timely and unique research on issues affecting agricultural markets and commodities important to Texas and the nation this year. TAMRDC is a market research service of the Texas Agricultural Experiment Station and the Texas Agricultural Extension Service. The main objective of TAMRDC is to conduct research leading to more efficient marketing of Texas and U.S. agricultural products in domestic and international markets. Research areas include domestic and foreign market opportunities for Texas and U.S. produced agricultural products; marketing policies and strategies; competitiveness of Texas and the U.S. in the production and marketing of traditional bulk and high value/value-added products in a global setting; the impact of new technologies on markets and prices; efficiency of market information systems; market structure and performance; consumer attitudes and preferences.
EXECUTIVE SUMMARY

The overall objective of this project was to identify and analyze the major factors influencing purchasing patterns of honey in the specific market area of Dallas-Fort Worth, Texas (DFW). A total of 409 face-to-face interviews were obtained in a three day period (March 11-13, 1989) in twelve randomly selected supermarkets in DFW. The stores were diverse in geographic location and socio-demographic and economic characteristics of the shoppers.

Results

Survey responses reveal that honey was purchased at least once in the past month by 44.3 percent of all households. Seventy percent of all respondents indicated they used honey in their households; over one-half used honey with breakfast and about 14 percent used it in cooking or baking. A majority indicated that all honey does not taste alike.

About 64 percent of all respondents perceived honey to be healthier than other sweeteners. Most information regarding the health and nutritional aspects of food was obtained from television; however, magazines and newspapers combined by far exceeded television as an information source.

A significant portion of the respondents perceived honey to be messy or inconvenient and preferred packaging in something other than a jar. Most honey consumers are largely unconcerned about the price of honey brands they purchase and nearly one-half consider the origin of their honey to be unimportant.

Females indicated a higher degree of price sensitivity, tended to use coupon redemption more frequently and were more conscious in choosing low-fat, low-calorie foods and in preparing nutritionally balanced meals than males. Males indicated more tolerance of the perceived "messiness" of honey. With regard to the race of the respondents, Blacks tended to be the heaviest users of honey, (followed by Whites and Hispanics), and were most likely to select the cheapest honey available.

Respondents with annual incomes below $12,000 were most likely to be on a strict food budget and purchase the most inexpensive honey, while those with incomes over $80,000 exhibited opposite tendencies. The frequency of honey purchases increased with increased income, suggesting that honey may have a sizeable income elasticity. As income level increased, magazines and newspapers replaced television as the major information source.

Less than one-half and one-third of all honey users, respectively, were familiar with creamed and/or spun honey. The term "creamed" conveys a misconception for many that some additive was in the honey, whereas "spun" did not convey this. Results fail to support the notion that form of honey (creamed/spun vs. liquid) is of significant importance when considering the convenience aspect of honey use. Although a sizeable number of honey users are familiar with creamed/spun honey, survey results indicate very few actually purchase anything other than liquid honey (282 liquid vs. 52 creamed/spun).

Responses to questions regarding the origin of honey purchased revealed that three-fourths of the sample could not recall having purchased or tried Canadian honey; less than one-tenth of the sample could not recall having purchased or tried Texas honey. Over one-third
of all honey users mentioned purchasing a Texas honey brand; only three mentioned a Canadian brand.

Recommendations

Numerous recommendations emanate from this research, as highlighted below:

• Price should not be a primary concern in longer-term efforts to increase purchases of Canadian honey.

• Producers and processors of Canadian honey can create whatever image they desire at the present time. The perceived "safety" of Canadian agricultural goods could be exploited. There is an ideal niche for an upscale honey in the market between traditional offerings and the more expensive West German honey.

• A new packaging scheme is essential. It must promote the quality of Canadian honey. Suggestions are to use taller, more slender translucent plastic squeeze bottles with a carefully selected color scheme and tamper resistant features. This should appeal to the appearance conscious Texas consumer.

• Concentrated couponing and advertising in trendy, prestigious magazines and in-store demonstrations in carefully chosen locations could be highly successful in reaching the more educated, higher income, 20-50 age segment of the population who are the heaviest users of honey, thereby increasing market share.
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AN ASSESSMENT OF CONSUMER PREFERENCES REGARDING HONEY PURCHASES: THE CASE OF CANADIAN HONEY IN THE DALLAS-FORT WORTH, TEXAS MARKET AREA

Long used as a sweetener and favored for its perception as a "healthy" alternative to sugar and corn syrup, honey is produced commercially in many nations worldwide. Leading producers include China, Mexico, Argentina, New Zealand, the United States, and Canada. Of these nations, China, Mexico, Argentina, and Canada are the major exporters. U.S. production totaled approximately 200 million pounds in 1986. The three leading honey-producing Canadian provinces of Alberta, Manitoba, and Saskatchewan produced 54.8 million pounds that same year (Table 1).

The leading honey importing countries have traditionally included West Germany, Japan, and the United States. West German honey imports originate primarily from Mexico and Japanese imports from China. Honey imported into the U.S. originates in almost equal quantities from China, Argentina, and Mexico. Historically, Mexico has been the dominant U.S. source of imported honey (American Bee Journal).

Canada is a secondary supplier to both West Germany and Japan. The primary Canadian honey export market is the U.S., accounting for approximately 15 percent of total Canadian production at a value of C$7.7 million (American Bee Journal). Imports from the U.S. into Canada amounted to only C$0.5 million (USDA-FAS). Total Canadian exports to the U.S. decreased from about 8,500 mt in 1986 to about 6,000 mt in 1987 (American Bee Journal). During the same period, total U.S. imports declined from 54,000 mt to 26,000 mt. U.S. production in 1987 totaled approximately 225 million pounds while consumption reached 320 million pounds in the same year.

Restriction of U.S. colonies for importation during the honey season due to varroa mite infestation has forced Canadian producers to import bees from Australia and New Zealand. This has increased the cost of production to Canadian producers and made it increasingly difficult to export honey at sufficient margins into the U.S. market at former volumes. At the same time, a rather complex buy-back/price-support provision tied to the
Table 1. Top Ten Honey Production States or Provinces, 1986

<table>
<thead>
<tr>
<th>State/Province</th>
<th>Millions of Pounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Dakota</td>
<td>31.03</td>
</tr>
<tr>
<td>California</td>
<td>27.04</td>
</tr>
<tr>
<td>Alberta</td>
<td>22.80</td>
</tr>
<tr>
<td>South Dakota</td>
<td>22.71</td>
</tr>
<tr>
<td>Florida</td>
<td>21.75</td>
</tr>
<tr>
<td>Manitoba</td>
<td>17.60</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>14.40</td>
</tr>
<tr>
<td>Minnesota</td>
<td>10.61</td>
</tr>
<tr>
<td>Nebraska</td>
<td>7.60</td>
</tr>
<tr>
<td>Texas</td>
<td>7.25</td>
</tr>
</tbody>
</table>

loan rate for honey in the 1985 Farm Bill has effectively decreased the price of U.S. honey below the world market level without adversely affecting the profits of U.S. producers. In 1987, Canada announced a price support of 6 cents per pound in an attempt to counter the negative impacts of the U.S. action on Canadian producers.

Despite the "health consciousness" trend in U.S. food consumption, retail sales of honey decreased from $132.5 million in 1981 to $104.9 million in 1986, a decrease of over 20 percent in just 5 years. Currently, bakeries account for roughly one-third of all U.S. honey use. About 75 percent of all honey sold at retail is purchased in supermarkets (USDA-ARS; Gleanings in Bee Culture). Per capita demand in the U.S. has fallen from 1.51 pounds annually in the early 1950s to about 1.1 pounds annually in 1986. Per capita demand in other major international markets such as West Germany and Japan has increased dramatically in recent years (Willett).

Predominant findings in recent research (Bee Culture, Bee World, American Bee Journal, and the Journal of Apiculture) indicate that most American consumers perceive honey to be "good for you," i.e., that it is healthier and better for your body than other forms of sweeteners. However, a 1987 study of Ohio consumers indicated that only 26 percent listed honey as their preferred sweetener (Niklas, National Honey Board). Primary consumer criticisms of honey include the following: (1) honey is too messy (sticky); (2) honey is too sweet; (3) honey only comes in one flavor; and (4) containers make honey use inconvenient (Niklas, National Honey Board). Potential solutions to the problem of decreasing honey consumption is the development of new products and/or new product forms (Gleanings, July, December, 1988). Additionally, negative attitudes reportedly exist in labeling and packaging and in perceived limited uses for honey (Niklas, Progressive Grocer).

OBJECTIVES

To develop effective marketing and merchandising strategies for Canadian honey in the Texas market, the major forces influencing retail honey purchases in this region
must be identified and analyzed. Assessing the relative importance of the identified factors affecting consumer preferences for and purchases of Canadian and competing honeys in the Dallas/Fort Worth (DFW) area should provide crucial insights concerning successful strategies aimed at increasing market share. The overall objective of this project, therefore, was to identify and analyze the major factors influencing purchasing patterns of honey in the DFW market area. Specifically, the study was intended to do the following for the DFW market area:

1. Determine preferences for various forms of honey (e.g., liquid, spun/creamed);
2. Determine preferences for various package types and package characteristics;
3. Analyze the significance of brand loyalty in determining honey purchases;
4. Determine the importance of the geographic origin of honey in honey purchase decisions;
5. Analyze the significance of pricing in determining honey purchases;
6. Determine the importance of health aspects of honey in honey purchase decisions; and
7. Determine whether honey purchases are planned or impulse-based.

PROCEDURES

The nature of the problem and the limited market area under consideration resulted in the choice of direct interviews as the most appropriate research technique. Face-to-face interviews were conducted on March 11, 12, and 13 in selected supermarkets across the Dallas-Fort Worth market area. At that time, the primary retail outlets for Canadian honey were Kroger, Skaggs, and Albertsons. Therefore, the population under consideration was all shoppers in any of the stores of these three chains in DFW on the days when the interviews were conducted.

Store Selection

It was necessary to select a sample from the 98 possible Kroger, Skaggs, and
Albertsons stores in the area. The DFW area was divided into four quadrants along Interstate 35-West (North to South) and U.S. Highway 80 (East to West). Complete lists of stores in each quadrant were obtained and 12 stores were selected proportional to the total number of stores in each quadrant. The result was that five stores were chosen in the NE quadrant, three each in the SE and SW quadrants and one in the NW quadrant. A map of the store locations selected for the study appears as Figure 1.

Selection of stores was random within each quadrant. There were 49 Kroger, 26 Skaggs and 13 Albertsons in the DFW market area. However, only stores with weekly sales volume exceeding $200,000 were included as potential interview sites. Therefore, only 30 Kroger, 24 Skaggs and 11 Albertsons stores were potential candidates. A list of the randomly selected stores with weekly sales volume and rank among area stores in the same chain appears as Table 2. The randomly selected stores reflect a range of store sizes and a broad cross-section of socio-economic and demographic groups. More detailed store information is discussed in a later section of this report.

**Interview Procedure**

Stores were placed into groups of three, based on proximity to one another. Four teams of two interviewers each were assigned to each store group. Interviews were conducted between 8:00 a.m. and 7:00 p.m. on Saturday, Sunday, and Monday in three hour shifts separated by one hour breaks for each team. Shifts were rotated each day. The interview schedules used are shown in Table 3. One member of each interview team interviewed actual honey purchasers in the assigned store while the other interviewed random shoppers in that store. Interviewers were clearly identified as Texas A&M students connected with the Texas Agricultural Market Research and Development Center. Clearance to conduct the interviews was obtained from both regional managers and store managers. Periodic interviews were conducted by the project director on both Saturday and Sunday in varied stores to assist student interviewers and to validate obtained responses.
<table>
<thead>
<tr>
<th>Store Number</th>
<th>Weekly Sales Volume</th>
<th>Rank Within Chain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NE Quadrant</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skaggs #4219</td>
<td>$320,000</td>
<td>16</td>
</tr>
<tr>
<td>Kroger #402</td>
<td>$250,000</td>
<td>15</td>
</tr>
<tr>
<td>Kroger #664</td>
<td>$218,000</td>
<td>24</td>
</tr>
<tr>
<td>Skaggs #4207</td>
<td>$375,000</td>
<td>11</td>
</tr>
<tr>
<td>Skaggs #4246</td>
<td>$650,000</td>
<td>1</td>
</tr>
<tr>
<td><strong>SE Quadrant</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kroger #434</td>
<td>$303,000</td>
<td>2</td>
</tr>
<tr>
<td>Kroger #602</td>
<td>$200,000</td>
<td>28</td>
</tr>
<tr>
<td>Skaggs #4203</td>
<td>$300,000</td>
<td>10</td>
</tr>
<tr>
<td><strong>NW Quadrant</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kroger #694</td>
<td>$260,000</td>
<td>10</td>
</tr>
<tr>
<td><strong>SW Quadrant</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kroger #224</td>
<td>$385,000</td>
<td>1</td>
</tr>
<tr>
<td>Skaggs #0240</td>
<td>$375,000</td>
<td>12</td>
</tr>
<tr>
<td>Albertsons #4217</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

N/A = Not Available
Table 3. Implemented Interview Schedules, March 11-13, 1989

<table>
<thead>
<tr>
<th>Time</th>
<th>TEAM I (Stan Cone, Kirk Siler)</th>
<th>TEAM II (David Bates, Karen Hunter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-7 p.m.</td>
<td>S-240</td>
<td>K-694</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>TEAM III (Laura McClellan, Jennifer Holle)</th>
<th>TEAM IV (Carrie &amp; Robyn Wilson)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-11 a.m.</td>
<td>K-409</td>
<td>K485</td>
</tr>
<tr>
<td>12-3 p.m.</td>
<td>K-485</td>
<td>S-4203</td>
</tr>
<tr>
<td>4-7 p.m.</td>
<td>S-4203</td>
<td>K-409</td>
</tr>
</tbody>
</table>

Key:

<table>
<thead>
<tr>
<th>Code</th>
<th>Store</th>
<th>Map #</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-694</td>
<td>Halton City</td>
<td>1</td>
</tr>
<tr>
<td>K-224</td>
<td>Fort Worth</td>
<td>2</td>
</tr>
<tr>
<td>S-250</td>
<td>Arlington</td>
<td>3</td>
</tr>
<tr>
<td>K-402</td>
<td>Irving</td>
<td>4</td>
</tr>
<tr>
<td>K-434</td>
<td>Grand Prairie</td>
<td>5</td>
</tr>
<tr>
<td>A-4271</td>
<td>Arlington</td>
<td>6</td>
</tr>
<tr>
<td>K-485</td>
<td>Dallas</td>
<td>7</td>
</tr>
<tr>
<td>K-409</td>
<td>Dallas</td>
<td>8</td>
</tr>
<tr>
<td>S-4203</td>
<td>Dallas</td>
<td>9</td>
</tr>
<tr>
<td>S-4219</td>
<td>Dallas</td>
<td>10</td>
</tr>
<tr>
<td>S-4246</td>
<td>Dallas</td>
<td>11</td>
</tr>
<tr>
<td>S-4207</td>
<td>Dallas</td>
<td>12</td>
</tr>
</tbody>
</table>
The Survey Instrument

The survey instrument employed in this research (Appendix A) was structured in three segments: (1) general shopping characteristics; (2) habits and attitudes regarding honey; and (3) general socio-economic and demographic characteristics. The survey design facilitated generalizing to a larger population and drawing inferences with respect to various groups of consumers. Pre-testing of the survey instrument was performed at three Bryan-College Station, Texas stores to check for clarity and administration time requirements and to identify potential problems in survey instrument design or implementation.

ANALYSIS OF RESULTS

A total of 409 interviews were obtained over the three day period of which 60 were of honey purchasers and 349 were of random shoppers. Frequencies for various overview characteristics such as interviews for each store, each day, each shift, and each interview are presented in Table 4. In addition, the number of dollars in weekly sales per interview, by store, is presented to give an indication of the representativeness of each store in the drawn sample.

Due to the location and nature of the stores selected, it was hypothesized that the sample would not be homogeneous across stores with respect to customer type and resultant perceptions and purchasing patterns for honey. To test this hypothesis, store samples were analyzed using analysis of variance (ANOVA) for socio-demographic composition and frequency of honey use by the subjects interviewed. The ANOVA tests for differences in the means indicated that stores indeed had non-homogeneous composition. Specifically, stores 1, 7, 8, 9 and 11 differed from the rest of the sample in both composition and purchasing behavior. Subjects in stores 7, 8, and 9 had generally lower income and lower educational levels than those in other stores and exhibited a pattern of being more infrequent in their honey purchases than was the mean of subjects in all stores. Store 11
Table 4. Frequencies of Selected Sample Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interviewer:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goodwin</td>
<td>12</td>
<td>2.9</td>
</tr>
<tr>
<td>Cone</td>
<td>63</td>
<td>15.4</td>
</tr>
<tr>
<td>Siler</td>
<td>62</td>
<td>15.2</td>
</tr>
<tr>
<td>Bates</td>
<td>56</td>
<td>13.7</td>
</tr>
<tr>
<td>Hunter</td>
<td>55</td>
<td>13.4</td>
</tr>
<tr>
<td>McClellan</td>
<td>34</td>
<td>8.3</td>
</tr>
<tr>
<td>Holle</td>
<td>34</td>
<td>8.3</td>
</tr>
<tr>
<td>C. Wilson</td>
<td>46</td>
<td>11.2</td>
</tr>
<tr>
<td>R. Wilson</td>
<td>47</td>
<td>11.5</td>
</tr>
<tr>
<td><strong>Store:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kroger 694</td>
<td>43</td>
<td>10.5</td>
</tr>
<tr>
<td>Kroger 224</td>
<td>41</td>
<td>10.0</td>
</tr>
<tr>
<td>Skaggs 240</td>
<td>42</td>
<td>10.3</td>
</tr>
<tr>
<td>Kroger 402</td>
<td>34</td>
<td>8.3</td>
</tr>
<tr>
<td>Kroger 434</td>
<td>35</td>
<td>8.6</td>
</tr>
<tr>
<td>Albertsons 4271</td>
<td>46</td>
<td>11.2</td>
</tr>
<tr>
<td>Kroger 602</td>
<td>19</td>
<td>4.6</td>
</tr>
<tr>
<td>Kroger 664</td>
<td>26</td>
<td>6.4</td>
</tr>
<tr>
<td>Skaggs 4203</td>
<td>31</td>
<td>7.6</td>
</tr>
<tr>
<td>Skaggs 4219</td>
<td>29</td>
<td>7.1</td>
</tr>
<tr>
<td>Skaggs 4246</td>
<td>36</td>
<td>8.8</td>
</tr>
<tr>
<td>Skaggs 4207</td>
<td>27</td>
<td>6.6</td>
</tr>
<tr>
<td><strong>Day:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturday, March 11</td>
<td>142</td>
<td>34.7</td>
</tr>
<tr>
<td>Sunday, March 12</td>
<td>159</td>
<td>38.9</td>
</tr>
<tr>
<td>Monday, March 13</td>
<td>108</td>
<td>26.4</td>
</tr>
<tr>
<td><strong>Shift:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:00-11:00 a.m.</td>
<td>135</td>
<td>33.0</td>
</tr>
<tr>
<td>12:00-3:00 p.m.</td>
<td>146</td>
<td>35.7</td>
</tr>
<tr>
<td>4:00-7:00 p.m.</td>
<td>121</td>
<td>29.6</td>
</tr>
<tr>
<td>Missing</td>
<td>7</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Dollar Sales Per Interview</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kroger 694</td>
<td>6,047</td>
<td></td>
</tr>
<tr>
<td>Kroger 224</td>
<td>9,390</td>
<td></td>
</tr>
<tr>
<td>Skaggs 240</td>
<td>8,929</td>
<td></td>
</tr>
<tr>
<td>Kroger 402</td>
<td>7,353</td>
<td></td>
</tr>
<tr>
<td>Kroger 434</td>
<td>8,657</td>
<td></td>
</tr>
<tr>
<td>Albertsons 4271</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Kroger 602</td>
<td>10,526</td>
<td></td>
</tr>
<tr>
<td>Kroger 664</td>
<td>8,385</td>
<td></td>
</tr>
<tr>
<td>Skaggs 4203</td>
<td>12,258</td>
<td></td>
</tr>
<tr>
<td>Skaggs 4219</td>
<td>11,034</td>
<td></td>
</tr>
<tr>
<td>Skaggs 4246</td>
<td>18,066</td>
<td></td>
</tr>
<tr>
<td>Skaggs 4207</td>
<td>13,889</td>
<td></td>
</tr>
</tbody>
</table>
subjects exhibited characteristics of higher income and educational levels and tended to be more frequent purchasers of honey, while store 1 subjects were generally older and purchased honey more frequently than the mean of subjects in all stores. A summary of these results are presented in Appendix Table A.2.

Descriptive Profile of All Respondents

A summary of responses to the Honey Questionnaire is presented in Table 5. Discussion of these summary frequencies will begin with the "Demographics" section (Q37-Q43), then proceed to general shopping habits (Q1-Q3), followed by the behavioral (Q4-Q10) and attitudinal questions (Q11-Q22). The remainder of the questionnaire will be discussed at a later point in the report.

Demographics (Q3-Q4). Of all respondents, 274 (67 percent) were female, while 352 (86.4 percent) were of white ethnic background. Respondents were normally distributed with respect to age, with 25.9 percent being 50-59 years of age and 21 percent each being 20-29 and 30-39 years of age. Sixty seven percent of all respondents were married. The average number of persons per household who "like honey" was 2.36. All but 19 of the respondents in the sample had completed a high school education and 75.3 percent had attended or completed college and/or graduate school. Annual gross household income was normally distributed. Nearly one-half (47.5 percent) of the respondents reported annual incomes between $24,000 and $48,000.

General Shopping Habits (Q1-Q3). With respect to shopping habits, 205 persons in the sample shopped for groceries once per week and an additional 126 shopped either two or three times per week. The most frequent source of information regarding the nutritional or health aspects of food was television (179), followed closely by magazines (161), and newspapers (141). Radio, food labels, and in-store displays were not frequently named by respondents suggesting that they are relatively less cost effective means of advertising the nutritional and health aspects of food. Frequency of purchase of products with similar uses as honey reflect that syrup and jam/jelly were purchased at least once in
Table 5. Summary of Responses to Honey Questionnaire, DFW Area

Interviewer: ____________ Store: ___________ Day: ___________ Hour: ______

1. Honey Purchaser: ___________ 15.3%
2. Random Shopper: ___________ 84.7%

HONEY QUESTIONNAIRE

(Q1) How often do you grocery shop?
1. 46.3 times/week 2.80 2. 2 times/weekly 3. 3.265 Weekly 4. 3.56 Bimonthly
5. 4.20 Monthly Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of food? (Check all that apply)
a. 141 Newspapers b. 161 Magazines c. 179 Radio d. 179 Television e. 22 Food Labels f. 8 In Store Displays g. 63 Other (Doctor)

(Q3) In the past month, how many times have you purchased each of the following products? (Enter number for each)

a. 39.1% Preserves b. 55% Jam/Jelly c. 10.3% Molasses d. 58.7% Syrup e. 44.3% Honey

PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR.

1 = Not sure, 2 = Rarely, if ever, 3 = Seldom, 4 = Sometimes, 5 = Usually

(Q4) I run my household on a strict food budget. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q5) Price is an important consideration in my grocery shopping. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q6) When I get food coupons, I redeem them. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q7) I buy low-fat foods when possible. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q8) I buy low calorie foods when possible. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q9) The meals we prepare at home are nutritionally balanced. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q10) Do you use honey in your household?
1. 285 Yes 2. 124 No

FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE.

1 = Disagree, 2 = Somewhat Disagree, 3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%) 1 2 3 4 5
1. 2 3 4 5

(Q12) I think honey should come in jars. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q13) Honey should come in tamper-proof containers. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q14) Honey is healthier than other sweeteners. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q15) Honey has medicinal properties. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q16) All honey tastes alike. (%) 1. 2 3 4 5
1. 2 3 4 5

If not honey user, go to demographics

(Q17) I am a frequent user of honey. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q18) Honey brands do not influence my purchase. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q19) Before I purchase honey, I compare prices of available brands. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q20) I tend to purchase the most inexpensive honey. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q21) I find honey labeling to be very helpful. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q22) It is important for me to know where the honey I buy is produced. (%) 1. 2 3 4 5
1. 2 3 4 5

(Q23) Are you familiar with creamed honey?
1. 135 Yes 2. 148 No 3. 5 Not Sure
1. 135 Yes 2. 148 No 3. 5 Not Sure

(Q24) Are you familiar with spun honey?
1. 96 Yes 2. 184 No 3. 8 Not Sure
1. 96 Yes 2. 184 No 3. 8 Not Sure

If no to (Q23) and (Q24), go to (Q27)

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste?
1. 59 Better 2. 54 Same 3. 31 Worse
1. 59 Better 2. 54 Same 3. 31 Worse
(Q26) Compared to regular liquid honey, is creamed or spun honey:
1. 51 Easier to use  2. 59 Same
3. 38 More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey?
1. 22 Yes  2. 216 No  3. 47 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?
If answer to (Q29) is no or not sure go to (Q32)

(Q31) Compared to other honey, how does Canadian honey taste?
1. 7 Better  2. 12 About the same
3. 1 Worse  4. 56 Not sure

(Q32) Have you ever purchased or tried Texas honey?
1. 206 Yes  2. 18 No  3. 59 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?
If answer to (Q32) is no or not sure go to (Q35)

(Q34) Compared to other honey, how does Texas honey taste?
1. 80 Better  2. 84 About the same
3. 3 Worse  4. 64 Not sure

(Q35) Do you purchase a particular brand of honey?
1. Yes  2. No
If yes, what brand? ___________________

(Q36) What form of honey do you generally purchase?
<table>
<thead>
<tr>
<th></th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jar (%)</td>
<td>a 42.9</td>
<td>e 1.8</td>
<td>f 1.2</td>
</tr>
<tr>
<td>Squeeze bottle (%)</td>
<td>b 43.2</td>
<td>d 2.1</td>
<td>g 1.2</td>
</tr>
<tr>
<td>Tub (%)</td>
<td>c 7.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DEMOGRAPHICS

(Q37) 1. 134 Male  2. 274 Female
(32.8%)  (67%)

(Q38) What is your ethnic background?
1. 352 White  2. 25 Black
(86.4%)  (6.1%)
3. 27 Hispanic  4. 3 Other
(6.6%)  (.7%)

(Q39) My age is in the following bracket:
1. 5 Under 20 (1.5%)  2. 62 40-49 (16.9%)
3. 86 20-29 (21%)  4. 106 50-59 (25.9%)
5. 85 30-39 (20.8%)  6. 54 60+ (13.2%)

(Q40) My marital status is:
1. 274 Married (67%)  2. 66 Single (16.1%)
3. 27 Widowed (6.6%)  4. 40 Divorced (9.8%)

(Q41) How many persons in your household like honey?  2.36 persons (Average)

(Q42) My school education includes: (mark highest level of attainment).
1. 5 Grade School (1.2%)
2. 14 Part of High School (3.45%)
3. 82 All of High School (20.1%)
4. 136 Part of College (33.5%)
5. 119 All of College (29.3%)
6. 50 Graduate School (12.3%)

(Q43) My household gross annual income is:
1. 27 Under $12,000 (7%)
2. 58 $12,000-23,999 (15.1%)
3. 104 $24,000-35,999 (27%)
4. 79 $36,000-47,999 (20.5%)
5. 84 $48,000-79,999 (21.8%)
6. 33 Over $80,000 (8.6%)
the past month by 58.7 percent and 55 percent of all households, respectively. Honey was purchased at least once in the past month by 44.3 percent of all households and preserves by 39.1 percent of all households. Molasses is a relatively infrequent purchase item.

Behavioral Questions (Q4-Q10). Persons interviewed were asked to respond to a series of questions which reflected their general behavior in selected shopping and health-related areas. They rated each question from 1 to 5 on a Likert scale, i.e., 1 (not sure), 2 (rarely, if ever), and so on to 5 (usually). Forty-one percent of the 409 respondents said they rarely ran their household on a strict food budget, while 27 percent said they usually ran their household on a strict food budget. Two-thirds stated price was an important consideration in grocery shopping and 55.5 percent stated they redeemed food coupons when they got them. It appears, then, that although a strict dollar budget is not the norm for grocery shoppers in this sample, most liked to get the best price for the items they purchased and utilized food coupons to save on their overall food bill.

Respondents indicated a general concern for health and nutritional aspects of their diet. Sixty-two percent indicated that they usually buy low-fat foods when possible and 46.7 percent stated they usually buy low calorie foods when possible. Additionally, 62.3 percent indicated that the meals prepared at home are usually nutritionally balanced.

Question 10 was transitional, intended to move respondents into the remainder of the questionnaire specific to honey. Seventy percent of all respondents indicated they used honey in their households. Each person which used honey was asked to indicate how they used honey. Results of this question, which was not shown on the questionnaire, are shown in Table 6. One-half the responses (204) were uses clearly associated with breakfast or breakfast items. Sixty-six respondents (13.7 percent) used honey in cooking and baking applications and an additional 41 (10 percent) used honey as a sugar substitute.

Honey Attitudes (Q11-Q22). Questions 11 through 16 focused on attitudes regarding honey and honey packaging. As previously mentioned, numerous studies performed by private firms and educational institutions indicate consumers perceive honey to be messy,
Table 6. Primary Honey Uses, DFW Area, March 1989

<table>
<thead>
<tr>
<th>Honey Uses</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing response</td>
<td>153</td>
<td>37.4</td>
</tr>
<tr>
<td>Breakfast</td>
<td>47</td>
<td>11.5</td>
</tr>
<tr>
<td>Sugar substitute</td>
<td>41</td>
<td>10.0</td>
</tr>
<tr>
<td>Toast/bread</td>
<td>26</td>
<td>6.4</td>
</tr>
<tr>
<td>Baking</td>
<td>23</td>
<td>5.6</td>
</tr>
<tr>
<td>Cooking</td>
<td>21</td>
<td>5.1</td>
</tr>
<tr>
<td>Coffee/tea</td>
<td>19</td>
<td>4.6</td>
</tr>
<tr>
<td>Muffins/biscuits</td>
<td>19</td>
<td>4.6</td>
</tr>
<tr>
<td>Cereal/oatmeal</td>
<td>17</td>
<td>4.2</td>
</tr>
<tr>
<td>Misc. uses</td>
<td>14</td>
<td>3.4</td>
</tr>
<tr>
<td>Peanut butter</td>
<td>9</td>
<td>2.2</td>
</tr>
<tr>
<td>Sauces</td>
<td>8</td>
<td>2.0</td>
</tr>
<tr>
<td>Medicinal uses</td>
<td>8</td>
<td>2.0</td>
</tr>
<tr>
<td>Recipes</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>409</td>
<td>100.0</td>
</tr>
</tbody>
</table>
inconvenient to use and of little variation in taste, but also to be "healthy" with some natural medicinal attributes. Questions were devised to check these perceptions within the study sample. Respondents were asked to use a Likert scale to indicate their attitudes ranging from 1 (disagree) to 5 (agree).

Over one-half (51.7 percent) disagreed when asked if they would use honey more frequently if it were more convenient to use while only 27.1 percent agreed. It is difficult to draw any inferences about honey use from this question alone because many non-users were included in the sample. However, 38.9 percent disagreed that all honey should come in jars while 33.4 percent agreed. Thus, a significant portion of the respondents perceived honey to be messy or inconvenient to some degree and preferred some other sort of packaging. This will be discussed in more depth later in the report.

Nearly 70 percent of the respondents agreed that honey should come in tamper-proof containers (tamper-indicated containers), suggesting a strong concern for product safety. About 64 percent of respondents perceived honey to be healthier than other sweeteners but only 39.2 percent agreed that honey has medicinal properties. Approximately 25 percent of all respondents were not sure of honey’s medicinal properties and an additional 25 percent disagreed that honey possessed medicinal properties. A large majority of respondents (65.9 percent) indicated that all honey does not taste alike.

Questions 17 through 22 were asked only of those 285 respondents indicating they used honey in their households (Q10). Forty-six percent of the 285 respondents indicated they were frequent users of honey while 22 percent indicated they were not frequent users. Results of Q18-Q22 were generally bimodal in nature. That is, most respondents either agreed or disagreed strongly with relatively few being somewhat neutral or not sure.

About one-half (49.5 percent) indicated honey brands influenced their purchases while 36.9 percent said they did not. Although 50.7 percent indicated they compared prices of available brands of honey, 58.7 percent disagreed when asked if they purchased the most inexpensive brand of honey. Over one-third responded that they do not compare prices of
available brands of honey indicating that while consumers tend to be aware of price it is not the determining factor in their honey purchases. A significant portion of honey consumers appear to be largely unconcerned about the prices of the honey brands they purchase.

Niklas (*Gleanings in Bee Culture*) found labels on honey to be relatively ineffective in communicating information to consumers regarding the product quality, purity, or origin. In this study, 50.7 percent of the respondents indicated that they found honey labeling to be very helpful and 32.6 percent did not. When asked if it was important to know where the honey they buy is produced, almost equal percentages of respondents indicated agreement (43.1 percent) and disagreement (46.5 percent). It appears that a sizeable portion of honey purchases perceive origin to be an unimportant consideration.

**Descriptive Analysis by Socio-Demographic Grouping**

A detailed analysis of respondents was conducted by five socio-demographic groupings: (1) Sex; (2) Ethnicity; (3) Age; (4) Education; and (5) Income. Overall summary frequencies and ANOVA results were compiled to give an indication of differing preferences, behavior, and habits based upon socio-demographic characteristics. These analyses will be discussed in turn by variable in the following sections.

**Sex.** Summary frequencies for respondents by sex are shown in Appendix Tables B.1a and B.1b. Responses to questions Q1-Q3 reflect only slight differences by sex in general shopping habits and sweetener purchases. Females are somewhat more likely to shop either weekly or bi-weekly than males. Both utilize television as their major source of nutritional and health information, but females cite magazines as their main secondary source of information whereas males cite newspapers. Syrup and jam/jelly are the most frequently purchased sweetener/topping by both sexes. Approximately 43 percent of all male and female shoppers interviewed had purchased honey at least once during the past month.
A relatively larger percentage of male shoppers were non-white, but tended to be somewhat younger than females overall. Marital status was similar for both groups, but males tended to have fewer persons in the household who like honey. Females tended to be from households with somewhat larger reported annual gross income. There was little difference in educational levels.

Behavioral and attitudinal questions were analyzed using ANOVA (Appendix Table B.2). Differences between means for males and females were found statistically significant for six questions. Female subjects indicated a higher degree of price sensitivity and tended to use food coupon redemption more frequently than males. Additionally, mean responses for females were higher with regard to nutritional/health based questions, indicating females were more conscious in choosing low-fat, low-calorie foods and in preparing nutritionally balanced meals. Males indicated a stronger feeling than females that honey should come in jars, indicating either more tolerance for perceived "messiness" or less concern of the issue than females. Since females comprise a larger proportion of shoppers in the sample than did males, an important implication is that the Canadian honey industry should focus to some extent on the low-fat, low-calorie foods and convenient packaging angles in marketing strategies.

**Ethnicity.** Summary frequencies for respondents by ethnicity are shown in Appendix Tables B.3a through B.3c. Whites in the sample indicated a strong practice of weekly shopping, with Blacks and Hispanics indicating equal levels of weekly and bi-weekly shopping. Whites indicated more frequent use of magazines for obtaining nutritional information than Hispanics while television is the primary information source for all ethnic groups. Only 20 percent of all Blacks in the sample indicated any source for nutritional or health information whatsoever. With regard to sweeteners/toppings, jam/jelly was cited as being purchased within the past month by the majority of both Blacks and Hispanics (72 and 74 percent, respectively) while syrup was the leading item cited by Whites (58 percent). Honey was purchased in the past month most
frequently by Blacks (56 percent) followed by Whites (44 percent) and Hispanics (37 percent). Accordingly, Q10 indicates that 70 and 68 percent, respectively, of the sample Whites and Blacks used honey in their households, compared to 59 percent of Hispanics.

Whites interviewed tended to have a larger percentage of female respondents, were slightly older, and had a marginally higher income distribution than did Blacks or Hispanics. There were no perceptible differences with regard to number of persons in the household liking honey or in educational levels.

ANOVA results indicating statistical comparison of means across ethnic groups are shown in Appendix Table B.4. Whites and Hispanics have means which are significantly higher than that of Blacks regarding the importance of price in grocery shopping. However, no other general shopping behavior indicates a difference due to ethnicity. With regard to honey being in jars, Blacks indicate a preference compared to Whites and Hispanics. Likewise, Blacks perceive more strongly that honey has medicinal properties than do Whites or Hispanics. They also are significantly more inclined to purchase the most inexpensive honey than are Whites or Hispanics. It is difficult to draw any general conclusions from the analysis based on ethnicity. The sample would indicate, however, that Hispanics probably comprise a smaller current market for honey than do Whites or Blacks and that Blacks are less likely to purchase higher priced honey brands in innovative packaging.

Age. Summary frequencies of survey responses for general shopping and sweetener/topping purchasing behavior are shown in Appendix Tables B.5a through B.5f. Weekly shopping was the prevailing shopping pattern practiced across all age groups. Television, magazines and newspapers were almost equal in their use as a source of nutritional information. Television was predominant in the 40-49 and 60 and over age groups, while magazines were the prevalent source cited by the 20-29, 30-39, and 50-59 age groups. Syrup and jam/jelly were the toppings/sweeteners named as being purchased by the most households in the past month, followed by honey, preserves, and molasses. The 50-
59 age grouping were the most frequent purchasers of all toppings/sweeteners during the month. The most frequent incidence of honey purchase was in the 60 and over age group (55.6 percent) followed by the 20-29 and 50-59 age groups (47.7 and 44.3 percent, respectively).

Socio-demographic characteristics of the six age groupings revealed all groupings to be predominantly white and female, as was the sample. The 20-29 and 30-39 age groupings showed a somewhat higher educational level overall; the 60 and over group exhibited the lowest educational level. Annual gross household income followed patterns of the general population, with the 40-49 and 50-59 age groupings having the highest income and the 60 and over grouping the lowest.

Results of ANOVA procedures shown in Appendix Table B.6 indicate several statistically significant differences in behavior and attitudes. Expectedly, the less than 20 age group was most sensitive regarding a strict food budget. Respondents in the 30-39 age group were least concerned with purchasing low-fat and low-calorie foods; the 60 and over group were most concerned with purchasing low-fat and low-calorie foods. With respect to comparing prices of available brands of honey, survey respondents in the 20-29 group were more likely to do so, while those in the 60 and over group were least likely to compare prices. Honey labeling was more helpful to persons in the 40-49 and 60 and over groups. Differences which were revealed in the less than 20 age group are not discussed due to the extremely small sample size (n = 3).

**Education.** Educational levels were aggregated into five groups. Summary frequencies for this analysis are in Appendix Tables B.7a through B.7e. Once again, frequency of grocery shopping varied little across educational levels. Television was the primary source for nutritional information for respondents with a high school education or below. As educational level increased, information was obtained almost equally from television, magazines and newspapers. In fact, for the group of college graduates, magazines were by far the primary information source, followed by newspapers and then
television. Frequency of sweeteners/toppings purchase in the past month shows little variation across educational levels, with syrup and jam/jelly being almost equal in response at about 60 percent. Honey was purchased at least monthly by about 44 percent of all homes represented in the sample, the exception being those with less than a high school education at 58 percent.

As was the case across the sample, respondents in each educational category were predominantly female and overwhelmingly white. Age of respondents was fairly normally distributed within each educational level, as was marital status. There was an expected increase in numbers of higher income households as education increases.

Results of ANOVA conducted to detect statistical differences in mean for Q4-Q22 educational levels are shown in Table B.8. The only behavioral or attitudinal responses indicating a significant difference are for Q15 regarding the medicinal properties of honey. Respondents with less than a high school education agreed more strongly that honey has medicinal properties than did other groups.

Income. Summary frequencies of survey responses for general shopping and sweetener/topping purchasing behavior are shown in Appendix Tables B.9a through B.9f. Weekly shopping was predominant across all income groups. Television was the most frequent source for nutritional and health information for foods for respondents with annual household incomes below $24,000. However, as the income level increased, printed material (magazines and newspapers) replaced television as the major information source. Syrup was the sweetener/topping named as being purchased by most households in the past month, followed by jams/jelly, honey, and preserves in that order. The highest income group (over $80,000) was also the segment of the sample with the highest percentage of the respondents purchasing sweeteners/toppings. A particularly significant result of the survey is that the frequency of honey purchase increases as income increases, suggesting that honey may have a sizeable income elasticity. That is, increases in income lead to even larger percentage increases in honey use.
Socio-demographic characteristics of the six income groups closely followed the pattern seen by educational levels. That is, the income groups were all predominantly female and white with age being normally distributed across all income categories. Number of persons per household liking honey increased with income. Also, higher income groups were of generally higher educational levels.

Results of ANOVA procedures shown in Appendix Table B.10 indicate numerous significant differences in behavior and attitude, particularly among income groups on either end of the spectrum as compared to those in the central four income groups. Respondents reporting annual incomes below $12,000 indicated a greater tendency to remain on a strict food budget and to buy the most inexpensive honey brand, but were less likely to be concerned with purchasing low fat or low calorie foods. This group had almost unanimous "strongly agree" response to the desirability of tamper-proof containers. In addition, they had a greater tendency to perceive that honey has medicinal properties than other groups.

Respondents in the highest annual income group (over $80,000) generally were not as concerned with strict food budgets as respondents in other groups, and agreed less strongly that price is an important consideration in their grocery shopping. This group had a significantly stronger tendency to purchase low fat foods.

Four other statistically significant differences were found in the analysis. Persons in the $12,000–$23,999 income group indicated the least concern for tamper-proof containers. Respondents in the $24,000–$35,000 group exhibited preferences for tamper-proof containers and for the most inexpensive brand of honey, similar to the lowest income group. Of all classifications, respondents in the $36,000–$47,999 disagreed most that honey had medicinal properties.

Descriptive Analysis of Honey Users

Approximately 70 percent of the sample indicated that honey is used in their households. A separate, detailed analysis of these "honey users" should provide insight

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specific to behavior and attitudes of persons who are already honey purchasers. Summary frequencies of honey user responses are presented in Table 7. A cursory comparison of these data with those in Table 5 indicate some differences exist between honey users and non-users. (Table 5 is a summary of all respondents whereas Table 7 includes only honey users). Noteworthy is the higher frequency of honey purchase (Q3) and a general tendency toward coupon redemption (Q6) and health concerns through purchase of low fat and low calorie foods and nutritionally prepared meals (Q7-Q9) for the honey user group. In addition, this group agreed more strongly than the sample as a whole that honey was more healthy than other sweeteners and had medicinal properties and disagreed more strongly that all honey tastes alike.

From a socio-demographic perspective, the sex, ethnic, age, and marital status composition of the honey user and non-user groups is comparable. Generally speaking, however, the number of persons per household liking honey is larger in the honey user group and income and educational levels appear to be somewhat higher.

**Honey Use Coefficients.** Honey users were divided into five use frequency classes dependent upon their response to Q17 as follows:

<table>
<thead>
<tr>
<th>Response to Q17</th>
<th>Use Frequency Class</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Rare</td>
<td>59</td>
</tr>
<tr>
<td>Somewhat Disagree</td>
<td>Occasional</td>
<td>26</td>
</tr>
<tr>
<td>Not Sure</td>
<td>Moderate</td>
<td>12</td>
</tr>
<tr>
<td>Somewhat Agree</td>
<td>Frequent</td>
<td>54</td>
</tr>
<tr>
<td>Agree</td>
<td>Heavy</td>
<td>130</td>
</tr>
<tr>
<td>Non-User</td>
<td>–</td>
<td>126</td>
</tr>
</tbody>
</table>

To simplify the pertinent material, ANOVA was utilized to detect differences among the non-users and use frequency groups for behavioral and attitudinal questions (Table 8). No cross-tabulations for the user classes are presented herein.

With respect to shopping habits, non-users indicated less tendency to redeem coupons. Rare and heavy users, however, indicated a stronger tendency to redeem coupons
Table 7. Summary of Responses of Households Using Honey, DFW Market Area

| Interviewer | Store | Day | Hour | 1. 58 Honey Purchaser | 2. 219 Random Shopper |

HONEY QUESTIONNAIRE

(Q1) How often do you grocery shop? (Frequencies)
1. 34 3 times/week 2. 57 2 times/weekly
3. 141 Weekly 4. 21 Bimonthly
5. 13 Monthly 6. 16 Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods? (Frequencies)
a. 97 Newspapers b. 122 Magazines
c. 18 Radio d. 119 Television
e. 16 Food Labels f. 5 In Store Displays
g. 49 Other (Doctor)

(Q3) In the past month, how many times have you purchased each of the following products? (Enter number for each) (%) (n = 284)
a. 43.7 Preserves b. 57.7 Jam/Jelly
c. 10.2 Molasses d. 63.0 Syrup
e. 59.9 Honey

PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR. (n = 284)
1 = Not sure, 2 = Rarely, if ever, 3 = Seldom, 4 = Sometimes, 5 = Usually

(Q4) I run my household on a strict food budget. (%) 1 2 3 4 5
1 2 3 4 5 4 40.5 11.6 18.0 22.6

(Q5) Price is an important consideration in my grocery shopping. (%) 1 2 3 4 5
1 2 3 4 5 14 11.3 21 17.6 67.6

(Q6) When I get food coupons, I redeem them. (%) 1 2 3 4 5
1 2 3 4 5 1.0 17.8 53 14.8 61.3

(Q7) I buy low-fat foods when possible. (%) 1 2 3 4 5
1 2 3 4 5 1.0 14.1 28 13.7 68.3

(Q8) I buy low calorie foods when possible. (%) 1 2 3 4 5
1 2 3 4 5 2.5 19.7 63 19.7 81.8

(Q9) The meals we prepare at home are nutritionally balanced. (%) 1 2 3 4 5
1 2 3 4 5 1.0 3.2 4.9 21.1 69.7

(Q10) Do you use honey in your household?
1. Yes 2. No

FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE. (n = 284)
1 = Disagree, 2 = Somewhat Disagree,
3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%) 1 2 3 4 5
1 2 3 4 5 50.4 6.0 63 8.1 28.9

(Q12) I think honey should come in jars. (%) 1 2 3 4 5
1 2 3 4 5 37.3 6.0 15.1 32 33.0

(Q13) Honey should come in tamper-proof containers. (%) 1 2 3 4 5
1 2 3 4 5 18.3 3.9 53 1.0 70.4

(Q14) Honey is healthier than other sweeteners. (%) 1 2 3 4 5
1 2 3 4 5 8.1 28.6 63 12.0 70.1

(Q15) Honey has medicinal properties. (%) 1 2 3 4 5
1 2 3 4 5 48.2 12.4 16.6 18.0 19.4

(Q16) All honey tastes alike. (%) 1 2 3 4 5
1 2 3 4 5 72.9 25.0 5.0 28.6 16.5

If not honey user, go to demographics (n = 284)

(Q17) I am a frequent user of honey. (%) 1 2 3 4 5
1 2 3 4 5 20.8 9.2 42 19.0 45.8

(Q18) Honey brands do not influence my purchase. (%) 1 2 3 4 5
1 2 3 4 5 48.2 6.3 21.5 37.3 61.3

(Q19) Before I purchase honey, I compare prices of available brands. (%) 1 2 3 4 5
1 2 3 4 5 34.8 2.5 106 50.4

(Q20) I tend to purchase the most inexpensive honey. (%) 1 2 3 4 5
1 2 3 4 5 50.7 7.0 42 10.6 19.4

(Q21) I find honey labeling to be very helpful. (%) 1 2 3 4 5
1 2 3 4 5 31.7 4.6 58 5.9 50.0

(Q22) It is important for me to know where the honey I buy is produced. (%) 1 2 3 4 5
1 2 3 4 5 46.5 3.5 39 25 43.3

(Q23) Are you familiar with creamed honey? (Frequencies)
1. Yes 2. 145 No 3. 5 Not Sure 3. 5 Not Sure

24
(Q24) Are you familiar with spun honey? (Frequencies)
1 93 Yes 2 182 No 3 8 Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)
1 58 Better 2 52 Same 3 29 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey: (Frequencies)
1 49 Easier to use 2 58 Same 3 36 More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)
1 22 Yes 2 211 No 3 47 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)
1 7 Better 2 12 About the same 3 54 Worse

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)
1 201 Yes 2 18 No 3 59 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)
1 79 Better 2 83 About the same 3 61 Worse

(Q35) Do you purchase a particular brand of honey?
1 132 Yes 2 149 No

(Q36) What form of honey do you generally purchase? (Frequencies)

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jar (%)</td>
<td>a 140</td>
<td>d 6</td>
<td>g 0</td>
</tr>
<tr>
<td>Squeeze bottle (%)</td>
<td>b 143</td>
<td>e 7</td>
<td>h 4</td>
</tr>
<tr>
<td>Tub (%)</td>
<td>c 24</td>
<td>f 4</td>
<td></td>
</tr>
</tbody>
</table>

DEMOGRAPHICS

(Q37) 1 87 Male 2 186 Female

(Q38) What is your ethnic background?
1 248 White 2 17 Black 3 16 Hispanic 4 1 Other

(Q39) My age is in the following bracket:
1 1 Under 20 2 50 40-49 3 65 20-29 4 71 50-59 5 64 30-39 6 41 60+

(Q40) My marital status is:
1 209 Married 2 37 Single 3 15 Widowed 4 22 Divorced

(Q41) How many persons in your household like honey? 2.74 persons (Average)

(Q42) My school education includes: (mark highest level of attainment).
1 3 Grade School 2 9 Part of High School 3 54 All of High School 4 84 Part of College 5 92 All of College 6 39 Graduate School

(Q43) My household gross annual income is:
1 16 Under $12,000 2 56 $12,000-23,999 3 33 $24,000-35,999 4 73 $36,000-47,999 5 67 $48,000-59,999 6 25 Over $60,000
than was the case for the entire sample. Low fat food purchases were of highest concern among heavy honey users with non-users and rare users indicating the least concern. Rare, frequent, and heavy honey users were strongest in their agreement that they prepared nutritionally balanced meals while non-users agreed less strongly than across the sample.

Other statistically significant differences related specifically to attitudes about honey. For example, mean responses concerning the healthiness of honey compared to other sweeteners indicated that non-users are generally not sure that honey is healthier whereas the means for rare, occasional, and heavy users indicate a strong agreement that honey is healthier than other sweeteners. Non-users and rare users seemed less sure of any medicinal properties of honey. Frequent and heavy users, however, indicated a higher degree of belief that honey possesses medicinal properties. Similarly, non-users and rare users tended to indicate that all honey tastes alike whereas frequent and heavy users disagreed with this assertion. It is curious that rare, as well as frequent and heavy users, tended to find honey labeling somewhat helpful. Occasional users somewhat disagreed that honey labeling is helpful.

**Consumer Familiarity With Honey Types**

The literature available on honey and honey product marketing (largely popular in nature rather than research oriented) focuses much attention on creamed or spun honey as a solution for the perceived messiness and convenience issues connected with honey use. Additionally, new product forms such as honey stix and honey based fruit spreads are suggested. Therefore, it was deemed necessary to evaluate consumer familiarity with and perception of creamed and spun honey. Questions Q23–Q28 address these issues.

**Creamed and Spun Honey.** Of the 283 subjects interviewed who use honey in their households, 47.0 and 32.8 percent indicated they were familiar with creamed honey and spun honey, respectively (Table 9). Persons familiar with either were then asked to
Table 8. Mean Values of Responses and Results of ANOVA on Means, by User Class, Q4-Q22

<table>
<thead>
<tr>
<th>Question Characteristics</th>
<th>Mean Value</th>
<th>Non-User (n=126)</th>
<th>Rare (n=59)</th>
<th>Occasional (n=26)</th>
<th>Moderate (n=12)</th>
<th>Frequent (n=54)</th>
<th>Heavy (n=130)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Food Budget</td>
<td>3.22</td>
<td>3.14</td>
<td>3.77</td>
<td>3.42</td>
<td>3.37</td>
<td>3.35</td>
<td></td>
</tr>
<tr>
<td>5 Price Sensitivity</td>
<td>4.34</td>
<td>4.34</td>
<td>4.73</td>
<td>4.42</td>
<td>4.28</td>
<td>4.38</td>
<td></td>
</tr>
<tr>
<td>6 Coupon Redemption</td>
<td>3.78&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4.27&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.96</td>
<td>3.67</td>
<td>4.02</td>
<td>4.28&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>7 Low Fat Foods</td>
<td>3.94&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4.25</td>
<td>3.96&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4.33</td>
<td>4.30</td>
<td>4.49&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>8 Low Calorie Foods</td>
<td>3.62</td>
<td>3.81</td>
<td>3.88</td>
<td>4.17</td>
<td>4.00</td>
<td>4.07</td>
<td></td>
</tr>
<tr>
<td>9 Balanced Meals</td>
<td>4.09&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4.51&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.31</td>
<td>4.17</td>
<td>4.52&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.67&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>11 Honey Convenience</td>
<td>2.41</td>
<td>2.12</td>
<td>2.73</td>
<td>3.58</td>
<td>2.52</td>
<td>2.72</td>
<td></td>
</tr>
<tr>
<td>12 Honey in Jars</td>
<td>2.61</td>
<td>2.92</td>
<td>2.81</td>
<td>2.17</td>
<td>3.09</td>
<td>3.12</td>
<td></td>
</tr>
<tr>
<td>13 Tamper Proof Containers</td>
<td>4.08</td>
<td>4.02</td>
<td>3.92</td>
<td>4.33</td>
<td>4.02</td>
<td>4.02</td>
<td></td>
</tr>
<tr>
<td>14 Healthier Sweetener</td>
<td>3.59&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4.31&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.35&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.92</td>
<td>3.91</td>
<td>4.58&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>15 Medicinal Properties</td>
<td>3.00&lt;sup&gt;b&lt;/sup&gt;</td>
<td>3.05&lt;sup&gt;b&lt;/sup&gt;</td>
<td>3.46</td>
<td>3.00</td>
<td>3.52&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.85&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>16 Tastes Alike</td>
<td>2.46&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.52&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.08</td>
<td>2.08</td>
<td>1.68&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.58&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>18 Brand Influence</td>
<td>NA&lt;sup&gt;c&lt;/sup&gt;</td>
<td>2.69</td>
<td>2.66</td>
<td>2.50</td>
<td>3.06</td>
<td>2.73</td>
<td></td>
</tr>
<tr>
<td>19 Brand Price</td>
<td>NA</td>
<td>3.58</td>
<td>3.96</td>
<td>3.67</td>
<td>3.23</td>
<td>3.25</td>
<td></td>
</tr>
<tr>
<td>20 Honey Price</td>
<td>NA</td>
<td>2.30</td>
<td>2.77</td>
<td>3.27</td>
<td>2.07</td>
<td>2.14</td>
<td></td>
</tr>
<tr>
<td>21 Honey Labeling</td>
<td>NA</td>
<td>3.21&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.28&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.75</td>
<td>3.28&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.76&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>22 Honey Origin</td>
<td>NA</td>
<td>2.68</td>
<td>2.96</td>
<td>2.83</td>
<td>2.83</td>
<td>3.05</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Indicates a mean larger than across groups at the 5% level of significance. If not indicated otherwise, no difference is present.

<sup>b</sup>Indicates a mean smaller than across groups at the 5% level of significance.

<sup>c</sup>NA represents not applicable.
provide their own concepts of "creamed" and "spun" honey. Table 9 summarizes their responses. Seventy-three of the 133 persons (54.9 percent) familiar with creamed honey were correct or partially correct in their responses, stating that creamed honey was aerated or processed. A sizeable percentage (39.1), however, believed creamed honey contains some additive with 40 of the 52 giving this general response stating it contains some dairy additive. In comparison, 55 of the 93 (59 percent) persons familiar with spun honey stated it was aerated or processed and only 9.7 percent said it contained some sort of additive. The term "creamed honey" apparently conveys a misconception that additives are present in the honey to many honey users. The term "spun honey," on the other hand, conveys the impression that the honey contains some additive to very few honey users.

Those interviewed were asked to respond to questions regarding the taste and convenience of creamed or spun honey compared to regular liquid honey (Q25 and Q26). Roughly 42 percent perceived creamed or spun honey to taste better, 37 percent to taste about the same, and 21 percent to taste worse than regular liquid honey (Table 7). With regard to convenience, 34.3 percent found creamed or spun honey easier to use, 40.6 percent about the same to use, and 25.2 percent more difficult to use than regular liquid honey. These results fail to support the assertion that the form of honey is of significant importance on a convenience basis in honey purchase decisions. To summarize, only a few more respondents indicated that spun or creamed honey is easier to use than liquid honey than indicated it is more difficult to use. However, many more respondents indicated that spun or creamed honey tastes better than liquid honey than indicated that it tastes worse.

**Canadian and Texas Honey.** Origin of honey purchased by honey users was of concern. Table 7 indicates that only 22 of the 283 respondents recalled having purchased or tried Canadian honey; an additional 47 were not sure. In comparison, 201 of the 283 respondents recalled having purchased or tried Texas honey and an additional 59 were not sure. In other words, three-fourths of the sample could not recall having purchased or tried
Table 9. Responses of Honey Users to Questions Regarding the Identity of Creamed and Spun Honey

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Creamed Honey</strong> (n = 283)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Familiar With</td>
<td>145</td>
<td>53.9</td>
</tr>
<tr>
<td>Aerated</td>
<td>48</td>
<td>16.9</td>
</tr>
<tr>
<td>Dairy Additives</td>
<td>40</td>
<td>14.1</td>
</tr>
<tr>
<td>Processed</td>
<td>25</td>
<td>8.8</td>
</tr>
<tr>
<td>Other Additives</td>
<td>7</td>
<td>2.5</td>
</tr>
<tr>
<td>Wax Additives</td>
<td>5</td>
<td>1.8</td>
</tr>
<tr>
<td>Concentrated</td>
<td>4</td>
<td>1.4</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>10</td>
<td>3.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spun Honey</strong> (n = 283)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Familiar With</td>
<td>205</td>
<td>62.3</td>
</tr>
<tr>
<td>Aerated</td>
<td>38</td>
<td>13.4</td>
</tr>
<tr>
<td>Processed</td>
<td>17</td>
<td>6.0</td>
</tr>
<tr>
<td>Wax Additives</td>
<td>5</td>
<td>1.8</td>
</tr>
<tr>
<td>Pure/Natural</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Dairy Additives</td>
<td>2</td>
<td>0.7</td>
</tr>
<tr>
<td>Other Additives</td>
<td>2</td>
<td>0.7</td>
</tr>
<tr>
<td>Concentrated</td>
<td>2</td>
<td>0.7</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>10</td>
<td>3.6</td>
</tr>
</tbody>
</table>
Questions Q31 and Q34 address the issue of the relative taste of Canadian and Texas honey as compared to other honeys. Generally speaking, 54 of the 69 persons who responded either "yes" or "not sure" to having purchased or tried Canadian honey were also not sure about its taste in comparison to other honeys. On the other hand, 162 of the 260 persons who responded "yes" or "not sure" to having purchased or tried Texas honey said it was either better or about the same in taste in comparison to other honeys. Only 3 said Texas honey was worse.

Part of merchandising a product effectively stems from the mental image consumers receive when the product is mentioned. Accordingly, sample subjects were asked "What comes to mind when you hear 'Canadian Honey/Texas Honey'?" Responses are summarized and presented in Tables 10 and 11. There were 145 responses to the Canadian Honey question and 200 responses to the Texas Honey question.

Over one-third (38.6 percent) of the responses for Canadian Honey (Table 10) were "parrot" responses, that is, the words "Canada," "Canadian Honey," or "Bees" were given. Forty-five responses (31 percent) had negative connotations, relating "cold," "foreign," and "expensive" to Canadian Honey. The largest positive responses were "Canadian motif" (11.0 percent) and "quality/purity" or "nature" (10.3 percent).

Responses to the Texas question were overwhelmingly positive. One-fourth of those responding cited various "Texas Pride" answers and an additional 9 percent some "Texas Motif" response. "Quality" was given by 19.0 percent and "nature" by 7.0 percent of respondents. A surprising 13.5 percent of the respondents named a Texas honey brand in response. Only 10.0 percent gave a "parrot" response and just 2 percent cited the negative response "inferior quality."

These results indicate that significant levels of provincialism and state pride exist among the DFW area sample subjects. At the same time, a generally uninformed or
Table 10. Summary of Responses to, "What comes to mind when you hear 'Canadian Honey?'" DFW Area, March 1989.

<table>
<thead>
<tr>
<th>Response</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality/purity</td>
<td>10</td>
<td>6.9</td>
</tr>
<tr>
<td>Foreign origin</td>
<td>22</td>
<td>15.2</td>
</tr>
<tr>
<td>Cold</td>
<td>19</td>
<td>13.1</td>
</tr>
<tr>
<td>Canada/Canadian honey</td>
<td>46</td>
<td>31.7</td>
</tr>
<tr>
<td>Bees</td>
<td>10</td>
<td>6.9</td>
</tr>
<tr>
<td>Expensive products</td>
<td>4</td>
<td>2.8</td>
</tr>
<tr>
<td>Nature</td>
<td>5</td>
<td>3.4</td>
</tr>
<tr>
<td>Canadian motifs (e.g. &quot;mounties&quot;)</td>
<td>16</td>
<td>11.0</td>
</tr>
<tr>
<td>Personal responses (e.g. &quot;grandpa&quot;)</td>
<td>3</td>
<td>2.1</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>9</td>
<td>6.2</td>
</tr>
<tr>
<td>Total</td>
<td>145</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 11. Summary of Responses to, "What comes to mind when you hear 'Texas Honey?'" DFW Area, March 1989.

<table>
<thead>
<tr>
<th>Response</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas pride</td>
<td>50</td>
<td>25.0</td>
</tr>
<tr>
<td>Texas motif</td>
<td>18</td>
<td>9.0</td>
</tr>
<tr>
<td>Personal response</td>
<td>10</td>
<td>5.0</td>
</tr>
<tr>
<td>Quality</td>
<td>38</td>
<td>19.0</td>
</tr>
<tr>
<td>Medicinal/health</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>Nature</td>
<td>14</td>
<td>7.0</td>
</tr>
<tr>
<td>Bees</td>
<td>20</td>
<td>10.0</td>
</tr>
<tr>
<td>Honey brands</td>
<td>27</td>
<td>13.5</td>
</tr>
<tr>
<td>Inferior product</td>
<td>4</td>
<td>2.0</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>17</td>
<td>8.5</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100.0</td>
</tr>
</tbody>
</table>
negative attitude exists with respect to "Canadian" honey.

**Brand Loyalty.** The extent of brand loyalty by honey purchasers may indicate the potential for honey purchasers to switch to Canadian honey brands. Of the 281 persons responding to the question "Do you purchase a particular brand of honey?", 132 (47.0 percent) said they did and 149 (53.0 percent) said they did not. There appears to be little brand loyalty among about one-half of all respondents, suggesting opportunity for switching honey users to Canadian brands. Persons were also asked to recall the brand of honey they last purchased. Results are shown in Table 12. Burleson led all others with 70 responses, one-fourth of all honey users. Sue Bee received 11.8 percent of responses. Over one-half (53.8 percent) could not recall the brand of their last honey purchase, lending further support to the potential for market share based on lack of brand loyalty. Interestingly, 3.6 percent of the respondents could not recall the brand of their last purchase but recalled only that "it was in a bear container." Only three respondents mentioned a Canadian honey brand.

**Form of Honey Purchased.** Sample subjects were asked what form of honey they generally purchased to gain insight into effective merchandising for honey based on honey type and container type. There was allowance in this question (Q36) for multiple answers. Referring back to Table 7, the overwhelming majority of all honey users in this sample purchase liquid honey (238) while few purchase creamed or spun honey (45). Among liquid honey users, 140 generally purchase honey in a jar and 143 generally purchase honey in a squeeze bottle. Creamed or spun honey users most often purchase their honey in tubs, which is the form marketed by Burleson's. Canadian spun honey, however, may be purchased in squeeze bottles. From these results, it is apparent that although a sizeable number of honey users are familiar with creamed or spun honey, few typically purchase anything other than liquid honey. No clear preference for liquid honey in jars of squeeze bottles is identifiable from these behavioral responses. A particular state brand, Burlesons, markets their creamed honey in a tub.
Table 12. Recall of Brand Purchased by Honey Users, DFW Area, March, 1989.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannot Recall</td>
<td>151</td>
<td>53.9</td>
</tr>
<tr>
<td>Sue Bee</td>
<td>33</td>
<td>11.8</td>
</tr>
<tr>
<td>Burleson</td>
<td>70</td>
<td>25.0</td>
</tr>
<tr>
<td>Local/farm</td>
<td>8</td>
<td>2.9</td>
</tr>
<tr>
<td>Misc. brands</td>
<td>5</td>
<td>2.9</td>
</tr>
<tr>
<td>Unknown (bear container)</td>
<td>10</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
<td>280</td>
<td>100.0</td>
</tr>
</tbody>
</table>

OBSERVATIONS REGARDING STORE MERCHANDISING

A detailed accounting of store merchandising with regard to honey was made for each of the 12 sample stores. Merchandising information for honey focused on honey location, shelf location and number facings, sizes and container types, as well as brands, and the presence of any specific promotional signs or displays. Presentation of this accounting is found in Appendix C.

Honey location varied across stores by chain but not within chain. All Kroger stores stocked honey adjacent to syrups and near the baking/sweetener departments. Skaggs stores placed honey with the jelly/spreads department while the Albertson store featured honey between the jelly/spreads and the syrups departments. Without exception, all 12 sample stores arranged honey on the top one or two shelves, dependent apparently on individual store managers rather than chain policy.

Total linear feet of shelf space ranged from 6 to 17 feet in Kroger stores, and 5 to 10 feet in Skaggs stores, and was 16 feet in the Albertsons store. Kroger typically placed honey either at or near the end of the aisle, whereas Skaggs and Albertson placed honey more near the center of aisles. The number of facings was roughly equivalent to one jar per 8 inches. Some stores stacked their honey (generally store brands) two high, thereby increasing the number of facings. Generally speaking, each size of honey for each brand had at least one facing. The Burleson brand dominated facings, typically having at least six and often 10 to 12 facings. Other brands usually had 4 facings at most.
With regard to available sizes and brands, the 12 oz., 16 oz, and 2 lb. sizes were most commonly offered and at least four to sometimes eight brands were offered. Size of container was most often linked to brand. Larger "economy" sizes were most prevalent among store brands, generic honey, and "local farm" type honey. Kroger stores offered more store and generic honey brands whereas Skaggs and Albertsons stores presented a greater number of up-scale and premium or imported honeys. Liquid honey was the dominant form offered. Generally, store, generic, and "locally produced" brands came in jars only whereas the up-scale honeys came predominantly in some form of squeeze bottle.

The presence of promotional signs was related to the lower price of generic honey at Kroger and to Burlesons at Albertsons, which happened to be a special item at the time of the survey. It is interesting to note that Burleson honey has positioned itself with two seemingly "distinct" honeys, the 100% clover honey and the "natural," pure honey. This doubles facings available to the brand in the store. Investigation of labels on these honeys revealed that the clover honey is a product of the U.S.A., while the "natural" honey is a blend of honeys from the U.S.A., Canada, Mexico, and Argentina. Burlesons is seen, however, as a Texas brand, regardless of its honey's true origin, as is Sue Bee, which has a distribution facility near Forth Worth.

Several general observations regarding merchandising are in order. The most frequent merchandising "error" concerned sticky counter areas in several of the sample stores around the honey. This presumably resulted from leaking jars or squeeze bottles due to either upside-down stacking of jars or failure to have tamper resistant inner seals on the squeeze bottles. In many stores, all items were not fronted and were often mixed in presentation, that is, more than one brand was available in each row of product.

At least two survey teams reported presence of visually detectable crystals in the Canadian honeys, giving consumers the impression that the honey had "gone to sugar," a highly undesirable trait. In fact, in casual conversation with shoppers, most said they usually had honey in their home long enough for it to "go to sugar," after which time they
threw it away. This certainly discourages consumption of the product. The Kroger stores in general appeared to be less efficient and diligent in their merchandising efforts, with one store manager stating he only stocked honey when the shelf was "almost out." Lower volume stores typically had dust on the lids or tops of some honeys indicating extremely low sales volumes. It comes as little surprise that such stores rationalize spending little effort on merchandising.

**RECOMMENDATIONS**

The survey results suggest a number of conclusions and recommendations regarding marketing/merchandising strategies of Canadian honey. They are grouped into four broad categories: (1) Price; (2) Image; (3) Packaging; and (4) Promotion.

**Price**

Although a large majority of the 409 persons surveyed considered price to be very important in their overall grocery shopping, a decidedly smaller number adhere to a strict food budget. Additionally, while most shoppers compare prices of honey brands before purchasing, there is insufficient evidence to strongly support the premise that honey users purchase the most inexpensive brand of honey. Honey use is decidedly connected with high income and educational levels as well. Therefore, it is doubtful that price should be a primary concern in efforts to increase purchases of Canadian honey. Temporary price reductions through "specials" may be appropriate in luring honey users who purchase other honeys to try Canadian honey. Such a position on a long term basis, however, could create an impression that Canadian honey is an inferior product. Maintaining a relatively competitive price should be a sufficient pricing strategy to minimize the alienation of consumers that may be more price sensitive than the norm.

**Image**

Fewer than ten percent of honey users in the sample have ever tried Canadian honey. At the same time, less than 100 of the 283 honey users interviewed had any substantive mental picture of "Canadian Honey." The responses of about one-half of those
who provided their impressions of "Canadian honey" had negative connotations. An opportunity seems to exist for producers and processors of Canadian honey to create an image. The problem, of course, is to determine what image is most likely to lead to both a positive impression of Canadian honey and some brand preference by consumers.

The ultimate goal of any product image is to establish a distinct, desirable product in the eyes of the consumer. The differentiation attempted through image creation must be sustainable and unique. The survey suggests that even with an aggressive pricing effort, consumers in the DFW area will not likely shift to Canadian honey as long as it is viewed as "no different" from Burleson's or Sue Bee. Perhaps the best strategy is to create a "premium," upscale, imported honey image. A somewhat higher priced product would convey higher quality image, especially if reinforced by an appropriate packaging design. There appears to be an ideal niche for such a product in the market place between the traditional honey offerings and the more expensive West German honey.

Several new approaches for promoting an enhanced product image could be explored. The following is a brief discussion of three such approaches suggested by the survey.

**Overtly Canadian Design.** While such a design is not indicated by survey results (in fact, it would on the surface appear to be an unlikely strategy), it would support a unique, sustainable positioning strategy. Because most respondents had no mental image of Canadian honey (65.8% of honey users), the "blank" could well be filled in by any one of several Canadian motifs. The drawback of this approach, of course, is the nationalistic and regionalistic sentiment of many Texans (and Americans for that matter). Nevertheless, the younger, upper income groups in general do not share this sentiment to the same extent and are less price sensitive.

**Upscale Image.** This too could support a unique, sustainable positioning strategy. American products tend to "clump" together at the lower end of the market. The survey indicates that honey users in the DFW area deny (for the most part) that they buy the
cheapest honey. Consequently, a higher priced offering with an upscale image might well find acceptance by a large majority of honey users. Images such as "pesticide free," "organic," or other buzz word combinations might work well. The term "Canada Pure" has some merits that will be discussed later.

**Down-Played Origin.** The current perceived Canadian superiority in the area of "safe" agricultural goods could be exploited in positioning Canadian honey. A major current trend in the U.S. consumer market is a growing dissatisfaction with the safety of domestic food supplies. Whether this fear is real or imagined, it is a significant, growing consumer concern. Domestic producers, for the most part, are the focus of consumer mistrust. Although Americans tend to be suspicious of the safety of food from developing countries, foreign imports from Europe, Australia, Canada, and other developed countries are often perceived as higher quality or safer in some sense. Canadian products, in particular, enjoy a positive image in this respect. The survey results tend to support this assertion. Americans perceive Canada to be a pristine "wilderness" with cities dispersed "comfortably" about. Canada is perceived to be more environmentally unaffected, open, and wholesome. Americans are well aware, for example, of the Canadian uproar over acid rain and the Canadian indignation over its effects on the environment. As a consequence, consumers are likely to perceive that the standards of agricultural products from Canada, the wilderness country, are surely higher than those in the United States. Canadian honey could easily combine this Canada Pure strategy with an "upscale" image to establish itself in the market place. After all, isn't "Canada Pure" superior to "American Pure?" The survey results suggest that Texas honey consumers may well believe so.

**Packaging**

The survey results also suggest that an excellent starting point for building market share for Canada in the Texas honey market may be in the area of packaging. Some packaging scheme that better promotes the high quality of Canadian honey is essential.
Current market share indicates that the package design of the most prominent Canadian brand in the DFW market, (BeeMaid), is not performing well, despite success in Canada and California. Texans perceive the package to be “squatty” with bland labelling. Despite the lower per unit price of Canadian honey, the container used by Burleson, the market leader in the DFW area, appears to give "more honey for less money." The uniqueness of the BeeMaid container is not assisting in the struggle for market share. In fact, survey response indicates greater brand loyalty to "Bear Honey" (third among all brands). Such brand loyalty is forged on packaging alone. Consumers repeatedly responded that they found the “Bear” packaging to be "cute" and convenient.

Survey respondents indicated a preference for "light" honey. Competing brands often put honey in translucent rather than clear plastic squeeze bottles, as is the case with Bee Maid. While all major competitor honeys in the selected stores appear nearly the same when squeezed onto a plate, the honeys in the translucent plastic appears lighter inside the container. This suggests that one packaging strategy would be to use more translucent containers to appeal to the consumer preference for "light" honey and to be more competitive in this area with competing honeys.

One or more new packaging designs could be test marketed. One package could be overtly Canadian and at least one other might down-play this aspect. All new packaging should be tamper resistant and clearly labelled as such. Few of the competitors offer or promote this characteristic. Package design should be more slender, slightly tall, with carefully selected color schemes. Texans appear to be heavily influenced by appearance.

Promotion

Several promotional avenues could be explored. A combination of approaches could be utilized including, but not limited to: (1) pricing specials; (2) couponing; (3) in-store taste demonstrations; (4) trade shows/fairs/conventions; (5) advertising in local/state upscale magazines, and (6) limited television exposure in targeted markets. The survey
suggests that options (2), (3), and (5) likely hold the greatest potential for pay-off in terms of added market share in the DFW area.

Based upon the intensity of couponing practiced by the honey users in the sample, this may indeed be an opportune avenue to expand market exposure among likely buyers. Results of this survey indicate extensive use of magazines for information regarding foods, particularly as income and educational levels rise. Several prestigious magazines are popular with this group of persons. Examples in the DFW area include *Dallas Magazine, Texas Monthly, Texas Highways, Yankee,* and *Organic Gardening.* Concentrating coupons here and in other outlets utilized by the heavier honey users should increase exposure to the product and, therefore, the effectiveness of couponing as a promotional vehicle.

In-store taste demonstrations may well be the best, *albeit* the most expensive, way to familiarize consumers with Canadian honey. Stores should be carefully selected based upon the socio-demographic and economic characteristics of their shoppers as identified herein. The potential exists, particularly in upscale stores, for tie-ins with store products, such as baked goods. Additionally, the potential for recipe ideas at point-of-purchase and at taste demonstrations should be considered.

In whatever promotion scheme chosen, however, the effort should be aimed at people interested in buying quality. The segment of white 20-40 year olds possessing a college education and substantial earning power ($30K+) should be the primary focus. These people are relatively price insensitive, brand conscious, and health conscious. A brand that conveys quality (via price and packaging), that extols its safety (tamper proof packaging, "organic," "Canada Pure," etc.) should favorably position Canadian honey to increase market share.
BIBLIOGRAPHY


Interviewer ____________________
Store _______________________
Day ___________ Hour ________

1. Honey Purchaser
2. Random Shopper

HONEY QUESTIONNAIRE

(Q1) How often do you grocery shop?
1____ 3 times/week  2_____ 2 times/weekly
3____ Weekly  4____ Bimonthly
5____ Monthly  6____ Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods? (Check all that apply)
a____ Newspapers  b____ Magazines
c____ Radio  d____ Television
e____ Food Labels  f____ In Store Displays
g____ Other (Doctor)

(Q3) In the past month, how many times have you purchased each of the following products? (Enter number for each)
a____ Preserves  b____ Jam/Jelly
c____ Molasses  d____ Syrup
e____ Honey

PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR.

1 = Not sure, 2 = Rarely, if ever, 3 = Seldom, 4 = Sometimes, 5 = Usually

(Q4) I run my household on a strict food budget. 1 2 3 4 5

(Q5) Price is an important consideration in my grocery shopping. 1 2 3 4 5

(Q6) When I get food coupons, I redeem them. 1 2 3 4 5

(Q7) I buy low-fat foods when possible. 1 2 3 4 5

(Q8) I buy low calorie foods when possible. 1 2 3 4 5

(Q9) The meals we prepare at home are nutritionally balanced. (%) 1 2 3 4 5

(Q10) Do you use honey in your household?
1____ Yes  2____ No

FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE.

1 = Disagree, 2 = Somewhat Disagree,
3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. 1 2 3 4 5

(Q12) I think honey should come in jars. 1 2 3 4 5

(Q13) Honey should come in tamper-proof containers. 1 2 3 4 5

(Q14) Honey is healthier than other sweeteners. 1 2 3 4 5

(Q15) Honey has medicinal properties. 1 2 3 4 5

(Q16) All honey tastes alike. 1 2 3 4 5

If not honey user, go to demographics

(Q17) I am a frequent user of honey. 1 2 3 4 5

(Q18) Honey brands do not influence my purchase. 1 2 3 4 5

(Q19) Before I purchase honey, I compare prices of available brands. 1 2 3 4 5

(Q20) I tend to purchase the most inexpensive honey. 1 2 3 4 5

(Q21) I find honey labeling to be very helpful. 1 2 3 4 5

(Q22) It is important for me to know where the honey I buy is produced. 1 2 3 4 5

(Q23) Are you familiar with creamed honey?
1____ Yes  2____ No  3____ Not Sure

(Q24) Are you familiar with spun honey?
1____ Yes  2____ No  3____ Not Sure

If no to (Q23) and (Q24), go to (Q27)

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste?
1____ Better  2____ Same  3____ Worse

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(Q26) Compared to regular liquid honey, is creamed or spun honey:

1. Easier to use  2. Same  3. More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey?

1. Yes  2. No  3. Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

If answer to (Q29) is no or not sure go to (Q32)

(Q31) Compared to other honey, how does Canadian honey taste?


(Q32) Have you ever purchased or tried Texas honey?

1. Yes  2. No  3. Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

If answer to (Q32) is no or not sure go to (Q35)

(Q34) Compared to other honey, how does Texas honey taste?


(Q35) Do you purchase a particular brand of honey?

1. Yes  2. No

If yes, what brand? _______________

(Q36) What form of honey do you generally purchase?

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DEMOGRAPHICS

(Q37) 1. Male  2. Female

(Q38) What is your ethnic background?


(Q39) My age is in the following bracket:

1. Under 20  2. 40-49  3. 20-29  4. 50-59
5. 30-39  6. 60+

(Q40) My marital status is:


(Q41) How many persons in your household like honey? ______ persons

(Q42) My school education includes: (mark highest level of attainment).

1. Grade School  2. Part of High School  3. All of High School
4. Part of College  5. All of College  6. Graduate School

(Q43) My household gross annual income is:

1. Under $12,000  2. $12,000-23,999  3. $24,000-35,999
4. $36,000-47,999  5. $48,000-79,999  6. Over $80,000
Table A2. Selected Characteristics of Interviewees, by Store, DFW Area

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Table B.1a. Frequencies and Percentage Responses to Honey Questionnaire, Males, DFW Area

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<th>Day</th>
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**HONEY QUESTIONNAIRE**

(Q1) How often do you grocery shop? (%)
- 1. 13.4 3 times/week
- 2. 15.7 2 times/weekly
- 3. 45.5 Weekly
- 4. 8.2 Bimonthly
- 5. 6 Monthly
- 6. 9.7 Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods? (Frequencies)
- a. Newspapers
- b. Magazines
- c. Radio
- d. Television
- e. Food Labels
- f. In Store Displays
- g. Other (Specify)

(Q3) In the past month, how many times have you purchased each of the following products? (Enter number for each) (%)
- a. 31.3 Preserves
- b. 52.2 Jam/Jelly
- c. 13.4 Molasses
- d. 58.7 Syrup
- e. 42.5 Honey

PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR.

1 = Not sure, 2 = Rarely, if ever, 3 = Seldom,
4 = Sometimes, 5 = Usually

(Q4) I run my household on a strict food budget. (%) 1 2 3 4 5
1.23.4 5
1.5 44.8 10.4 20.9 22.4

(Q5) Price is an important consideration in my grocery shopping. (%) 1 2 3 4 5
1.5 15 23.2 21.8 50.4

(Q6) When I get food coupons, I redeem them. (%) 1 2 3 4 5
1.3 30.3 9.6 12.1 44.7

(Q7) I buy low-fat foods when possible. (%) 1 2 3 4 5
1.2 3 4 5
7.2 26.1 6.7 15.7 50.7

(Q8) I buy low calorie foods when possible. (%) 1 2 3 4 5
1.2 3 4 5
2.2 30.8 11.2 16.4 39.8

(Q9) The meals we prepare at home are nutritionally balanced. (%) 1 2 3 4 5
1.2 3 4 5
3.8 6 13.5 25.8 51.1

(Q10) Do you use honey in your household?
- 1. 87. Yes
- 2. 47. No
(64.9%) (35.1%)

FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE.

1 = Disagree, 2 = Somewhat Disagree,
3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%) 1 2 3 4 5
1.5 7.7 9.2 7.7 28.9

(Q12) I think honey should come in jars. (%) 1 2 3 4 5
1.2 3 4 5
44.3 41 18.5 22.3 31

(Q13) Honey should come in tamper-proof containers. (%) 1 2 3 4 5
1.2 3 4 5
17.2 1.8 10.2 3.1 68.8

(Q14) Honey is healthier than other sweeteners. (%) 1 2 3 4 5
1.3 2.3 11.7 6.6 64.1

(Q15) Honey has medicinal properties. (%) 1 2 3 4 5
1.2 3 4 5
21.7 2.3 19.4 13.2 43.4

(Q16) All honey tastes alike. (%) 1 2 3 4 5
62.3 5.4 9.2 4.6 18.5

If not honey user, go to demographics

(Q17) I am a frequent user of honey. (%) 1 2 3 4 5
18.9 8.9 44 25.6 42.2

(Q18) Honey brands do not influence my purchase. (%) 1 2 3 4 5
1.2 3 4 5
40.4 9 22 7.9 40.4

(Q19) Before I purchase honey, I compare prices of available brands. (%) 1 2 3 4 5
1.2 3 4 5
37.5 23 0 13.6 46.5

(Q20) I tend to purchase the most inexpensive honey. (%) 1 2 3 4 5
1.2 3 4 5
48.3 9.2 8 16.1 18.4

(Q21) I find honey labeling to be very helpful. (%) 1 2 3 4 5
1.2 3 4 5
29.1 7 7 4.7 52.3

(Q22) It is important for me to know where the honey I buy is produced. (%) 1 2 3 4 5
1.2 3 4 5
43.8 5.5 5.6 4.5 40.4

(Q23) Are you familiar with creamed honey? (%) 1 2 3 4 5
1.30.6 Yes 2.33.6 No 3.2 2 Not Sure

(Q24) Are you familiar with spun honey? (%) 1 2 3 4 5
1.23.1 Yes 2.41 No 3.2 2 Not Sure

46
(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (%)
1. 9 Better 2. 13.4 Same 3. 9 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey: (%)
1. 9 Easier to use 2. 11.2 Same 3. 9.7 More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).
Dairy Additives 12% 
Aerated 12%
Processed 11%

(Q28) What do you think spun honey is? (Look for key words).
Aerated 8%
Processed 8%

(Q29) Have you ever purchased or tried Canadian honey? (%)
1. 6 Yes 2. 45.5 No 3. 13.4 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?
Repeat of question elements 11.2%
Foreign 5.2%
Cold 5.2%
Canadian Motif 5.2

(Q31) Compared to other honey, how does Canadian honey taste? (%)
1. 3 Better 2. 3 About the same 3. 0 Worse 4. 14.9 Not sure

(Q32) Have you ever purchased or tried Texas honey? (%)
1. 44 Yes 2. 3.7 No 3. 16.4 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?
Quality 10.4%
Texas Pride 8.2%
Honey Brands 4.5%
Nature 4.5%

(Q34) Compared to other honey, how does Texas honey taste? (%)
1. 17.9 Better 2. 17.9 About the same 3. 1.5 Worse 4. 14.9 Not sure

(Q35) Do you purchase a particular brand of honey? (%)
1. 21.6 Yes 2. 44 No

(Q36) What form of honey do you generally purchase? (frequencies)
jar (%) a 50 d 1 g 1 
squeeze bottle (%) b 38 e 4 h 0 
tub (%) c 10 f 0

DEMOGRAPHICS

(Q37) 1. Male 2. Female

(Q38) What is your ethnic background?
1. 111 White 2. 11 Black 3. 11 Hispanic 4. 1 Other

(Q39) My age is in the following bracket:
1. 2 Under 20 2. 40-49
3. 20-29 4. 50-59
5. 30-39 6. 60+

(Q40) My marital status is:
1. 79 Married 2. 38 Single
3. 3 Widowed 4. 14 Divorced

(Q41) How many persons in your household like honey? 2.07 persons (Average)

(Q42) My school education includes: (mark highest level of attainment).
1. 2 Grade School (1.5%)
2. 9 Part of High School (6.7%)
3. 23 All of High School (17.2%)
4. 39 Part of College (29.1%)
5. 42 All of College (31.3%)
6. 19 Graduate School (14.2%)

(Q43) My household gross annual income is:
1. 9 Under $12,000 (6.7%)
2. 22 $12,000-23,999 (24.6%)
3. 33 $24,000-35,999 (22.4%)
4. 26 $36,000-47,999 (16.4%)
5. 30 $48,000-79,999 (19.4%)
6. 8 Over $80,000 (6%)
Table B.1b. Frequencies and Percentage Responses to Honey Questionnaire, Females, DFW Area

Interviewer____237______Store____233______Day___37___Hour______

1. _37__ Honey Purchaser 13.5%
2. _233__ Random Shopper 85%

HONEY QUESTIONNAIRE

(Q1) How often do you grocery shop? (%)
1. 10-2.3 times/week 2. 21.5 2 times/weekly
3. _52.8_ Weekly 4. _88_ Bimonthly
5. _44_ Monthly 6. _29_ Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods? (Frequencies)
a. _95_ Newspapers b. _12_4 Magazines
c. _14_ Radio d. _122_ Television
e. _12_ Food Labels f. _6_ In Store Displays
g. _43_ Other (Specify)

(Q3) In the past month, how many times have you purchased each of the following products? (Enter number for each) (%)
a. _42.7_ Preserves b. _48.2_ Jam/Jelly
c. _8.8_ Molasses d. _61.3_ Syrup
e. _43.3_ Honey

PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR.

1 = Not sure, 2 = Rarely, if ever, 3 = Seldom, 4 = Sometimes, 5 = Usually

(Q4) I run my household on a strict food budget. (%) 1 2 3 4 5
4. _29.8_ 12 18.8 29.2

(Q5) Price is an important consideration in my grocery shopping. (%) 1 2 3 4 5
1. _1.9_ 9.9 33 15.7 70.1

(Q6) When I get food coupons, I redeem them. (%) 1 2 3 4 5
4. _15.3_ 4.7 19 60.6

(Q7) I buy low-fat foods when possible. (%) 1 2 3 4 5
4. _12.8_ 1.8 17.2 67.9

(Q8) I buy low calorie foods when possible. (%) 1 2 3 4 5
L5 19 62 23 50.4

(Q9) The meals we prepare at home are nutritionally balanced. (%) 1 2 3 4 5
7. _44_ 2.9 24.5 67.5

(Q10) Do you use honey in your household?
1. _196_ Yes 2. _77_ No
(71.5%) (28.1%)

FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE.

1 = Disagree, 2 = Somewhat Disagree,
3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%) 1 2 3 4 5
6.2 4.8 7.7 7.7 27.2

(Q12) I think honey should come in jars. (%) 1 2 3 4 5
4.4 4.1 18.5 22 31

(Q13) Honey should come in tamper-proof containers. (%) 1 2 3 4 5
17.5 3.3 6.7 1.9 70.6

(Q14) Honey is healthier than other sweeteners. (%) 1 2 3 4 5
11.6 2.6 10 11.4 64.2

(Q15) Honey has medicinal properties. (%) 1 2 3 4 5
26.1 22 23.5 11 37.1

(Q16) All honey tastes alike. (%) 1 2 3 4 5
67.3 1.1 11.4 1.5 18.4

(Q17) I am a frequent user of honey. (%) 1 2 3 4 5
23.4 9.1 4.1 15.7 47.7

(Q18) Honey brands do not influence my purchase. (%) 1 2 3 4 5
53.5 9.1 2 4 35.4

(Q19) Before I purchase honey, I compare prices of available brands. (%) 1 2 3 4 5
34.8 2.5 1 9.1 52.5

(Q20) I tend to purchase the most inexpensive honey. (%) 1 2 3 4 5
62.8 6.6 2.6 8.2 19.9

(Q21) I find honey labeling to be very helpful. (%) 1 2 3 4 5
34.2 4.1 5.6 6.1 50

(Q22) It is important for me to know where the honey I buy is produced. (%) 1 2 3 4 5
11 3.5 2 35.5 44.2

(Q23) Are you familiar with creamed honey? (%) 1 2 3 4 5
18 50.4 24 50.4 12

(Q24) Are you familiar with spun honey? (%) 1 2 3 4 5
12 3 5 50.4 12

48
(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (%)

1. 47 Better 2. 36 Same 3. 19 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey:

1. 39 Easier to use 2. 44 Same 3. 25 More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).
- Aerated 36%
- Dairy Additives 28%
- Processed 15%

(Q28) What do you think spun honey is? (Look for key words).
- Aerated 27%
- Processed 9%

(Q29) Have you ever purchased or tried Canadian honey? (%)

1. 51 Yes 2. 56.6 No 3. 10.6 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?
- Repeat of question elements 11.3%
- Foreign 5.5%
- Cold 4.4%

(Q31) Compared to other honey, how does Canadian honey taste? (%)

1. 11 Better 2. 29 About the same 3. 4 Worse 4. 13.1 Not sure

(Q32) Have you ever purchased or tried Texas honey? (%)

1. 53.6 Yes 2. 47 No 3. 13.5 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?
- Texas Pride 14.2%
- Quality 8.8%
- Honey Brands 7.7%

(Q34) Compared to other honey, how does Texas honey taste? (%)

1. 20.4 Better 2. 21.9 About the same 3. 16.1 Worse 4. 16.1 Not sure

(Q35) Do you purchase a particular brand of honey? (%)

1. 38.3 Yes 2. 33.9 No

(Q36) What form of honey do you generally purchase? (frequencies)

- Liquid a93
- Creamed d5
- Spun g3
- Squeeze bottle b38
- Jar e4
- Tub h4
- C.19
- f1

DEMOGRAPHICS

(Q37) 1. Male 2. Female

(Q38) What is your ethnic background?
- 1. 241 White
- 2. 14 Black
- 3. 16 Hispanic
- 4. 2 Other

(Q39) My age is in the following bracket:

1. 4 Under 20 (1.5%) 2. 43 20-49 (15.7%) 3. 63 20-29 (23%) 4. 83 50-59 (30.3%) 5. 44 30-39 (16.1%) 6. 35 60+ (12.8%) 7. Under 10 (1.5%)

(Q40) My marital status is:

1. 195 Married 2. 28 Single
- 3. 24 Widowed 4. 26 Divorced
- 5. 47 Single 6. 43 Married
- 7. 44 Widowed 8. 22 Divorced

(Q41) How many persons in your household like honey? 2.49 persons (Average)

(Q42) My school education includes: (mark highest level of attainment).

1. 3 Grade School (1.1%) 2. 5 Part of High School (1.8%) 3. 59 All of High School (21.5%) 4. 97 Part of College (35.4%) 5. 77 All of College (28.1%) 6. 31 Graduate School (11.3%) 7. Under 10 (1.5%) 8. Over 40 (1.5%)

(Q43) My household gross annual income is:

1. 18 Under $12,000 (6.6%) 2. 53 $12,000-23,999 (19.4%) 3. 36 $24,000-35,999 (13.2%) 4. 54 $36,000-47,999 (19.8%) 5. 71 $48,000-79,999 (26.0%) 6. 25 Over $80,000 (9.2%)
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<sup>a</sup>Indicates a mean larger than across groups at the 5% level of significance. If not indicated otherwise, no difference is present.
Table B.3a. Frequencies and Percentage Responses to Honey Questionnaire, Whites, DFW Area

Interviewer ____________________________

Store ____________________________

Day _______ Hour ______

1. ____ Honey Purchaser 15.6%
2. ____ Random Shopper 82.1%

HONEY QUESTIONNAIRE

(Q1) How often do you grocery shop?

(Frequencies)

1_3 times/week 2.64 2 times/weekly
3.86 Weekly 4.26 Bimonthly
5.17 Monthly 6.13 Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods?

(Frequencies)

a. 121 Newspapers b. 146 Magazines
c. 22 Radio d. 149 Television
e. 21 Food Labels f. 6.5 In Store Displays
g. 57 Other (Doctor)

(Q3) In the past month, how many times have you purchased each of the following products?

(Enter number for each) (%)
a. 48.9 Preserves b. 52 Jam/Jelly
c. 9.4 Molasses d. 58 Syrup

e. 44 Honey

PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR.

1 = Not sure, 2 = Rarely, if ever, 3 = Seldom,
4 = Sometimes, 5 = Usually

(Q4) I run my household on a strict food budget. (%) 1 2 3 4 5
2.8 42.6 11.9 18.2 26.7

(Q5) Price is an important consideration in my grocery shopping. (%) 1 2 3 4 5
9 18.8 31.1 17.7 67.5

(Q6) When I get food coupons, I redeem them. (%) 1 2 3 4 5
1.8 18.4 5.7 16.8 56.7

(Q7) I buy low-fat foods when possible. (%) 1 2 3 4 5
1.2 18.6 3.1 18.8 63.9

(Q8) I buy low calorie foods when possible. (%) 1 2 3 4 5
2 21.9 6.5 19.6 46

(Q9) The meals we prepare at home are nutritionally balanced. (%) 1 2 3 4 5
1.7 4.5 6.8 24.7 62.2

(Q10) Do you use honey in your household?

1.248 Yes 2.103 No
(70.5%) (29.3%)

FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE.

1 = Disagree, 2 = Somewhat Disagree,
3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%) 1 2 3 4 5
1 2 3 4 5
50.7 5.7 9.2 7.7 26.6

(Q12) I think honey should come in jars. (%) 1 2 3 4 5
1 2 3 4 5
39.4 4.3 19.8 3.4 33

(Q13) Honey should come in tamper-proof containers. (%) 1 2 3 4 5
1 2 3 4 5
18 3.2 7.8 2 68.9

(Q14) Honey is healthier than other sweeteners. (%) 1 2 3 4 5
1 2 3 4 5
13 2.6 10.1 10.7 63.6

(Q15) Honey has medicinal properties. (%) 1 2 3 4 5
1 2 3 4 5
25.8 2.6 22.1 11.5 38.2

(Q16) All honey tastes alike. (%) 1 2 3 4 5
1 2 3 4 5
62.2 2.3 10 2.6 18.6

If not honey user, go to demographics

(Q17) I am a frequent user of honey. (%) 1 2 3 4 5
1 2 3 4 5
21.9 95.4 19.1 45.4

(Q18) Honey brands do not influence my purchase. (%) 1 2 3 4 5
1 2 3 4 5
51.2 5.6 64 6 24.8

(Q19) Before I purchase honey, I compare prices of available brands.(%) 1 2 3 4 5
1 2 3 4 5
36.1 2.8 8.4 84 51.4

(Q20) I tend to purchase the most inexpensive honey. (%) 1 2 3 4 5
1 2 3 4 5
50.3 69.3 11.8 14.3 15.4

(Q21) I find honey labeling to be very helpful. (%) 1 2 3 4 5
1 2 3 4 5
33.1 4.3 6.5 45 11.4

(Q22) It is important for me to know where the honey I buy is produced. (%) 1 2 3 4 5
1 2 3 4 5
47 3.8 4 12.4 44.2

(Q23) Are you familiar with creamed honey? (Frequencies)

1.128 Yes 2.118 No 3.3 Not Sure
(Q24) Are you familiar with spun honey? (Frequencies)
1. 91 Yes 2. 154 No 3. 6 Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)
1. 57 Better 2. 51 Same 3. 28 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey? (Frequencies)
1. 50 Easier to use 2. 56 Same 3. 35 More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).
Aerated 47
Diary Additives 35
Processed 25

(Q28) What do you think spun honey is? (Look for key words).
Aerated 33
Processed 15
Wax Additives 5

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)
1. 19 Yes 2. 184 No 3. 43 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?
Repeat of question elements 40
Cold 19
Foreign 18
Canadian Motif 15

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)
1. 6 Better 2. 11 About the same 3. 45 Not sure

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)
1. 181 Yes 2. 16 No 3. 50 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?
Texas Pride 41
Quality 37
Honey Brands 23

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)
1. 72 Better 2. 73 About the same 3. 53 Not sure

(Q35) Do you purchase a particular brand of honey?
1. 119 Yes 2. 130 No

(Q36) What form of honey do you generally purchase? (frequencies)
jar (%) a. 132 d. 0 g. 0
squeez bottle (%) b. 121 e. 7 h. 4
tub (%) c. 19 f. 4

DEMOGRAPHICS

(Q37) 1. 111 Male 2. 241 Female

(Q38) What is your ethnic background?
1. White 2. Black
3. Hispanic 4. Other

(Q39) My age is in the following bracket:
1. 4 Under 20 2. 59 20-49
3. 71 20-29 4. 91 50-59
5. 73 30-39 6. 52 60+

(Q40) My marital status is:
1. 283 Married 2. 57 Single
3. 23 Widowed 4. 34 Divorced

(Q41) How many persons in your household like honey? 2. 33 persons (Average)

(Q42) My school education includes: (mark highest level of attainment).
1. 3 Grade School 2. 7 Part of High School
3. 69 All of High School 4. 123 Part of College
5. 108 All of College 6. 41 Graduate School

(Q43) My household gross annual income is:
1. 22 Under $12,000 2. 50 $12,000-23,999
3. 88 $24,000-35,999 4. 69 $36,000-47,999
5. 75 $48,000-79,999 6. 29 Over $80,000
Table B.3b. Frequencies and Percentage Responses to Honey Questionnaire, Blacks, DFW Area

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<tr>
<th>Interviewer</th>
<th>Store</th>
<th>Day</th>
<th>Hour</th>
<th>1. Honey Purchaser</th>
<th>2. Random Shopper</th>
</tr>
</thead>
</table>

### HONEY QUESTIONNAIRE

(Q1) How often do you grocery shop? (Frequencies)
- 1. 3. 3 times/week
- 2. 8. 2 times/weekly
- 3. 7. Weekly
- 4. 2. Bimonthly
- 5. 2. Monthly
- 6. 2. Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods? (Frequencies)
- a. 0. Newspapers
- b. 0. Magazines
- c. 0. Radio
- d. 5. Television
- e. 0. Food Labels
- f. 0. In Store Displays
- g. 1. Other (Doctor)

(Q3) In the past month, how many times have you purchased each of the following products? (Enter number for each) (%)
- a. 36. Preserves
- b. 72. Jam/Jelly
- c. 20. Molasses
- d. 64. Syrup
- e. 56. Honey

### PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR.

1 = Not sure, 2 = Rarely, if ever, 3 = Seldom, 4 = Sometimes, 5 = Usually

(Q10) Do you use honey in your household?
- 1. 17. Yes (68%)
- 2. 8. No (32%)

### FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE.

1 = Disagree, 2 = Somewhat Disagree,
3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%) 1 2 3 4 5
- 1 2 3 4 5
- 56.5 4.3 0 0 39.1

(Q12) I think honey should come in jars. (%) 1 2 3 4 5
- 1 2 3 4 5
- 28.1 0 31.7 0 40.2

(Q13) Honey should come in tamper-proof containers. (%) 1 2 3 4 5
- 1 2 3 4 5
- 13 0 13 0 73.9

(Q14) Honey is healthier than other sweeteners. (%) 1 2 3 4 5
- 1 2 3 4 5
- 4.3 0 17.4 0 78.3

(Q15) Honey has medicinal properties. (%) 1 2 3 4 5
- 1 2 3 4 5
- 43 0 30.4 4.3 60.9

(Q16) All honey tastes alike. (%) 1 2 3 4 5
- 1 2 3 4 5
- 52.2 4.3 13 0 30.4

If not honey user, go to demographics

(Q17) I am a frequent user of honey. (%) 1 2 3 4 5
- 1 2 3 4 5
- 29.4 5.9 5.9 5.9 59.9

(Q18) Honey brands do not influence my purchase. (%) 1 2 3 4 5
- 1 2 3 4 5
- 47.1 0 0 0 52.9

(Q19) Before I purchase honey, I compare prices of available brands. (%) 1 2 3 4 5
- 1 2 3 4 5
- 28.4 0 0 23.5 47.1

(Q20) I tend to purchase the most inexpensive honey. (%) 1 2 3 4 5
- 1 2 3 4 5
- 41.2 5.9 17.6 0 35.3

(Q21) I find honey labeling to be very helpful. (%) 1 2 3 4 5
- 1 2 3 4 5
- 23.5 5.9 0 11.8 58.8

(Q22) It is important for me to know where the honey I buy is produced. (%) 1 2 3 4 5
- 1 2 3 4 5
- 47.1 5.9 0 0 47.1

(Q23) Are you familiar with creamed honey? (Frequencies)
- 1. 1. Yes
- 2. 16. No
- 3. 0. Not Sure
(Q24) Are you familiar with spun honey? (Frequencies)

1. Yes  2. No  3. Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)

1. Better  2. Same  3. Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey: (Frequencies)

1. Easier to use  2. Same  3. More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

Dairy Additives  2  Other Additives  1  Processed  1

(Q28) What do you think spun honey is? (Look for key words).

Processed  2

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)

1. Yes  2. No  3. Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind? Repeat of question elements 3

Bees  1  Foreign  1  Canadian Motif  1

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)

1. Better  2. About the same  3. Worse

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)

1. Yes  2. No  3. Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

Texas Pride  4

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)

1. Better  2. About the same  3. Worse

(Q35) Do you purchase a particular brand of honey?

1. Yes  2. No

(Q36) What form of honey do you generally purchase? (frequencies)

Liquid  Squeeze bottle  Tub


(Q37) Sex (Frequencies)

1. Male  2. Female

(Q38) What is your ethnic background?


(Q39) My age is in the following bracket:

1. Under 20  2. 20-49  3. 50-69  4. 70+

(Q40) My marital status is:


(Q41) How many persons in your household like honey? (Average)

2.4

(Q42) My school education includes: (mark highest level of attainment).

1. Grade School  2. Part of High School  3. All of High School

4. Part of College  5. All of College  6. Graduate School

(Q43) My household gross annual income is:

1. Under $12,000  2. $12,000-23,999  3. $24,000-35,999

4. $36,000-47,999  5. $48,000-79,999  6. Over $80,000
Table B.3c. Frequencies and Percentage Responses to Honey Questionnaire, Hispanics, DFW Area

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>Store</th>
<th>Day</th>
<th>Hour</th>
<th>1. Honey Purchaser</th>
<th>2. 26 Random Shopper</th>
</tr>
</thead>
</table>

**HONEY QUESTIONNAIRE**

**Q1** How often do you grocery shop? (Frequencies)
- 1 3 3 times/week
- 2 7 2 times/weekly
- 3 9 Weekly
- 4 6 Bimonthly
- 5 1 Monthly
- 6 1 Other (Specify)

**Q2** Where do you usually read or hear information about the health or nutritional value of foods? (Frequencies)
- a 13 Newspapers
- b 7 Magazines
- c 3 Radio
- d 13 Television
- e 0 Food Labels
- f 1 In Store Displays
- g 2 Other (Doctor)

**Q3** In the past month, how many times have you purchased each of the following products? (Enter number for each) (%)
- a 44.4 Preserves
- b 74.1 Jam/Jelly
- c 14.8 Molasses
- d 63 Syrup
- e 37 Honey

**Q10** Do you use honey in your household?
- 1.16 Yes
- 2.11 No

**FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE.**

1 = Disagree, 2 = Somewhat Disagree, 3 = Not sure, 4 = Somewhat Agree, 5 = Agree

**Q11** I would use honey more frequently if it were easier to use. (%) 1 2 3 4 5
 **Q12** I think honey should come in jars. (%) 1 2 3 4 5
 **Q13** Honey should come in tamper-proof containers. (%) 1 2 3 4 5
 **Q14** Honey is healthier than other sweeteners. (%) 1 2 3 4 5
 **Q15** Honey has medicinal properties. (%) 1 2 3 4 5
 **Q16** All honey tastes alike. (%) 1 2 3 4 5

If not honey user, go to demographics

**Q17** I am a frequent user of honey. (%) 1 2 3 4 5
 **Q18** Honey brands do not influence my purchase. (%) 1 2 3 4 5
 **Q19** Before I purchase honey, I compare prices of available brands. (%) 1 2 3 4 5
 **Q20** I tend to purchase the most inexpensive honey. (%) 1 2 3 4 5
 **Q21** I find honey labeling to be very helpful. (%) 1 2 3 4 5
 **Q22** It is important for me to know where the honey I buy is produced. (%) 1 2 3 4 5
 **Q23** Are you familiar with creamed honey? (Frequencies)
- Yes
- No
- Not Sure
(Q24) Are you familiar with spun honey? (Frequencies)
1. Yes  2. No  3. Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)
1. Better  2. Same  3. Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey: (Frequencies)
1. Easier to use  2. Same  3. More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).
Dairy Additives

(Q28) What do you think spun honey is? (Look for key words).
Concentrated

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)
1. Yes  2. No  3. Not Sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?
Repeat of question elements  3. Foreign

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)
1. Better  2. About the same  3. Worse

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)
1. Yes  2. No  3. Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?
Texas Pride  4. Bees  2. Honey Brands

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)
1. Better  2. About the same  3. Worse

(Q35) Do you purchase a particular brand of honey?
1. Yes  2. No

(Q36) What form of honey do you generally purchase? (Frequencies)
Jar (%) 2. Squeeze bottle (%) 3. Tub (%)

DEMOGRAPHICS

(Q37) 1. Male  2. Female

(Q38) What is your ethnic background?

(Q39) My age is in the following bracket:
1. Under 20  2. 20-29  3. 30-39  4. 40-49  5. 50-59  6. 60+

(Q40) My marital status is:

(Q41) How many persons in your household like honey? 2.62 persons (Average)

(Q42) My school education includes: (mark highest level of attainment).
1. Grade School  2. Part of High School  3. All of High School
4. Part of College  5. All of College  6. Graduate School

(Q43) My household gross annual income is:
1. Under $12,000  2. $12,000-23,999  3. $24,000-35,999
4. $36,000-47,999  5. $48,000-79,999  6. Over $80,000
Table B.4. Mean Values of Responses and Results of ANOVA on Means, by Race, Q4-Q22

<table>
<thead>
<tr>
<th>Question</th>
<th>Characteristics</th>
<th>Mean Value</th>
<th>White (n=352)</th>
<th>Black (n=25)</th>
<th>Hispanic (n=27)</th>
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</thead>
<tbody>
<tr>
<td>4</td>
<td>Food Budget</td>
<td></td>
<td>3.28</td>
<td>3.64</td>
<td>3.44</td>
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<tr>
<td>5</td>
<td>Price Sensitivity</td>
<td></td>
<td>4.40&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.84</td>
<td>4.41&lt;sup&gt;a&lt;/sup&gt;</td>
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<tr>
<td>6</td>
<td>Coupon Redemption</td>
<td>4.08</td>
<td>3.68</td>
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<td>7</td>
<td>Low Fat Foods</td>
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<td>3.88</td>
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<td>Low Calorie Foods</td>
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<td>3.80</td>
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<td>2.61</td>
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<td>Honey in Jars</td>
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<td>3.52&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>Tamper Proof Containers</td>
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<td>4.22</td>
<td>4.38</td>
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<tr>
<td>14</td>
<td>Healthier Sweetener</td>
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<td>4.48</td>
<td>4.12</td>
<td></td>
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<tr>
<td>15</td>
<td>Medicinal Properties</td>
<td>3.34</td>
<td>4.18&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>16</td>
<td>Tastes Alike</td>
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<td>2.52</td>
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<td>3.22</td>
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<td>19</td>
<td>Brand Price</td>
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<td>Honey Price</td>
<td>2.23</td>
<td>2.82&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>Honey Origin</td>
<td>2.90</td>
<td>2.94</td>
<td>3.00</td>
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</table>

<sup>a</sup>Indicates a mean larger than across groups at the 5% level of significance. If not indicated otherwise, no difference is present.
Table B.5a. Frequencies and Percentage Responses to Honey Questionnaire, Less Than 20 Years of Age, DFW Area

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>Store</th>
<th>Day</th>
<th>Hour</th>
<th>Honey Purchaser</th>
<th>Random Shopper</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1_0 Honey</td>
<td>2_6 Random</td>
</tr>
</tbody>
</table>

**HONEY QUESTIONNAIRE**

(Q1) How often do you grocery shop?  
(Frequencies)  
1_1 3 times/week 2_1 2 times/weekly 3_4 Weekly 4_0 Bimonthly 5_0 Monthly 6_0 Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods?  
(Frequencies)  
a_2 Newspapers b_1 Magazines c_0 Radio d_5 Television e_0 Food Labels f_2 In Store Displays g_0 Other (Doctor)

(Q3) In the past month, how many times have you purchased each of the following products?  
Enter number for each (%)  
a_16.6 Preserves b_67 Jam/Jelly c_16.6 Molasses d_16.6 Syrup e_0 Honey

**PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR.**  
n=6

1 = Not sure, 2 = Rarely, if ever, 3 = Seldom, 4 = Sometimes, 5 = Usually

(Q4) I run my household on a strict food budget. (%)  
1 2 3 4 5

(Q5) Price is an important consideration in my grocery shopping. (%)  
1 2 3 4 5 0 0 16.6 0 0 0 66.6 0 0 0 0 0

(Q6) When I get food coupons, I redeem them. (%)  
1 2 3 4 5 0 16.6 16.6 33.4 33.4

(Q7) I buy low-fat foods when possible. (%)  
1 2 3 4 5 0 16.6 0 33.4 33.4

(Q8) I buy low calorie foods when possible. (%)  
1 2 3 4 5 0 33.4 16.6 33.4 16.6

(Q9) The meals we prepare at home are nutritionally balanced. (%)  
1 2 3 4 5 0 16.6 33.4 0 50

(Q10) Do you use honey in your household?  
1_5 Yes 2_1 No

FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE.  
n=6

1 = Disagree, 2 = Somewhat Disagree, 3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%)  
1 2 3 4 5 0 0 16.6 16.6 16.6

(Q12) I think honey should come in jars. (%)  
1 2 3 4 5 0 0 33.4 16.6 16.6

(Q13) Honey should come in tamper-proof containers. (%)  
1 2 3 4 5 0 0 40 0 40

(Q14) Honey is healthier than other sweeteners. (%)  
1 2 3 4 5 0 0 50 0 16.6

(Q15) Honey has medicinal properties. (%)  
1 2 3 4 5 0 0 33.4 0 16.6

(Q16) All honey tastes alike. (%)  
1 2 3 4 5 0 0 66.6 0 16.6 0 16.6

(Q17) I am a frequent user of honey. (%)  
1 2 3 4 5 0 100 0 0 0 0

(Q18) Honey brands do not influence my purchase. (%)  
1 2 3 4 5 0 66.7 0 0 33.4

(Q19) Before I purchase honey, I compare prices of available brands. (%)  
1 2 3 4 5 0 66.7 0 0 33.4

(Q20) I tend to purchase the most inexpensive honey. (%)  
1 2 3 4 5 0 66.7 0 33.4 0 0

(Q21) I find honey labeling to be very helpful. (%)  
1 2 3 4 5 0 66.7 0 0 33.4

(Q22) It is important for me to know where the honey I buy is produced. (%)  
1 2 3 4 5 0 66.7 0 33.4 0 0

(Q23) Are you familiar with creamed honey?  
(Frequencies)  
1_1 Yes 2_2 No 3_0 Not Sure

58
(Q24) Are you familiar with spun honey?
(Frequencies)
1 _ 2 _ Yes 2 _ 1 _ No 3 _ 1 _ Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste?
(Frequencies)
1 _ Better 2 _ Same 3 _ 2 _ Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey:
(Frequencies)
1 _ Easier to use 2 _ Same 3 _ 2 _ More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)
1 _ 6 _ Yes 2 _ 2 _ No 3 _ 1 _ Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)
1 _ Better 2 _ About the same 3 _ 2 _ Worse

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)
1 _ 2 _ Yes 2 _ No 3 _ 1 _ Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)
1 _ Better 2 _ About the same 3 _ 2 _ Worse

(Q35) Do you purchase a particular brand of honey?
1 _ Yes 2 _ 3 _ No

(Q36) What form of honey do you generally purchase? (frequencies)

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jar (%)</td>
<td>a_0</td>
<td>d_0</td>
<td>g_0</td>
</tr>
<tr>
<td>Squeeze bottle (%)</td>
<td>b</td>
<td>e_0</td>
<td>h_0</td>
</tr>
<tr>
<td>Tub (%)</td>
<td>c_0</td>
<td>f_0</td>
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</tbody>
</table>
Table B.5b. Frequencies and Percentage Responses to Honey Questionnaire, 20-29 Years of Age, DFW Area

Interviewer ______________________
Store___________________________
Day_________ Hour ________
1. __10__ Honey Purchaser
2. __75__ Random Shopper

HONEY QUESTIONNAIRE

(Q1) How often do you grocery shop?
(Frequencies)  
1. 10 3 times/week  
2. 18 2 times/weekly  
3. 45 Weekly  
4. 4 Bimonthly  
5. 3 Monthly  
6. 6 Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods? (Frequencies)  
2. 75 Newspapers  
1. 34 Magazines  
5. 9 Radio  
3. 3 Television  
7. 7 Food Labels  
3 In Store Displays  
10 Other (Specify)

(Q3) In the past month, how many times have you purchased each of the following products? (Enter number for each) (%)  
a. 34.9 Preserves  
b. 58.1 Jam/Jelly  
c. 5.8 Molasses  
d. 61.6 Syrup  
e. 47.7 Honey

PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR.

1 = Not sure, 2 = Rarely, if ever, 3 = Seldom, 4 = Sometimes, 5 = Usually

(Q4) I run my household on a strict food budget. (%)  
1. 64 Yes  
2. 21 No  
(Q10) Do you use honey in your household?

FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE.  n=86

1 = Disagree, 2 = Somewhat Disagree,  
3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%)  
1 = Agree, 2 = Somewhat Agree, 3 = Not sure, 4 = Somewhat Disagree, 5 = Disagree

(Q12) I think honey should come in jars. (%)  
1 = Agree, 2 = Somewhat Agree, 3 = Not sure, 4 = Somewhat Disagree, 5 = Disagree

(Q13) Honey should come in tamper-proof containers. (%)  
1 = Agree, 2 = Somewhat Agree, 3 = Not sure, 4 = Somewhat Disagree, 5 = Disagree

(Q14) Honey is healthier than other sweeteners. (%)  
1 = Agree, 2 = Somewhat Agree, 3 = Not sure, 4 = Somewhat Disagree, 5 = Disagree

(Q15) Honey has medicinal properties. (%)  
1 = Agree, 2 = Somewhat Agree, 3 = Not sure, 4 = Somewhat Disagree, 5 = Disagree

(Q16) All honey tastes alike. (%)  
1 = Agree, 2 = Somewhat Agree, 3 = Not sure, 4 = Somewhat Disagree, 5 = Disagree

If not honey user, go to demographics  
n=66

(Q17) I am a frequent user of honey. (%)  
1 = Agree, 2 = Somewhat Agree, 3 = Not sure, 4 = Somewhat Disagree, 5 = Disagree

(Q18) Honey brands do not influence my purchase. (%)  
1 = Agree, 2 = Somewhat Agree, 3 = Not sure, 4 = Somewhat Disagree, 5 = Disagree

(Q19) Before I purchase honey, I compare prices of available brands. (%)  
1 = Agree, 2 = Somewhat Agree, 3 = Not sure, 4 = Somewhat Disagree, 5 = Disagree

(Q20) I tend to purchase the most inexpensive honey. (%)  
1 = Agree, 2 = Somewhat Agree, 3 = Not sure, 4 = Somewhat Disagree, 5 = Disagree

(Q21) I find honey labeling to be very helpful. (%)  
1 = Agree, 2 = Somewhat Agree, 3 = Not sure, 4 = Somewhat Disagree, 5 = Disagree

(Q22) It is important for me to know where the honey I buy is produced. (%)  
1 = Agree, 2 = Somewhat Agree, 3 = Not sure, 4 = Somewhat Disagree, 5 = Disagree

(Q23) Are you familiar with creamed honey?  (Frequencies)  
1. 31 Yes  
2. 36 No  
3. 0 Not Sure
(Q24) Are you familiar with spun honey?
(Frequencies)
1..22....Yes 2.42....No 3.3....Not Sure

(Q25) Compared to regular liquid honey, how
does creamed or spun honey taste?
(Frequencies)
1...16....Better 2.11....Same 3...5....Worse

(Q26) Compared to regular liquid honey, is
creamed or spun honey: (Frequencies)
1...11....Easier to use 2.11....Same
3...9....More difficult to use

(Q27) What do you think creamed honey is?
(Look for key words).

(Q28) What do you think spun honey is? (Look
for key words).

(Q29) Have you ever purchased or tried
Canadian honey? (Frequencies)
1...3....Yes 2.52....No 3...5....Not sure

(Q30) When you think of Canadian honey, what
is the first thing that comes to mind?

(Q31) Compared to other honey, how does
Canadian honey taste? (Frequencies)
1...0....Better 2...1....About the same
3.0....Worse 4..16....Not sure

(Q32) Have you ever purchased or tried Texas
honey? (Frequencies)
1...52....Yes 2.1....No 3.12....Not sure

(Q33) When you think of Texas honey, what is
the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas
honey taste? (Frequencies)
1...18....Better 2.26....About the same
3...1....Worse 4...14....Not sure

(Q35) Do you purchase a particular brand of
honey?
1..29....Yes 2.37....No

(Q36) What form of honey do you generally
purchase? (frequencies)

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<tr>
<th>Jar (%)</th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
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<tbody>
<tr>
<td>27</td>
<td>a</td>
<td>d</td>
<td>g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Squeeze bottle (%)</th>
<th>b5</th>
<th>e</th>
<th>h</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tub (%)</th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td>c2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DEMOGRAPHICS

(Q37) 1...23....Male 2.63....Female

(Q38) What is your ethnic background?
1...71....White 2.9....Black 3.5....Hispanic 4.4....Other

(Q39) My age is in the following bracket:
1...1....Under 20 2.40-49 3.20-29 4.50-59 5.30-39 6.60+

(Q40) My marital status is:
1...63....Married 2.7....Single 3.2....Widowed 4.14....Divorced

(Q41) How many persons in your household like
honey? 2.86....persons (Average)

(Q42) My school education includes: (mark
highest level of attainment).
1...Grade School 2.3....Part of High School 3..9....All of High School
4.29....Part of College 5.30....All of College 6.17....Graduate School

(Q43) My household gross annual income is:
1...1....Under $12,000 2.10...$12,000-$23,999 3.18...$24,000-$35,999
4.18...$36,000-$47,999 5.24...$48,000-$79,999 6.11...Over $80,000
Table B.5c. Frequencies and Percentage Responses to Honey Questionnaire, 30-39 Years of Age, DFW Area

Interviewer ____________________________
Store _________________________________
Day ______ Hour ______
1. 13 Honey Purchaser
2. 70 Random Shopper

HONEY QUESTIONNAIRE

(Q1) How often do you grocery shop?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 _9 _3 times/week</td>
<td>2 _14 _2 times/weekly</td>
</tr>
</tbody>
</table>

(Q2) Where do you usually read or hear information about the health or nutritional value of foods?

<table>
<thead>
<tr>
<th>Source</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a _24 Newspapers</td>
<td>35.3</td>
</tr>
<tr>
<td>c _3 Radio</td>
<td>15.3</td>
</tr>
<tr>
<td>e _4 Food Labels</td>
<td>3.7</td>
</tr>
<tr>
<td>f _2 In Store Displays</td>
<td>3.7</td>
</tr>
</tbody>
</table>

(Q3) In the past month, how many times have you purchased each of the following products?

<table>
<thead>
<tr>
<th>Product</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a _29 _Preserves</td>
<td>47.1</td>
</tr>
<tr>
<td>b _55 _Jam/Jelly</td>
<td>19.3</td>
</tr>
<tr>
<td>c _1 Molasses</td>
<td>3.7</td>
</tr>
<tr>
<td>d _34 _Syrup</td>
<td>3.7</td>
</tr>
<tr>
<td>e _34 _Honey</td>
<td>9.3</td>
</tr>
</tbody>
</table>

(Please tell me how well each of these statements reflect your behavior. n=85)

I = Not sure, 2 = Rarely, if ever, 3 = Seldom, 4 = Sometimes, 5 = Usually

(Q4) I run my household on a strict food budget. (%) 1 2 3 4 5

Please tell me how you use honey in your household.

1 _54 Yes  2 _31 No

FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE.  n=85

1 = Disagree, 2 = Somewhat Disagree, 3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%) 1 2 3 4 5

(Q12) I think honey should come in jars. (%) 1 2 3 4 5

(Q13) Honey should come in tamper-proof containers. (%) 1 2 3 4 5

(Q14) Honey is healthier than other sweeteners. (%) 1 2 3 4 5

(Q15) Honey has medicinal properties. (%) 1 2 3 4 5

(Q16) All honey tastes alike. (%) 1 2 3 4 5

For the next statements please tell me to what extent you agree or disagree. n=54

(Q17) I am a frequent user of honey. (%) 1 2 3 4 5

(Q18) Honey brands do not influence my purchase. (%) 1 2 3 4 5

(Q19) Before I purchase honey, I compare prices of available brands. (%) 1 2 3 4 5

(Q20) I tend to purchase the most inexpensive honey. (%) 1 2 3 4 5

(Q21) I find honey labeling to be very helpful. (%) 1 2 3 4 5

(Q22) It is important for me to know where the honey I buy is produced. (%) 1 2 3 4 5

(Q23) Are you familiar with creamed honey?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 _20 _Yes</td>
<td>2 _34 _No</td>
</tr>
</tbody>
</table>

(Q24) It is important for me to know where the honey I buy is produced. (%) 1 2 3 4 5

(Q25) I tend to purchase the most expensive honey. (%) 1 2 3 4 5

(Q26) Honey is a healthy food. (%) 1 2 3 4 5

(Q27) Honey is a low-calorie food. (%) 1 2 3 4 5

(Q28) The meals we prepare at home are nutritionally balanced. (%) 1 2 3 4 5

(Q29) I find honey to be an essential part of my diet. (%) 1 2 3 4 5

(Q30) Honey has medicinal properties. (%) 1 2 3 4 5

(Q31) The honey I purchase is produced in my state. (%) 1 2 3 4 5

(Q32) I would use honey more frequently if it were easier to buy. (%) 1 2 3 4 5

(Q33) I find honey labeling to be very helpful. (%) 1 2 3 4 5

(Q34) It is important for me to know where the honey I buy is produced. (%) 1 2 3 4 5

(Q35) Are you familiar with creamed honey?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 _20 _Yes</td>
<td>2 _34 _No</td>
</tr>
</tbody>
</table>
(Q24) Are you familiar with spun honey? (Frequencies)
1. 17 Yes 2. 35 No 3. 2 Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)
1. 13 Better 2. 9 Same 3. 1 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey (Frequencies)
1. 8 Easier to use 2. 10 Same 3. 5 More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)
1. 6 Yes 2. 36 No 3. 11 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)
1. 1 Better 2. 6 About the same 3. 0 Worse 4. 2 Not sure

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)
1. 26 Yes 2. 9 No 3. 18 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)
1. 11 Better 2. 12 About the same 3. 0 Worse 4. 13 Not sure

(Q35) Do you purchase a particular brand of honey?
1. 28 Yes 2. 26 No

(Q36) What form of honey do you generally purchase? (frequencies)

<table>
<thead>
<tr>
<th>Jar (%)</th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>28</td>
<td>d 0</td>
<td>g 0</td>
</tr>
<tr>
<td>b</td>
<td>22</td>
<td>e 0</td>
<td>h 1</td>
</tr>
<tr>
<td>c</td>
<td>2</td>
<td>f 1</td>
<td></td>
</tr>
</tbody>
</table>

(DEMOGRAPHICS)

(Q37) 1. 41 Male 2. 44 Female

(Q38) What is your ethnic background?
1. 73 White 2. 5 Black 3. 7 Hispanic 4. 0 Other

(Q39) My age is in the following bracket:
1. 1 Under 20 2. 40-49 3. 20-29 4. 50-59 5. 30-39 6. 60+

(Q40) My marital status is:
1. 42 Married 2. 40 Single 3. 1 Widowed 4. 2 Divorced

(Q41) How many persons in your household like honey? 1. 93 persons (Average)

(Q42) My school education includes: (mark highest level of attainment).
1. 0 Grade School 2. 2 Part of High School 3. 12 All of High School 4. 26 Part of College 5. 33 All of College 6. 12 Graduate School

(Q43) My household gross annual income is:
1. 13 Under $12,000 2. 16 $12,000-23,999 3. 26 $24,000-35,999 4. 11 $36,000-47,999 5. 18 $48,000-79,999 6. 2 Over $80,000
Table B.5d. Frequencies and Percentage Responses to Honey Questionnaire, 40-49 Years of Age, DFW Area

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>Store</th>
<th>Day</th>
<th>Hour</th>
<th>Honey Purchaser</th>
<th>Random Shopper</th>
</tr>
</thead>
<tbody>
<tr>
<td>____________</td>
<td>_______</td>
<td>______</td>
<td>______</td>
<td>8</td>
<td>58</td>
</tr>
</tbody>
</table>

**HONEY QUESTIONNAIRE**

(Q1) How often do you grocery shop? (Frequencies)

<table>
<thead>
<tr>
<th>(Frequencies)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3 times/week</strong></td>
<td>14</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td><strong>2 times/weekly</strong></td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td><strong>Weekly</strong></td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td><strong>Monthly</strong></td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

(Q2) Where do you usually read or hear information about the health or nutritional value of foods? (Frequencies)

<table>
<thead>
<tr>
<th>(Frequencies)</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Newspapers</strong></td>
<td>32</td>
<td>16</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Magazines</strong></td>
<td>6</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Radio</strong></td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Television</strong></td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Food Labels</strong></td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>In Store Displays</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

(Q3) In the past month, how many times have you purchased each of the following products? (Enter number for each) (%)

<table>
<thead>
<tr>
<th>(Frequencies)</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preserves</strong></td>
<td>48.4</td>
<td>23.2</td>
<td>12</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Jam/Jelly</strong></td>
<td>53.6</td>
<td>56.4</td>
<td>23</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Molasses</strong></td>
<td>13.0</td>
<td>23.2</td>
<td>12</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Syrup</strong></td>
<td>52.2</td>
<td>56.4</td>
<td>23</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Honey</strong></td>
<td>49.3</td>
<td>51.8</td>
<td>21</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

(Please tell me how well each of these statements reflect your behavior. n=69)

**(Q10)** Do you use honey in your household?

| 1 | 50 | Yes | 2 | 19 | No |

**For the next statements please tell me to what extent you agree or disagree. n=68**

1 = Disagree, 2 = Somewhat Disagree, 3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>55.9</strong></td>
<td>5.9</td>
<td>4.4</td>
<td>8.8</td>
<td>25</td>
</tr>
</tbody>
</table>

(Q12) I think honey should come in jars. (%)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>26.5</strong></td>
<td>2.9</td>
<td>22.1</td>
<td>18</td>
<td>45.6</td>
</tr>
</tbody>
</table>

(Q13) Honey should come in tamper-proof containers. (%)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>20.6</strong></td>
<td>1.5</td>
<td>7.4</td>
<td>1.5</td>
<td>67.6</td>
</tr>
</tbody>
</table>

(Q14) Honey is healthier than other sweeteners. (%)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>13.2</strong></td>
<td>1.5</td>
<td>7.4</td>
<td>13.2</td>
<td>64.7</td>
</tr>
</tbody>
</table>

(Q15) Honey has medicinal properties. (%)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>25</strong></td>
<td>1.5</td>
<td>20.6</td>
<td>8.8</td>
<td>44.2</td>
</tr>
</tbody>
</table>

(Q16) All honey tastes alike. (%)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>72</strong></td>
<td>1.5</td>
<td>7.4</td>
<td>0</td>
<td>19.1</td>
</tr>
</tbody>
</table>

If not honey user, go to demographics n=50

(Q17) I am a frequent user of honey. (%)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>22</strong></td>
<td>2</td>
<td>2</td>
<td>20</td>
<td>54</td>
</tr>
</tbody>
</table>

(Q18) Honey brands do not influence my purchase. (%)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>40</strong></td>
<td>14</td>
<td>4</td>
<td>4</td>
<td>38</td>
</tr>
</tbody>
</table>

(Q19) Before I purchase honey, I compare prices of available brands. (%)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>30</strong></td>
<td>6</td>
<td>0</td>
<td>10</td>
<td>54</td>
</tr>
</tbody>
</table>

(Q20) I tend to purchase the most inexpensive honey. (%)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>58</strong></td>
<td>8</td>
<td>4</td>
<td>12</td>
<td>14</td>
</tr>
</tbody>
</table>

(Q21) I find honey labeling to be very helpful. (%)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>14</strong></td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>70</td>
</tr>
</tbody>
</table>

(Q22) It is important for me to know where the honey I buy is produced. (%)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>18</strong></td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>46</td>
</tr>
</tbody>
</table>

(Q23) Are you familiar with creamed honey? (Frequencies)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>126</strong></td>
<td>26</td>
<td>23</td>
<td>13</td>
<td>1</td>
</tr>
</tbody>
</table>

1 = Yes, 2 = No, 3 = Not Sure

64
(Q24) Are you familiar with spun honey? (Frequencies)
1.14 Yes 2.35 No 3.1 Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)
1.6 Better 2.12 Same 3.9 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey: (Frequencies)
1.7 Easier to use 2.12 Same 3.8 More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)
1.4 Yes 2.36 No 3.9 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)
1.0 Better 2.1 About the same 3.1 Worse 4.11 Not sure

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)
1.40 Yes 2.1 No 3.9 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)
1.20 Better 2.9 About the same 3.0 Worse 4.14 Not sure

(Q35) Do you purchase a particular brand of honey?
1.22 Yes 2.27 No

(Q36) What form of honey do you generally purchase? (Frequencies)

<table>
<thead>
<tr>
<th>Jar (%)</th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td>a 32</td>
<td>d 0</td>
<td>g 0</td>
<td></td>
</tr>
<tr>
<td>Squeeze bottle (%)</td>
<td>b 16</td>
<td>e 0</td>
<td>h 1</td>
</tr>
<tr>
<td>Tub (%)</td>
<td>c 0</td>
<td>f 0</td>
<td></td>
</tr>
</tbody>
</table>

(Q37) 1.26 Male 2.43 Female

(Q38) What is your ethnic background?
1.59 White 2.4 Black 3.5 Hispanic 4.0 Other

(Q39) My age is in the following bracket:
1. Under 20 2. 40-49 3. 20-29 4. 50-59 5. 30-39 6. 60+

(Q40) My marital status is:

(Q41) How many persons in your household like honey? 2.30 persons (Average)

(Q42) My school education includes: (mark highest level of attainment).

(Q43) My household gross annual income is:
1. Under $12,000 2. $12,000-23,999 3. $24,000-35,999 4. $36,000-47,999 5. $48,000-79,999 6. Over $80,000
Table B.5e. Frequencies and Percentage Responses to Honey Questionnaire, 50-59 Years of Age, DFW Area

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>Store</th>
<th>Day</th>
<th>Hour</th>
<th>Questionnaire Details</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>_______</td>
<td>_______</td>
<td>1</td>
<td>17</td>
<td>Honey Purchaser</td>
<td>1 Yes, 2 No</td>
</tr>
<tr>
<td>2</td>
<td>Random Shopper</td>
<td>88</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HONEY QUESTIONNAIRE**

(Q1) How often do you grocery shop?  
*(Frequencies)*  
1 93 times/week 2 24 2 times/weekly 3 52 Weekly 4 12 Bimonthly 5 7 Monthly 6 2 Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods?  
*(Frequencies)*  
a 30 Newspapers  b 50 Magazines  c 7 Radio  d 42 Television  e 6 Food Labels  f 1 In Store Displays  g 14 Other (Doctor)

(Q3) In the past month, how many times have you purchased each of the following products?  
*(Enter number for each)*  
a 45.3 Preserves  b 63.2 Jam/Jelly  c 8.4 Molasses  d 68.9 Syrup  e 44.3 Honey

**PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR.**  
n=106

<table>
<thead>
<tr>
<th>Statement</th>
<th>Frequency</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>I run my household on a strict food budget.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Price is an important consideration in my grocery shopping.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>When I get food coupons, I redeem them.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I buy low-fat foods when possible.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I buy low calorie foods when possible.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The meals we prepare at home are nutritionally balanced.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Do you use honey in your household?</td>
<td></td>
<td>1 Yes, 2 No</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE.**  
n=102

1 = Disagree, 2 = Somewhat Disagree, 3 = Not sure, 4 = Somewhat Agree, 5 = Agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>Frequency</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would use honey more frequently if it were easier to use.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I think honey should come in jars.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Honey should come in tamper-proof containers.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Honey is healthier than other sweeteners.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Honey has medicinal properties.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>In the past month, how many times have you purchased each of the following products?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am a frequent user of honey.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Honey brands do not influence my purchase.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Before I purchase honey, I compare prices of available brands.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I tend to purchase the most inexpensive honey.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I find honey labeling to be very helpful.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>It is important for me to know where the honey I buy is produced.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Are you familiar with creamed honey? (Frequencies)</td>
<td></td>
<td>1</td>
<td>36 Yes, 2</td>
<td>33 No, 3</td>
<td>3</td>
<td>Not Sure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Frequency</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>I run my household on a strict food budget.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Price is an important consideration in my grocery shopping.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>When I get food coupons, I redeem them.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I buy low-fat foods when possible.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I buy low calorie foods when possible.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The meals we prepare at home are nutritionally balanced.</td>
<td>(%)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

66
(Q24) Are you familiar with spun honey?  
(Frequencies)  
1.25 Yes 2.45 No 3.2 Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste?  
(Frequencies)  
1.17 Better 2.14 Same 3.7 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey:  
(Frequencies)  
1.16 Easier to use 2.17 Same 3.9 More difficult to use

(Q27) What do you think creamed honey is?  
(Look for key words).

(Q28) What do you think spun honey is?  
(Look for key words).

(Q29) Have you ever purchased or tried Canadian honey?  
(Frequencies)  
1.4 Yes 2.54 No 3.13 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste?  
(Frequencies)  
1.2 Better 2.3 About the same 3.0 Worse 4.16 Not sure

(Q32) Have you ever purchased or tried Texas honey?  
(Frequencies)  
1.52 Yes 2.6 No 3.14 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste?  
(Frequencies)  
1.21 Better 2.22 About the same 3.0 Worse 4.14 Not sure

(Q35) Do you purchase a particular brand of honey?  
1.35 Yes 2.37 No

(Q36) What form of honey do you generally purchase?  
(Frequencies)  
Jar (%)  Liquid: 29  Creamed: 1  Spun: 0
Squeeze bottle (%)  b. 38  e. 1  h. 1
Tub (%)  c. 3  f. 0

(Q37) 1.23 Male 2.83 Female

(Q38) What is your ethnic background?  
1.91 White 2.5 Black 3.8 Hispanic 4.2 Other

(Q39) My age is in the following bracket:  

(Q40) My marital status is:  
1.84 Married 2.10 Single 3.2 Widowed 4.10 Divorced

(Q41) How many persons in your household like honey? 2.72 persons (Average)

(Q42) My school education includes:  
1.0 Grade School 2.2 Part of High School 3.18 All of High School 4.40 Part of College 5.36 All of College 6.10 Graduate School

(Q43) My household gross annual income is:  
1.3 Under $12,000 2.12 $12,000-$23,999 3.31 $24,000-$35,999 4.26 $36,000-$47,999 5.19 $48,000-$79,999 6.10 Over $80,000
Table B.5f. Frequencies and Percentage Responses to Honey Questionnaire, Over 60 Years of Age, DFW Area

Interviewer ______________
Store ________________
Day ________________ Hour ____________
1. 12 Honey Purchaser
2. 41 Random Shopper

HONEY QUESTIONNAIRE

(Q1) How often do you grocery shop?
(Frequencies)
1 = 13 3 times/week 2 = 8 2 times/weekly
3 = 27 Weekly 4 = 3 Bimonthly
5 = 0 Monthly 6 = 3 Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods?
(Frequencies)
a = 19 Newspapers b = 20 Magazines
c = 2 Radio d = 26 Television
e = 4 Food Labels f = 0 In Store Displays
 g = 14 Other (Doctor)

(Q3) In the past month, how many times have you purchased each of the following products?
(Enter number for each) (%)
a = 40.7 Preserves b = 40.7 Jam/Jelly
c = 14.8 Molasses d = 51.9 Syrup
e = 55.6 Honey

PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR.
n = 54

1 = Not sure, 2 = Rarely, if ever, 3 = Seldom, 4 = Sometimes, 5 = Usually

(Q4) I run my household on a strict food budget. (%) 1 = 2 3 4 5
1.9 50.0 9.3 13.0 28.0

(Q5) Price is an important consideration in my grocery shopping. (%) 1 = 2 3 4 5
1.9 18.5 0 13.0 66.7

(Q6) When I get food coupons, I redeem them. (%) 1 = 2 3 4 5
3.7 18.5 5.0 13.0 57.4

(Q7) I buy low-fat foods when possible. (%) 1 = 2 3 4 5
1.9 5.8 0 11.1 81.5

(Q8) I buy low calorie foods when possible. (%) 1 = 2 3 4 5
5.6 7.4 9.3 16.7 61.1

(Q9) The meals we prepare at home are nutritionally balanced. (%) 1 = 2 3 4 5
5.6 1.9 5.6 18.5 68.5

(Q10) Do you use honey in your household?
1 = Yes, 2 = No

FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE. n = 53

1 = Disagree, 2 = Somewhat Disagree,
3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%) 1 = 2 3 4 5
69.6 5.7 9.4 1.9 24.5

(Q12) I think honey should come in jars. (%) 1 = 2 3 4 5
39.6 3.8 15.1 0 41.5

(Q13) Honey should come in tamper-proof containers. (%) 1 = 2 3 4 5
18.9 0 9.4 1.9 66.0

(Q14) Honey is healthier than other sweeteners. (%) 1 = 2 3 4 5
94.0 0 17.0 6.7 68.0

(Q15) Honey has medicinal properties. (%) 1 = 2 3 4 5
17.0 1.9 34.0 3.8 43.4

(Q16) All honey tastes alike. 1 = 2 3 4 5
68.0 0 11.3 3.8 17.0

(Q17) I am a frequent user of honey. (%) 1 = 2 3 4 5
22.0 0 2.4 22.0 0

(Q18) Honey brands do not influence my purchase. (%) 1 = 2 3 4 5
61.0 0 0 2.4 36.6

(Q19) Before I purchase honey, I compare prices of available brands. (%) 1 = 2 3 4 5
53.7 2.4 2.4 2.4 36.6

(Q20) I tend to purchase the most inexpensive honey. (%) 1 = 2 3 4 5
70.7 2.4 7.3 9.8 7.3

(Q21) I find honey labeling to be very helpful. (%) 1 = 2 3 4 5
22.0 2.4 7.3 7.3 66.5

(Q22) It is important for me to know where the honey I buy is produced. (%) 1 = 2 3 4 5
48.8 2.4 4.9 0 43.9

(Q23) Are you familiar with creamed honey?
(Frequencies)
1 = 20 Yes, 2 = 20 No, 3 = 1 Not Sure

68
(Q24) Are you familiar with spun honey? (Frequencies)
1 16 Yes 2 25 No 3 0 Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)
1 6 Better 2 8 Same 3 7 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey easier to use? (Frequencies)
1 9 Easier to use 2 8 Same 3 5 More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)
1 5 Yes 2 28 No 3 8 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)
1 4 Better 2 1 About the same 3 0 Worse 4 9 Not sure

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)
1 33 Yes 2 1 No 3 5 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)
1 9 Better 2 15 About the same 3 2 Worse 4 7 Not sure

(Q35) Do you purchase a particular brand of honey?
1 19 Yes 2 22 No

(Q36) What form of honey do you generally purchase? (Frequencies)

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jar (%)</td>
<td>26</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Squeeze bottle (%)</td>
<td>13</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Tub (%)</td>
<td>0</td>
<td>f</td>
<td>0</td>
</tr>
</tbody>
</table>

---

DEMOGRAPHICS

(Q37) What is your gender?
1 19 Male 2 35 Female

(Q38) What is your ethnic background?
1 52 White 2 2 Black 3 0 Hispanic 4 0 Other

(Q39) My age is in the following bracket:
1 Under 20 2 40-49 3 20-29 4 50-59 5 30-39 6 54-60+

(Q40) My marital status is:
1 31 Married 2 0 Single 3 16 Widowed 4 7 Divorced

(Q41) How many persons in your household like honey? 1 60 persons (Average)

(Q42) My school education includes: (mark highest level of attainment).
1 2 Grade School 2 1 Part of High School 3 19 All of High School 4 17 Part of College 5 9 All of College 6 4 Graduate School

(Q43) My household gross annual income is:
1 5 Under $12,000 2 13 $12,000-23,999 3 14 $24,000-35,999 4 6 $36,000-47,999 5 2 $48,000-79,999 6 4 Over $80,000
Table B.6. Mean Values of Responses and Results of ANOVA on Means, by Age Q4-Q22

<table>
<thead>
<tr>
<th>Question Characteristics</th>
<th>Mean Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;20</td>
</tr>
<tr>
<td></td>
<td>(n=6)</td>
</tr>
<tr>
<td>4 Food Budget</td>
<td>4.33&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>5 Price Sensitivity</td>
<td>4.67</td>
</tr>
<tr>
<td>6 Coupon Redemption</td>
<td>3.83</td>
</tr>
<tr>
<td>7 Low Fat Foods</td>
<td>4.17</td>
</tr>
<tr>
<td>8 Low Calorie Foods</td>
<td>3.33</td>
</tr>
<tr>
<td>9 Balanced Meals</td>
<td>3.83</td>
</tr>
<tr>
<td></td>
<td>(n=3)</td>
</tr>
<tr>
<td>11 Honey Convenience</td>
<td>2.50</td>
</tr>
<tr>
<td>12 Honey in Jars</td>
<td>3.33</td>
</tr>
<tr>
<td>13 Tamper Proof Containers</td>
<td>3.00</td>
</tr>
<tr>
<td>14 Healthier Sweetener</td>
<td>2.33&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>15 Medicinal Properties</td>
<td>2.67</td>
</tr>
<tr>
<td>16 Tastes Alike</td>
<td>2.00</td>
</tr>
<tr>
<td>17 Frequent User</td>
<td>1.00&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>18 Brand Influence</td>
<td>2.33</td>
</tr>
<tr>
<td>19 Brand Price</td>
<td>1.67</td>
</tr>
<tr>
<td>20 Honey Price</td>
<td>2.00</td>
</tr>
<tr>
<td>21 Honey Labeling</td>
<td>2.33</td>
</tr>
<tr>
<td>21 Honey Origin</td>
<td>1.67</td>
</tr>
</tbody>
</table>

<sup>a</sup>Indicates a mean larger than across groups at the 5% level of significance. If not indicated otherwise, no difference is present.

<sup>b</sup>Indicates a mean smaller than across groups at the 5% level of significance.
Table B.7a. Frequencies and Percentage Responses to Honey Questionnaire, Less Than High School Education, DFW Area

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>Store</th>
<th>Day</th>
<th>Hour</th>
<th>1. <em>3</em> Honey Purchaser</th>
<th>2. <em>16</em> Random Shopper</th>
</tr>
</thead>
</table>

**HONEY QUESTIONNAIRE**

(Q1) How often do you grocery shop? (Frequencies)

<table>
<thead>
<tr>
<th></th>
<th>1 3 3 times/week</th>
<th>2 3 2 times/weekly</th>
<th>3 7 Weekly</th>
<th>4 2 Bimonthly</th>
<th>5 1 Monthly</th>
<th>6 2 Other (Specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Q2) Where do you usually read or hear information about the health or nutritional value of foods? (Frequencies)

<table>
<thead>
<tr>
<th></th>
<th>a 7 Newspapers</th>
<th>b 4 Magazines</th>
<th>c 0 Radio</th>
<th>d 13 Television</th>
<th>e 0 Food Labels</th>
<th>f 0 In Store Displays</th>
<th>g 4 Other (Doctor)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Q3) In the past month, how many times have you purchased each of the following products? (Enter number for each) (%)

<table>
<thead>
<tr>
<th>a 47.4 Preserves</th>
<th>b 52.6 Jam/Jelly</th>
<th>c 15.8 Molasses</th>
<th>d 63.2 Syrup</th>
<th>e 57.9 Honey</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Please tell me how well each of these statements reflect your behavior. n=19)

1 = Not sure, 2 = Rarely, if ever, 3 = Seldom, 4 = Sometimes, 5 = Usually

(Q10) Do you use honey in your household?

1_12_Yes 2_7_No

For the next statements please tell me to what extent you agree or disagree. n=19

1 = Disagree, 2 = Somewhat Disagree, 3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%)

1 2 3 4 5

(Q12) I think honey should come in jars. (%)

1 2 3 4 5

(Q13) Honey should come in tamper-proof containers. (%)

1 2 3 4 5

(Q14) Honey is healthier than other sweeteners. (%)

1 2 3 4 5

(Q15) Honey has medicinal properties. (%)

1 2 3 4 5

(Q16) All honey tastes alike. (%)

1 2 3 4 5

If not honey user, go to demographics. n=12

(Q17) I am a frequent user of honey. (%)

1 2 3 4 5

(Q18) Honey brands do not influence my purchase. (%)

1 2 3 4 5

(Q19) Before I purchase honey, I compare prices of available brands. (%)

1 2 3 4 5

(Q20) I tend to purchase the most inexpensive honey. (%)

1 2 3 4 5

(Q21) I find honey labeling to be very helpful. (%)

1 2 3 4 5

(Q22) It is important for me to know where the honey I buy is produced. (%)

1 2 3 4 5

(Q23) Are you familiar with creamed honey? (Frequencies)

1 4 Yes 2 8 No 3 5 Not Sure

71
(Q24) Are you familiar with spun honey? (Frequencies)
1 3 Yes 2 9 No 3 Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)
1 0 Better 2 3 Same 3 1 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey easier to use? (Frequencies)
1 1 Easier to use 2 2 Same 3 1 More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)
1 0 Yes 2 9 No 3 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)
1 0 Better 2 3 About the same 3 1 Worse 4 Not sure

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)
1 1 Yes 2 0 No 3 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)
1 4 Better 2 4 About the same 3 0 Worse 4 3 Not sure

(Q35) Do you purchase a particular brand of honey?
1 6 Yes 2 6 No

(Q36) What form of honey do you generally purchase? (frequencies)

<table>
<thead>
<tr>
<th>Jar (%)</th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a 7</td>
<td>d 0</td>
<td>g 0</td>
</tr>
<tr>
<td>Squeeze Bottle (%)</td>
<td>b 4</td>
<td>e 0</td>
<td>h 1</td>
</tr>
<tr>
<td>Tub (%)</td>
<td>c 0</td>
<td>f 0</td>
<td></td>
</tr>
</tbody>
</table>

DEMOGRAPHICS

(Q37) 1 11 Male 2 8 Female

(Q38) What is your ethnic background?
1 11 White 2 5 Black 3 3 Hispanic 4 Other

(Q39) My age is in the following bracket:
1 1 Under 20 2 8 40-49 3 3 20-29 4 2 50-59 5 2 30-39 6 3 60+

(Q40) My marital status is:
1 11 Married 2 3 Single 3 2 Widowed 4 3 Divorced

(Q41) How many persons in your household like honey? 2 44 persons (Average)

(Q42) My school education includes: (mark highest level of attainment).
1 0 Grade School 2 Part of High School 3 All of High School 4 Part of College 5 All of College 6 Graduate School

(Q43) My household gross annual income is:
1 6 Under $12,000 2 5 $12,000-23,999 3 3 $24,000-35,999 4 2 $36,000-47,999 5 1 $48,000-79,999 6 0 Over $80,000
Table B.7b. Frequencies and Percentage Responses to Honey Questionnaire, High School Education, DFW Area

Interviewer ____________________________
Store _________________________________
Day _______ Hour _______
1. 8 Honey Purchaser
2. 74 Random Shopper

HONEY QUESTIONNAIRE

(Q1) How often do you grocery shop? (Frequencies)
1_7.3 times/week 2_14 2 times/weekly
3_42 Weekly 4_11 Bimonthly
5_1 Monthly 6_7 Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods? (Frequencies)
a_29 Newspapers b_22 Magazines
c_4 Radio d_42 Television
e_5 Food Labels f_1 In Store Displays
g_10 Other (Doctor)

(Q3) In the past month, how many times have you purchased each of the following products? (Enter number for each) %
a_39.0 Preserves b_56.1 Jam/Jelly
c_14.6 Molasses d_53.6 Syrup
e_43.9 Honey

PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR. n=82

1 = Not sure, 2 = Rarely, if ever, 3 = Seldom,
4 = Sometimes, 5 = Usually

(Q4) I run my household on a strict food budget. (%) 1 2 3 4 5
2.4 41.5 11.0 14.8 30.5

(Q5) Price is an important consideration in my grocery shopping. (%) 1 2 3 4 5
1.2 8.5 0 14.8 75.6

(Q6) When I get food coupons, I redeem them. (%) 1 2 3 4 5
2.5 17.3 25 210 56.8

(Q7) I buy low-fat foods when possible. (%) 1 2 3 4 5
0 19.8 2 25.8 52.4

(Q8) I buy low calorie foods when possible. (%) 1 2 3 4 5
2.4 25.8 3.7 23.2 43.9

(Q9) The meals we prepare at home are nutritionally balanced. (%) 1 2 3 4 5
2.4 3.7 4.9 25.8 63.4

(Q10) Do you use honey in your household? 1_54 Yes 2_28 No

FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE. n=82

1 = Disagree, 2 = Somewhat Disagree,
3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%) 1 2 3 4 5
57.5 3.8 7.5 3.8 27.5

(Q12) I think honey should come in jars. (%) 1 2 3 4 5
40.0 1.3 23.8 25 32.5

(Q13) Honey should come in tamper-proof containers. (%) 1 2 3 4 5
4.5 0 8.8 0 75.0

(Q14) Honey is healthier than other sweeteners. (%) 1 2 3 4 5
50.0 0 15.9 3.8 65.6

(Q15) Honey has medicinal properties. (%) 1 2 3 4 5
21.5 3.8 27.8 7.6 39.2

(Q16) All honey tastes alike. % 1 2 3 4 5
65.0 0 11.3 25 21.3

If not honey user, go to demographics n=54

(Q17) I am a frequent user of honey. (%) 1 2 3 4 5
38.2 3.6 3.6 18.2 36.4

(Q18) Honey brands do not influence my purchase. (%) 1 2 3 4 5
54.5 3.6 1.8 0 40.0

(Q19) Before I purchase honey, I compare prices of available brands. (%) 1 2 3 4 5
42.9 0 1.8 8 54.0

(Q20) I tend to purchase the most inexpensive honey. (%) 1 2 3 4 5
58.4 3.6 3.6 16.4 20.0

(Q21) I find honey labeling to be very helpful. (%) 1 2 3 4 5
33.9 1.8 29 71 4.2

(Q22) It is important for me to know where the honey I buy is produced. (%) 1 2 3 4 5
44.6 5.4 3.6 14.4

(Q23) Are you familiar with creamed honey? (Frequencies)
1_25 Yes 2_31 No 3_18 Not Sure
(Q24) Are you familiar with spun honey? (Frequencies)
1. Yes 2. No 3. Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)
1. Better 2. Same 3. Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey easier to use? (Frequencies)
1. Easier to use 2. Same 3. More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)
1. Yes 2. No 3. Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)
1. Yes 2. No 3. Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)

(Q35) Do you purchase a particular brand of honey?
1. Yes 2. No

(Q36) What form of honey do you generally purchase? (Frequencies)

(Q37) My marital status is:

(Q38) What is your ethnic background?

(Q39) My age is in the following bracket:
1. Under 20 2. 20-39 3. 40-59 4. 60+

(Q40) How many persons in your household like honey? (Average)
1. 1 2. 2 3. 3 4. 4

(Q41) My school education includes: (mark highest level of attainment)

(Q42) My household gross annual income is:
1. Under $12,000 2. $12,000-$23,999 3. $24,000-$35,999 4. $36,000-$47,999 5. $48,000-$79,999 6. Over $80,000

(Q43) What form of honey do you generally purchase? (Frequencies)

<table>
<thead>
<tr>
<th>Jar (%)</th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. 28</td>
<td>d. 2</td>
<td>g. 1</td>
<td></td>
</tr>
<tr>
<td>b. 24</td>
<td>e. 1</td>
<td>h. 2</td>
<td></td>
</tr>
<tr>
<td>c. 8</td>
<td>f. 0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

74
Table B.7c. Frequencies and Percentage Responses to Honey Questionnaire, Part of College Education, DFW Area

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>Store</th>
<th>Day</th>
<th>Hour</th>
<th>1. 18 Honey Purchaser</th>
<th>2. 115 Random Shopper</th>
</tr>
</thead>
</table>

**HONEY QUESTIONNAIRE**

(Q1) How often do you grocery shop? (Frequencies)
- 1. 16.3 times/week
- 2. 2.7 2 times/weekly
- 3. 69 Weekly
- 4. 12 Bimonthly
- 5. 9 Monthly
- 6. 3 Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods? (Frequencies)
- a. 44 Newspapers
- b. 56 Magazines
- c. 10 Radio
- d. 60 Television
- e. 6 Food Labels
- f. 3 In Store Displays
- g. 19 Other (Doctor)

(Q3) In the past month, how many times have you purchased each of the following products? (Enter number for each) (%)
- a. 38.8 preserves
- b. 56.4 Jam/Jelly
- c. 9.8 Molasses
- d. 58.4 Syrup
- e. 40.6 Honey

**PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR. n=133**

| 1 = Not sure, 2 = Rarely, if ever, 3 = Seldom, 4 = Sometimes, 5 = Usually |
| --- | --- | --- | --- | --- |
| I run my household on a strict food budget. (%) | 1 2 3 4 5 | 0.7 28.2 17.8 19.9 23.5 |
| Price is an important consideration in my grocery shopping. (%) | 1 2 3 4 5 | 0.7 13.2 3.7 16.2 66.2 |
| When I get food coupons, I redeem them. (%) | 1 2 3 4 5 | 0.7 20.0 7.4 19.3 52.5 |
| I buy low-fat foods when possible. (%) | 1 2 3 4 5 | 0.7 20.0 7.4 19.3 52.5 |
| I buy low-calorie foods when possible. (%) | 1 2 3 4 5 | 0.7 20.0 7.4 19.3 52.5 |
| The meals we prepare at home are nutritionally balanced. (%) | 1 2 3 4 5 | 0.7 37.4 27.2 61.0 |

(Q10) Do you use honey in your household?
- 1. 84 Yes
- 2. 51 No

**FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE. n=133**

1 = Disagree, 2 = Somewhat Disagree, 3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%) 1 2 3 4 5

(Q12) I think honey should come in jars. (%) 1 2 3 4 5

(Q13) Honey should come in tamper-proof containers. (%) 1 2 3 4 5

(Q14) Honey is healthier than other sweeteners. (%) 1 2 3 4 5

(Q15) Honey has medicinal properties. (%) 1 2 3 4 5

(Q16) All honey tastes alike. (%) 1 2 3 4 5

**If not honey user, go to demographics**

n=84

(Q17) I am a frequent user of honey. (%) 1 2 3 4 5

(Q18) Honey brands do not influence my purchase. (%) 1 2 3 4 5

(Q19) Before I purchase honey, I compare prices of available brands. (%) 1 2 3 4 5

(Q20) I tend to purchase the most inexpensive honey. (%) 1 2 3 4 5

(Q21) I find honey labeling to be very helpful. (%) 1 2 3 4 5

(Q22) It is important for me to know where the honey I buy is produced. (%) 1 2 3 4 5

(Q23) Are you familiar with creamed honey? (Frequencies)
- 1. 48 Yes
- 2. 36 No
- 3. 1 Not Sure
(Q24) Are you familiar with spun honey? (Frequencies)
1.34 Yes 2.42 No 3.2 Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)
1.15 Better 2.23 Same 3.6 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey easier to use? (Frequencies)
1.17 Easier to use 2.20 Same 3.9 More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)
1.8 Yes 2.58 No 3.18 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)
1.2 Better 2.6 About the same 3.0 Worse 4.21 Not sure

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)
1.62 Yes 2.5 No 3.16 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)
1.22 Better 2.28 About the same 3.1 Worse 4.17 Not sure

(Q35) Do you purchase a particular brand of honey?
1.36 Yes 2.49 No

(Q36) What form of honey do you generally purchase? (frequencies)

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jar (%)</td>
<td>a.43</td>
<td>d.1</td>
<td>g.1</td>
</tr>
<tr>
<td>Squeeze bottle (%)</td>
<td>b.47</td>
<td>e.2</td>
<td>h.0</td>
</tr>
<tr>
<td>Tub (%)</td>
<td>c.8</td>
<td>f.</td>
<td></td>
</tr>
</tbody>
</table>

DEMOGRAPHICS

(Q37) 1.32 Male 2.97 Female

(Q38) What is your ethnic background?
1.123 White 2.3 Black 3.9 Hispanic 4.1 Other

(Q39) My age is in the following bracket:
1.2 Under 20 2.23 20-29 3.27 30-39 4.40 40-59 5.28 50-59 6.17 60+

(Q40) My marital status is:
1.89 Married 2.24 Single 3.7 Widowed 4.15 Divorced

(Q41) How many persons in your household like honey? 2.38 persons (Average)

(Q42) My school education includes: (mark highest level of attainment)

(Q43) My household gross annual income is:
1.10 Under $12,000 2.20 $12,000-23,999 3.41 $24,000-35,999 4.30 $36,000-47,999 5.17 $48,000-79,999 6.12 Over $80,000
Table B.7d. Frequencies and Percentage Responses to Honey Questionnaire, College Education, DFW Area

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>Store</th>
<th>Day</th>
<th>Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>____________</td>
<td>______</td>
<td>____</td>
<td>_____</td>
</tr>
</tbody>
</table>

**HONEY QUESTIONNAIRE**

(Q1) How often do you grocery shop?  
(Frequencies)

| times/week | 16.3 | 2.23 | 2 times/weekly | 1.8 |
| 3. Weekly | 3.57 | 1.8 | Bimonthly | 0.8 |
| 5. Monthly | 5.8 | 6 | Other (Specify) | 6.6 |

(Q2) Where do you usually read or hear information about the health or nutritional value of foods?  
(Frequencies)

| Newspapers | 42 | Magazines | 59 |
| Radio | 11 | Television | 34 |
| Food Labels | 5 | In Store Displays | 6 |
| Other (Specify) | 22 |

(Q3) In the past month, how many times have you purchased each of the following products?  
(Enter number for each)

| Preserves | 37.0 | Jam/Jelly | 54.8 |
| Molasses | 7.8 | Syrup | 63.9 |
| Honey | 46.2 |

PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR.  
n=119

1 = Not sure, 2 = Rarely, if ever, 3 = Seldom, 4 = Sometimes, 5 = Usually

(Q4) I run my household on a strict food budget.  
(%)  
1 2 3 4 5  
0 38.7 7.6 24.4 29.4

(Q5) Price is an important consideration in my grocery shopping.  
(%)  
1 2 3 4 5  
0 17.7 5.9 21.0 61.3

(Q6) When I get food coupons, I redeem them.  
(%)  
1 2 3 4 5  
0 17.7 8.7 14.3 52.9

(Q7) I buy low-fat foods when possible.  
(%)  
1 2 3 4 5  
0 8.8 14.3 2.5 18.5 63.9

(Q8) I buy low calorie foods when possible.  
(%)  
1 2 3 4 5  
0 17.8 7.6 22.7 48.6

(Q9) The meals we prepare at home are nutritionally balanced.  
(%)  
1 2 3 4 5  
0 2.5 5.9 8.4 22.7 69.5

(Q10) Do you use honey in your household?  
1 _2_ Yes  
2 _2_ No

FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE.  
n=115

1 = Disagree, 2 = Somewhat Disagree, 3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use.  
(%)  
1 2 3 4 5  
42.9 7.6 5.9 10.9 32.8

(Q12) I think honey should come in jars.  
(%)  
1 2 3 4 5  
38.7 6.7 14.3 7.6 32.8

(Q13) Honey should come in tamper-proof containers.  
(%)  
1 2 3 4 5  
18.8 8.0 8.5 1.7 66.0

(Q14) Honey is healthier than other sweeteners.  
(%)  
1 2 3 4 5  
11.0 5.1 7.6 11.9 54.4

(Q15) Honey has medicinal properties.  
(%)  
1 2 3 4 5  
28.8 5.0 18.5 12.8 35.3

(Q16) All honey tastes alike.  
(%)  
1 2 3 4 5  
61.3 4.2 10.9 3.4 20.2

---

If not honey user, go to demographics  
n=92

(Q17) I am a frequent user of honey.  
(%)  
1 2 3 4 5  
18.1 10.6 7.4 16.0 47.9

(Q18) Honey brands do not influence my purchase.  
(%)  
1 2 3 4 5  
61.1 6.4 4.3 6.4 31.9

(Q19) Before I purchase honey, I compare prices of available brands.  
(%)  
1 2 3 4 5  
32.3 2.2 0 11.8 53.8

(Q20) I tend to purchase the most inexpensive honey.  
(%)  
1 2 3 4 5  
65.9 6.5 32.1 23.7

(Q21) I find honey labeling to be very helpful.  
(%)  
1 2 3 4 5  
18.0 10.9 2.2 6.5 42.4

(Q22) It is important for me to know where the honey I buy is produced.  
(%)  
1 2 3 4 5  
51.1 43.2 32.2 38.3

(Q23) Are you familiar with creamed honey?  
(Frequencies)  
1 _3_ Yes  
2 _5_ No  
3 _4_ Not Sure

---

77
(Q24) Are you familiar with spun honey? (Frequencies)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>58</th>
<th>No</th>
<th>3</th>
<th>Not Sure</th>
<th>5</th>
</tr>
</thead>
</table>

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)

<table>
<thead>
<tr>
<th></th>
<th>Better</th>
<th>2</th>
<th>Same</th>
<th>13</th>
<th>Worse</th>
<th>2</th>
</tr>
</thead>
</table>

(Q26) Compared to regular liquid honey, is creamed or spun honey easier to use? (Frequencies)

<table>
<thead>
<tr>
<th></th>
<th>Easier to use</th>
<th>17</th>
<th>Same</th>
<th>12</th>
<th>More difficult to use</th>
<th>3</th>
</tr>
</thead>
</table>

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>9</th>
<th>No</th>
<th>73</th>
<th>Not sure</th>
<th>11</th>
</tr>
</thead>
</table>

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)

<table>
<thead>
<tr>
<th></th>
<th>Better</th>
<th>3</th>
<th>About the same</th>
<th>2</th>
<th>Worse</th>
<th>3</th>
</tr>
</thead>
</table>

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>68</th>
<th>No</th>
<th>7</th>
<th>Not sure</th>
<th>18</th>
</tr>
</thead>
</table>

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)

<table>
<thead>
<tr>
<th></th>
<th>Better</th>
<th>30</th>
<th>About the same</th>
<th>26</th>
</tr>
</thead>
</table>

(Q35) Do you purchase a particular brand of honey?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>50</th>
<th>No</th>
<th>44</th>
</tr>
</thead>
</table>

(Q36) What form of honey do you generally purchase? (frequencies)

<table>
<thead>
<tr>
<th>Form of Honey</th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jar (%)</td>
<td>a 47</td>
<td>d 2</td>
<td>g 0</td>
</tr>
<tr>
<td>Squeeze Bottle (%)</td>
<td>b 50</td>
<td>e 1</td>
<td>h 1</td>
</tr>
<tr>
<td>Tub (%)</td>
<td>c 5</td>
<td>f 1</td>
<td></td>
</tr>
</tbody>
</table>

DEMOGRAPHICS

(Q37) What is your sex? (Frequencies)

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>42</th>
<th>Female</th>
<th>77</th>
</tr>
</thead>
</table>

(Q38) What is your ethnic background? (Frequencies)

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>108</th>
<th>Black</th>
<th>5</th>
</tr>
</thead>
</table>

(Q39) My age is in the following bracket:

<table>
<thead>
<tr>
<th></th>
<th>Under 20</th>
<th>0</th>
<th>20-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

(Q40) My marital status is:

<table>
<thead>
<tr>
<th></th>
<th>Married</th>
<th>86</th>
<th>Single</th>
<th>20</th>
<th>Widowed</th>
<th>2</th>
<th>Divorced</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
<td>3</td>
<td></td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

(Q41) How many persons in your household like honey? (Frequencies)

<table>
<thead>
<tr>
<th></th>
<th>Under 2, 42</th>
<th>2</th>
<th>42 persons</th>
<th>(Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

(Q42) My school education includes: (Mark highest level of attainment).

<table>
<thead>
<tr>
<th></th>
<th>Grade School</th>
<th>1</th>
<th>Part of High School</th>
<th>2</th>
<th>All of High School</th>
<th>3</th>
<th>Part of College</th>
<th>4</th>
<th>All of College</th>
<th>5</th>
<th>Graduate School</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Q43) My household gross annual income is:

<table>
<thead>
<tr>
<th></th>
<th>Under $12,000</th>
<th>2</th>
<th>$12,000-$23,999</th>
<th>3</th>
<th>$24,000-$35,999</th>
<th>4</th>
<th>$36,000-$47,999</th>
<th>5</th>
<th>$48,000-$79,999</th>
<th>6</th>
<th>Over $80,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

78
Table B.7e. Frequencies and Percentage Responses to Honey Questionnaire, Graduate School Education, DFW Area

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>Store</th>
<th>Day</th>
<th>Hour</th>
<th>1. Honey Purchaser</th>
<th>2. Random Shopper</th>
</tr>
</thead>
</table>

**HONEY QUESTIONNAIRE**

(Q1) How often do you grocery shop?

- 1. 3-5 times/week
- 2. 2 times/weekly
- 3. Weekly
- 4. Bimonthly
- 5. Monthly

(Q2) Where do you usually read or hear information about the health or nutritional value of foods?

- a. Newspapers
- b. Magazines
- c. Radio
- d. Television
- e. Food Labels
- f. In Store Displays
- g. Other (Specify)

(Q3) In the past month, how many times have you purchased each of the following products?

- a. Preserves
- b. Jam/Jelly
- c. Molasses
- d. Syrup
- e. Honey

(Q4) I run my household on a strict food budget. (%) 1 2 3 4 5

(Q5) Price is an important consideration in my grocery shopping. (%) 1 2 3 4 5

(Q6) When I get food coupons, I redeem them. (%) 1 2 3 4 5

(Q7) I buy low-fat foods when possible. (%) 1 2 3 4 5

(Q8) I buy low calorie foods when possible. (%) 1 2 3 4 5

(Q9) The meals we prepare at home are nutritionally balanced. (%) 1 2 3 4 5

(Q10) Do you use honey in your household?

1. Yes 2. No

(Q11) I would use honey more if it were easier to use. (%) 1 2 3 4 5

(Q12) I think honey should come in jars. (%) 1 2 3 4 5

(Q13) Honey should come in tamper-proof containers. (%) 1 2 3 4 5

(Q14) Honey is healthier than other sweeteners. (%) 1 2 3 4 5

(Q15) Honey has medicinal properties. (%) 1 2 3 4 5

(Q16) All honey tastes alike. (%) 1 2 3 4 5

(Q17) I am a frequent user of honey. (%) 1 2 3 4 5

(Q18) Honey brands do not influence my purchase. (%) 1 2 3 4 5

(Q19) Before I purchase honey, I compare prices of available brands. (%) 1 2 3 4 5

(Q20) I tend to purchase the most inexpensive honey. (%) 1 2 3 4 5

(Q21) I find honey labeling to be very helpful. (%) 1 2 3 4 5

(Q22) It is important for me to know where the honey I buy is produced. (%) 1 2 3 4 5

(Q23) Are you familiar with creamed honey?

1. Yes 2. No 3. Not Sure

FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE. n=50

(Q11) I would use honey more if it were easier to use. (%) 1 2 3 4 5

(Q12) I think honey should come in jars. (%) 1 2 3 4 5

(Q13) Honey should come in tamper-proof containers. (%) 1 2 3 4 5

(Q14) Honey is healthier than other sweeteners. (%) 1 2 3 4 5

(Q15) Honey has medicinal properties. (%) 1 2 3 4 5

(Q16) All honey tastes alike. (%) 1 2 3 4 5

If not honey user, go to demographics

n=39

(Q17) I am a frequent user of honey. (%) 1 2 3 4 5

(Q18) Honey brands do not influence my purchase. (%) 1 2 3 4 5

(Q19) Before I purchase honey, I compare prices of available brands. (%) 1 2 3 4 5

(Q20) I tend to purchase the most inexpensive honey. (%) 1 2 3 4 5

(Q21) I find honey labeling to be very helpful. (%) 1 2 3 4 5

(Q22) It is important for me to know where the honey I buy is produced. (%) 1 2 3 4 5

(Q23) Are you familiar with creamed honey? (Frequencies) 1. Yes 2. No 3. Not Sure

79
(Q24) Are you familiar with spun honey? (Frequencies)
1 15 Yes 2 24 No 3 6 Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)
1 8 Better 2 10 Same 3 4 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey easier to use? (Frequencies)
1 8 Better 2 10 Same 3 4 Worse

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)
1 2 Yes 2 31 No 3 6 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)
1 1 Better 2 2 About the same 3 0 Worse 4 5 Not sure

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)
1 25 Yes 2 2 No 3 12 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)
1 8 Better 2 13 About the same 3 1 Worse 4 10 Not sure

(Q35) Do you purchase a particular brand of honey?
1 15 Yes 2 23 No

(Q36) What form of honey do you generally purchase? (frequencies)

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jar (%)</td>
<td>a 17</td>
<td>d 1</td>
<td>g 0</td>
</tr>
<tr>
<td>Squeeze bottle (%)</td>
<td>b 18</td>
<td>e 3</td>
<td>h 1</td>
</tr>
<tr>
<td>Tub (%)</td>
<td>c 3</td>
<td>f 0</td>
<td></td>
</tr>
</tbody>
</table>

DEMOGRAPHICS

(Q37) 1 19 Male 2 31 Female
(Q38) 1 41 White 2 7 Black 3 1 Hispanic 4 1 Other
(Q39) 1 0 Under 20 2 7 40-49 3 17 20-29 4 10 50-59 5 12 30-39 6 4 60+
(Q40) 1 32 Married 2 9 Single 3 3 Widowed 4 6 Divorced
(Q41) How many persons in your household like honey? 2.56 persons (Average)
(Q42) My school education includes: (mark highest level of attainment).
1 1 Grade School 2 2 Part of High School 3 3 All of High School 4 4 Part of College 5 5 All of College 6 6 Graduate School
(Q43) My household gross annual income is:
1 3 Under $12,000 2 3 $12,000-23,999 3 6 $24,000-35,999 4 10 $36,000-47,999 5 20 $48,000-79,999 6 5 Over $80,000
Table B.8. Mean Values of Responses and Results of ANOVA on Means, by Education, Q4-Q22

<table>
<thead>
<tr>
<th>Question Characteristics</th>
<th>Grade School (n=5)</th>
<th>Part High School (n=14)</th>
<th>High School (n=82)</th>
<th>Part College (n=136)</th>
<th>College (n=119)</th>
<th>Grad (n=50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Food Budget</td>
<td>2.60</td>
<td>3.71</td>
<td>3.29</td>
<td>3.27</td>
<td>3.44</td>
<td>3.04</td>
</tr>
<tr>
<td>5 Price Sensitivity</td>
<td>5.00</td>
<td>4.36</td>
<td>4.55</td>
<td>4.34</td>
<td>4.28</td>
<td>4.28</td>
</tr>
<tr>
<td>6 Coupon Redemption</td>
<td>4.80</td>
<td>3.57</td>
<td>4.12</td>
<td>4.03</td>
<td>3.92</td>
<td>4.32</td>
</tr>
<tr>
<td>7 Low Fat Foods</td>
<td>4.80</td>
<td>4.07</td>
<td>4.11</td>
<td>4.17</td>
<td>4.30</td>
<td>4.46</td>
</tr>
<tr>
<td>8 Low Calorie Foods</td>
<td>4.60</td>
<td>3.71</td>
<td>3.79</td>
<td>3.74</td>
<td>4.00</td>
<td>4.16</td>
</tr>
<tr>
<td>9 Balanced Meals</td>
<td>4.00</td>
<td>4.07</td>
<td>4.44</td>
<td>4.44</td>
<td>4.33</td>
<td>4.59</td>
</tr>
<tr>
<td>11 Honey Convenience</td>
<td>3.60</td>
<td>2.43</td>
<td>2.40</td>
<td>2.31</td>
<td>2.83</td>
<td>2.65</td>
</tr>
<tr>
<td>12 Honey in Jars</td>
<td>3.40</td>
<td>3.71</td>
<td>2.56</td>
<td>2.70</td>
<td>2.89</td>
<td>3.08</td>
</tr>
<tr>
<td>13 Tamper Proof Containers</td>
<td>3.40</td>
<td>4.64</td>
<td>4.18</td>
<td>4.11</td>
<td>3.88</td>
<td>3.90</td>
</tr>
<tr>
<td>14 Healthier Sweetener</td>
<td>3.20</td>
<td>4.14</td>
<td>4.18</td>
<td>4.08</td>
<td>4.16</td>
<td>4.04</td>
</tr>
<tr>
<td>15 Medicinal Properties</td>
<td>4.20&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.29&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.39</td>
<td>3.51</td>
<td>3.21</td>
<td>3.08</td>
</tr>
<tr>
<td>16 Tastes Alike</td>
<td>1.80</td>
<td>2.36</td>
<td>2.15</td>
<td>1.89</td>
<td>2.17</td>
<td>1.98</td>
</tr>
<tr>
<td>17 Frequent User</td>
<td>5.00</td>
<td>3.78</td>
<td>3.11</td>
<td>3.63</td>
<td>3.64</td>
<td>3.69</td>
</tr>
<tr>
<td>18 Brand Influence</td>
<td>2.33</td>
<td>3.44</td>
<td>2.67</td>
<td>2.79</td>
<td>2.62</td>
<td>2.79</td>
</tr>
<tr>
<td>19 Brand Price</td>
<td>3.33</td>
<td>3.89</td>
<td>3.20</td>
<td>3.37</td>
<td>3.53</td>
<td>3.26</td>
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<td>20 Honey Price</td>
<td>1.67</td>
<td>2.78</td>
<td>2.40</td>
<td>2.12</td>
<td>2.40</td>
<td>1.92</td>
</tr>
<tr>
<td>21 Honey Labeling</td>
<td>4.33</td>
<td>4.44</td>
<td>3.34</td>
<td>3.40</td>
<td>3.04</td>
<td>3.79</td>
</tr>
<tr>
<td>22 Honey Origin</td>
<td>4.33</td>
<td>4.11</td>
<td>2.96</td>
<td>2.89</td>
<td>2.73</td>
<td>3.10</td>
</tr>
</tbody>
</table>

<sup>a</sup>Indicates a mean larger than across groups at the 5% level of significance. If not indicated otherwise, no difference is present.
Table B.9a. Frequencies and Percentage Responses to Honey Questionnaire, Income Below $12,000, DFW Area

Interviewer  
Store  
Day  Hour  
1. _4_ Honey Purchaser  
2. _22_ Random Shopper

**HONEY QUESTIONNAIRE**

(Q1) How often do you grocery shop?  
(Frequencies)  
1 = 2--3 times/week  
2 = 4--6 times/weekly  
3 = 1--2 times/monthly  
5 = 6--2 times/other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods?  
(Frequencies)  
7 = Newspapers  
5 = Magazines  
1 = Radio  
7 = Television  
2 = Food Labels  
4 = In Store Displays  
2 = Other (Specify)

(Q3) In the past month, how many times have you purchased each of the following products?  
(Enter number for each)  
Preserves  
Jam/Jelly  
Molasses  
Syrup  
Honey

**PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR.**  
n=27

(Q4) I run my household on a strict food budget. (%)  
1 = 2 3 4 5  
0 = 22.2 7.4 11.1 59.3

(Q5) Price is an important consideration in my grocery shopping. (%)  
1 = 2 3 4 5  
3.7 = 3.7 0 3.7 88.9

(Q6) When I get food coupons, I redeem them. (%)  
1 = 2 3 4 5  
0 = 18.5 7.4 18.5 55.6

(Q7) I buy low-fat foods when possible. (%)  
1 = 2 3 4 5  
0 = 40.7 0 3.7 55.6

(Q8) I buy low calorie foods when possible. (%)  
1 = 2 3 4 5  
0 = 44.4 11.1 11.1 33.3

(Q9) The meals we prepare at home are nutritionally balanced. (%)  
1 = 2 3 4 5  
3.7 = 0 0 22.2 74.1

(Q10) Do you use honey in your household?  
1 = Yes 2 = No

FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE.  
n=27

1 = Disagree, 2 = Somewhat Disagree, 3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%)  
1 = 2 3 4 5  
55.6 = 0 3.7 37.0

(Q12) I think honey should come in jars. (%)  
1 = 2 3 4 5  
37.0 = 0 14.8 37.0 44.4

(Q13) Honey should come in tamper-proof containers. (%)  
1 = 2 3 4 5  
0 = 0 0 0 77.9 22.1

(Q14) Honey is healthier than other sweeteners. (%)  
1 = 2 3 4 5  
14.8 = 3.7 7.4 3.7 70.4

(Q15) Honey has medicinal properties. (%)  
1 = 2 3 4 5  
22.2 = 0 11.1 7.4 55.3

(Q16) All honey tastes alike. (%)  
1 = 2 3 4 5  
0 = 59.3 3.7 11.1 22.2

**If not honey user, go to demographics**  
n=16

(Q17) I am a frequent user of honey. (%)  
1 = 2 3 4 5  
18.8 = 12.5 0 12.5 56.3

(Q18) Honey brands do not influence my purchase. (%)  
1 = 2 3 4 5  
37.5 = 0 0 62.5

(Q19) Before I purchase honey, I compare prices of available brands. (%)  
1 = 2 3 4 5  
25.0 = 0 0 0 75.0

(Q20) I tend to purchase the most inexpensive honey. (%)  
1 = 2 3 4 5  
37.5 = 0 12.5 10.0 32.5

(Q21) I find honey labeling to be very helpful. (%)  
1 = 2 3 4 5  
20.0 = 0 0 6.7 73.3

(Q22) It is important for me to know where the honey I buy is produced. (%)  
1 = 2 3 4 5  
32.5 = 0 12.5 0 55.0

(Q23) Are you familiar with creamed honey?  
(Frequencies)  
1 = Yes 2 = No 3 = Not Sure

82
(Q24) Are you familiar with spun honey? (Frequencies)

1. Yes 2. No 3. Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)

1. Better 2. Same 3. Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey easier to use? (Frequencies)

1. Easier to use 2. Same 3. More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)

1. Yes 2. No 3. Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)

1. Better 2. About the same 3. Worse

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)

1. Yes 2. No 3. Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)

1. Better 2. About the same 3. Worse

(Q35) Do you purchase a particular brand of honey?

1. Yes 2. No

(Q36) What form of honey do you generally purchase? (Frequencies)

<table>
<thead>
<tr>
<th>Form of Honey</th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jar (%)</td>
<td>a</td>
<td>d</td>
<td>g</td>
</tr>
<tr>
<td>Squeeze Bottle</td>
<td>b</td>
<td>e</td>
<td>h</td>
</tr>
<tr>
<td>Tub (%)</td>
<td>c</td>
<td>f</td>
<td></td>
</tr>
</tbody>
</table>

(DEMOGRAPHICS)

(Q37) 1. Male 2. Female

(Q38) What is your ethnic background?


(Q39) My age is in the following bracket:

1. Under 20 2. 20-29 3. 30-39 4. 40-49 5. 50-59 6. 60+

(Q40) My marital status is:


(Q41) How many persons in your household like honey? 2. 11 persons (Average)

(Q42) My school education includes: (Mark highest level of attainment).


(Q43) My household gross annual income is:

1. Under $12,000 2. $12,000-23,999 3. $24,000-35,999 4. $36,000-47,999 5. $48,000-79,999 6. Over $80,000
Table B.9b. Frequencies and Percentage Responses to Honey Questionnaire, Income of $12,000-23,999, DFW Area

Interviewer__________________________
Store_______________________________
Day_________ Hour _________
1.____8____Honey Purchaser
2.____50____Random Shopper

HONEY QUESTIONNAIRE

(Q1) How often do you grocery shop?

<table>
<thead>
<tr>
<th>(Frequencies)</th>
<th>1. 3 times/week</th>
<th>2. 2 times/weekly</th>
<th>3. 1 times/week</th>
<th>4. Monthly</th>
<th>5. Bimonthly</th>
<th>6. Other (Specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 73%</td>
<td>2. 82%</td>
<td>3. 31%</td>
<td>4. 52%</td>
<td>5. 4%</td>
<td>6. 2%</td>
<td></td>
</tr>
</tbody>
</table>

(Q2) Where do you usually read or hear information about the health or nutritional value of foods?

<table>
<thead>
<tr>
<th>(Frequencies)</th>
<th>a. Newspapers</th>
<th>b. Magazines</th>
<th>c. Radio</th>
<th>d. Television</th>
<th>e. Food Labels</th>
<th>f. In Store Displays</th>
<th>g. Other (Specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 16%</td>
<td>2. 48%</td>
<td>3. 3%</td>
<td>4. 32%</td>
<td>5. 1%</td>
<td>6. 2%</td>
<td>7. 1%</td>
<td>8. 1%</td>
</tr>
</tbody>
</table>

(Q3) In the past month, how many times have you purchased each of the following products?

<table>
<thead>
<tr>
<th>(Frequencies)</th>
<th>a. Preserves</th>
<th>b. Jam/Jelly</th>
<th>c. Molasses</th>
<th>d. Syrup</th>
<th>e. Honey</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 34%</td>
<td>2. 44%</td>
<td>3. 16%</td>
<td>4. 53%</td>
<td>5. 14%</td>
<td></td>
</tr>
</tbody>
</table>

Please tell me how well each of these statements reflect your behavior.

<table>
<thead>
<tr>
<th>n=58</th>
</tr>
</thead>
</table>

(Q10) Do you use honey in your household?

1. _______ Yes  2. _______ No

For the next statements please tell me to what extent you agree or disagree.

n=58

1 = Disagree, 2 = Somewhat Disagree, 3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use.

| (Percent) | 1. 53% | 2. 34% | 3. 00% | 4. 17% | 5. 19% |

(Q12) I think honey should come in jars.

| (Percent) | 1. 33% | 2. 33% | 3. 00% |

(Q13) Honey should come in tamper-proof containers.

| (Percent) | 1. 27% | 2. 20% | 3. 14% |

(Q14) Honey is healthier than other sweeteners.

| (Percent) | 1. 27% | 2. 33% | 3. 14% |

(Q15) Honey has medicinal properties.

| (Percent) | 1. 27% | 2. 33% | 3. 14% |

(Q16) All honey tastes alike.

| (Percent) | 1. 67% | 2. 22% | 3. 3% |

If not honey user, go to demographics

n=33

(Q17) I am a frequent user of honey.

| (Percent) | 1. 18% | 2. 91% | 3. 9% | 4. 0% | 5. 0% |

(Q18) Honey brands do not influence my purchase.

| (Percent) | 1. 65% | 2. 91% | 3. 0% | 4. 0% | 5. 0% |

(Q19) Before I purchase honey, I compare prices of available brands.

| (Percent) | 1. 45% | 2. 55% | 3. 0% | 4. 0% | 5. 0% |

(Q20) I tend to purchase the least expensive honey.

| (Percent) | 1. 66% | 2. 33% | 3. 0% | 4. 0% | 5. 0% |

(Q21) I find honey labeling to be very helpful.

| (Percent) | 1. 67% | 2. 33% | 3. 0% | 4. 0% | 5. 0% |

(Q22) It is important for me to know where the honey I buy is produced.

| (Percent) | 1. 45% | 2. 55% | 3. 0% | 4. 0% | 5. 0% |

(Q23) Are you familiar with creamed honey?

| (Frequencies) | 1. 20% | 2. 13% | 3. 0% | 4. 0% | 5. 0% |

84
(Q24) Are you familiar with spun honey?  
(Frequencies) 
1.15 Yes  2.17 No  3.1 Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste?  
(Frequencies) 
1.8 Better  2.6 Same  3.4 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey: (Frequencies) 
1.5 Easier to use  2.11 Same  3.4 More difficult to use

(Q27) What do you think creamed honey is?  
(Look for key words)

(Q28) What do you think spun honey is?  
(Look for key words)

(Q29) Have you ever purchased or tried Canadian honey?  
(Frequencies) 
1.3 Yes  2.22 No  3.7 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste?  
(Frequencies) 
1.1 Better  2.3 About the same  3.0 Worse  4.5 Not sure

(Q32) Have you ever purchased or tried Texas honey?  
(Frequencies) 
1.22 Yes  2.8 No  3.8 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste?  
(Frequencies) 
1.8 Better  2.10 About the same  3.1 Worse  4.6 Not sure

(Q35) Do you purchase a particular brand of honey? 
1.16 Yes  2.17 No

(Q36) What form of honey do you generally purchase?  
(frequencies) 

<table>
<thead>
<tr>
<th></th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jar (%)</td>
<td>.18</td>
<td>.0</td>
<td>.0</td>
</tr>
<tr>
<td>Squeeze bottle</td>
<td>.15</td>
<td>.1</td>
<td>.0</td>
</tr>
<tr>
<td>Tub (%)</td>
<td>.5</td>
<td>.2</td>
<td></td>
</tr>
</tbody>
</table>

DEMOGRAPHICS

(Q37) 1.22 Male  2.36 Female

(Q38) What is your ethnic background? 
1.50 White  2.3 Black  3.4 Hispanic  4.1 Other

(Q39) My age is in the following bracket: 
1.1 Under 20  2.6 40-49  3.10 20-29  4.12 50-59  5.16 30-39  6.13 60+

(Q40) My marital status is: 
1.25 Married  2.17 Single  3.5 Widowed  4.11 Divorced

(Q41) How many persons in your household like honey?  
1.81 persons (Average)

(Q42) My school education includes:  
(mark highest level of attainment).

1.1 Grade School  2.4 Part of High School  3.17 All of High School  4.20 Part of College  5.13 All of College  6.3 Graduate School

(Q43) My household gross annual income is: 
1. Under $12,000  2. $12,000-23,999  3. $24,000-35,999  4. $36,000-47,999  5. $48,000-79,999  6. Over $60,000
Table B.9c. Frequencies and Percentage Responses to Honey Questionnaire, Income of $24,000-35,999, DFW Area

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>Store</th>
<th>Day</th>
<th>Hour</th>
<th>1. Honey Purchaser</th>
<th>2. Random Shopper</th>
</tr>
</thead>
</table>

**HONEY QUESTIONNAIRE**

(Q1) How often do you grocery shop?  
(Frequencies)  
1. 11 time/week 2. 2-5 times/weekly 3. 54 Weekly 4. 9 Bimonthly 5. 4 Monthly 6. 3 Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods?  
(Frequencies)  
a. 27 Newspapers  b. 44 Magazines  c. 6 Radio  d. 38 Television  e. 3 Food Labels  f. 1 In Store Displays  g. 17 Other (Doctor)

(Q3) In the past month, how many times have you purchased each of the following products?  
(Enter number for each)  
a. 36.5 Preserves  b. 55.8 Jam/Jelly  c. 12.5 Molasses  d. 63.4 Syrup  e. 40.4 Honey

(Please tell me how well each of these statements reflect your behavior.)

(Q10) Do you use honey in your household?  
1. 67 Yes 2. 37 No

For the next statements please tell me to what extent you agree or disagree. n=104

1 = Disagree, 2 = Somewhat Disagree, 3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%)  
1 2 3 4 5

(Q12) I think honey should come in jars. (%)  
1 2 3 4 5

(Q13) Honey should come in tamper-proof containers. (%)  
1 2 3 4 5

(Q14) Honey is healthier than other sweeteners. (%)  
1 2 3 4 5

(Q15) Honey has medicinal properties. (%)  
1 2 3 4 5

(Q16) All honey tastes alike. (%)  
1 2 3 4 5

If not honey user, go to demographics n=87

(Q17) I am a frequent user of honey. (%)  
1 2 3 4 5

(Q18) Honey brands do not influence my purchase. (%)  
1 2 3 4 5

(Q19) Before I purchase honey, I compare prices of available brands. (%)  
1 2 3 4 5

(Q20) I tend to purchase the most inexpensive honey. (%)  
1 2 3 4 5

(Q21) I find honey labeling to be very helpful. (%)  
1 2 3 4 5

(Q22) It is important for me to know where the honey I buy is produced. (%)  
1 2 3 4 5

(Q23) Are you familiar with creamed honey?  
(Frequencies)

1. 36 Yes 2. 31 No 3. 2 Not Sure
(Q24) Are you familiar with spun honey? (Frequencies)
   1 17 Yes 2 49 No 3 3 Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)
   1 17 Better 2 14 Same 3 10 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey easier to use? (Frequencies)
   1 14 Easier to use 2 14 Same 3 11 More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)
   1 5 Yes 2 53 No 3 11 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)
   1 2 Better 2 2 About the same 3 0 Worse

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)
   1 46 Yes 2 4 No 3 17 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)
   1 12 Better 2 26 About the same 3 0 Worse

(Q35) Do you purchase a particular brand of honey?
   1 26 Yes 2 43 No

(Q36) What form of honey do you generally purchase? (Frequencies)

   jar (%)  Liquid  Creamed  Spun
   a 37      d 2      g 0
   b 36      e 2      h 0
   c 7       f 1

(DEMOGRAPHICS)

(Q37) 1 33 Male 2 71 Female

(Q38) What is your ethnic background?
   1 88 White 2 8 Black 3 0 Hispanic 4 0 Other

(Q39) My age is in the following bracket:
   1 0 Under 20 2 14 20-29 3 18 30-39 4 26 40-49

(Q40) My marital status is:
   1 62 Married 2 21 Single 3 8 Widowed 4 13 Divorced

(Q41) How many persons in your household like honey? 2 25 persons (Average)

(Q42) My school education includes: (Mark highest level of attainment).
   1 1 Grade School 2 2 Part of High School 3 28 All of High School
   4 41 Part of College 5 26 All of College 6 6 Graduate School

(Q43) My household gross annual income is:
   1 0 Under $12,000 2 2 $12,000-23,999 3 2 $24,000-35,999
   4 4 $36,000-47,999 5 2 $48,000-79,999 6 6 Over $80,000
Table B.9d. Frequencies and Percentage Responses to Honey Questionnaire, Income of $36,000-47,999, DFW Area

Interviewer

Store

Day _______ Hour _______

1. 6 Honey Purchaser
2. 73 Random Shopper

HONEY QUESTIONNAIRE

(Q1) How often do you grocery shop? (Frequencies)

1. 11 3 times/week
2. 15 2 times/weekly
3. 40 Weekly
4. 5 Biweekly
5. 2 Monthly
6. 6 Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods? (Frequencies)

a. 31 Newspapers
b. 30 Magazines
c. 11 Radio
d. 38 Television
e. 7 Food Labels
f. 2 In Store Displays
g. 12 Other (Specify)

(Q3) In the past month, how many times have you purchased each of the following products? (Enter number for each) (%)

a. 43.0 Preserves
b. 51.9 Jam/Jelly
c. 5.1 Molasses
d. 67.0 Syrup
e. 41.8 Honey

Please tell me how well each of these statements reflect your behavior.

n=79

1 = Not sure, 2 = Rarely, if ever, 3 = Seldom, 4 = Sometimes, 5 = Usually

(Q4) I run my household on a strict food budget. (%) 1 2 3 4 5
2.5 35.4 13.9 20.3 27.8

(Q5) Price is an important consideration in my grocery shopping. (%) 1 2 3 4 5
2.5 7.6 3.8 16.5 69.6

(Q6) When I get food coupons, I redeem them. (%) 1 2 3 4 5
0 28.2 1.3 17.2 62.8

(Q7) I buy low-fat foods when possible. (%) 1 2 3 4 5
1 2 3 4 5
0 12.7 5.1 17.7 64.6

(Q8) I buy low calorie foods when possible. (%) 1 2 3 4 5
1 2 3 4 5
2.5 17.7 7.6 22.8 49.4

(Q9) The meals we prepare at home are nutritionally balanced. (%) 1 2 3 4 5
1.3 8.3 10.1 22.8 59.5

(Q10) Do you use honey in your household?
1. 56 Yes
2. 22 No

For the next statements please tell me to what extent you agree or disagree.

n=79

1 = Disagree, 2 = Somewhat Disagree,
3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%) 1 2 3 4 5
48.1 6.5 7.8 52.2 32.5

(Q12) I think honey should come in jars. (%) 1 2 3 4 5
1.7 2.6 15.6 26 31.2

(Q13) Honey should come in tamper-proof containers. (%) 1 2 3 4 5
19.7 3.9 3.9 26 69.7

(Q14) Honey is healthier than other sweeteners. (%) 1 2 3 4 5
21.1 2.8 7.9 13.2 55.3

(Q15) Honey has medicinal properties. (%) 1 2 3 4 5
31.2 2.6 27.3 13.0 28.0

(Q16) All honey tastes alike. (%) 1 2 3 4 5
68.8 2.6 9.1 0 19.5

If not honey user, go to demographics

n=58

(Q17) I am a frequent user of honey. (%) 1 2 3 4 5
29.1 9.1 1.8 12.7 47.3

(Q18) Honey brands do not influence my purchase. (%) 1 2 3 4 5
46.4 8.9 1.8 12.5 30.4

(Q19) Before I purchase honey, I compare prices of available brands. (%) 1 2 3 4 5
1.7 2.6 15.6 26 31.2

(Q20) I tend to purchase the most inexpensive honey. (%) 1 2 3 4 5
61.8 12.7 1.8 14.5 9.1

(Q21) I find honey labeling to be very helpful. (%) 1 2 3 4 5
30.9 5.5 1.8 36 69.6

(Q22) It is important for me to know where the honey I buy is produced. (%) 1 2 3 4 5
46.4 9.4 10.1 36 42.9

(Q23) Are you familiar with creamed honey? (Frequencies)

1. 24 Yes
2. 32 No
3. 0 Not Sure
(Q24) Are you familiar with spun honey? (Frequencies)
1. 23 Yes 2. 31 No 3. 2 Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)
1. 12 Better 2. 10 Same 3. 4 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey: (Frequencies)
1. 12 Easier to use 2. 8 Same 3. 6 More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)
1. 6 Yes 2. 44 No 3. 5 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)
1. 2 Better 2. 4 About the same 3. 8 Not sure

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)
1. 41 Yes 2. 5 No 3. 10 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)
1. 22 Better 2. 10 About the same 3. 1 Worse 4. 11 Not sure

(Q35) Do you purchase a particular brand of honey?
1. 28 Yes 2. 26 No

(Q36) What form of honey do you generally purchase? (frequencies)

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td>jar (%)</td>
<td>a. 22</td>
<td>d. 0</td>
<td>g. 0</td>
</tr>
<tr>
<td>squeeze bottle (%)</td>
<td>b. 34</td>
<td>e. 0</td>
<td>h. 0</td>
</tr>
<tr>
<td>tub (%)</td>
<td>c. 5</td>
<td>f. 2</td>
<td></td>
</tr>
</tbody>
</table>

DEMOGRAPHICS

(Q37) 1. 26 Male 2. 53 Female

(Q38) What is your ethnic background?
1. 69 White 2. 2 Black 3. 8 Hispanic 4. 0 Other

(Q39) My age is in the following bracket:
1. 0 Under 20 2. 18 20-29 3. 11 30-39 4. 0 60+

(Q40) My marital status is:
1. 68 Married 2. 5 Single 3. 1 Widowed 4. 5 Divorced

(Q41) How many persons in your household like honey? 2.52 persons (Average)

(Q42) My school education includes: (mark highest level of attainment).
1. 1 Grade School 2. 1 Part of High School 3. 14 All of High School 4. 30 Part of College 5. 23 All of College 6. 10 Graduate School

(Q43) My household gross annual income is:
1. Under $12,000 2. $12,000-23,999 3. $24,000-35,999 4. $36,000-47,999 5. $48,000-79,999 6. Over $80,000
Table B.9e. Frequencies and Percentage Responses to Honey Questionnaire, Income of $48,000-79,999, DFW Area

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>Store</th>
<th>Day</th>
<th>Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HONEY QUESTIONNAIRE**

(Q1) How often do you grocery shop?  
(Frequencies)  
1 7.3 times/week  
2 2.1 2 times/weekly  
3 38 Weekly  
4 7 Bimonthly  
5 6 Monthly  
6 5 Other (Specify)  

(Q2) Where do you usually read or hear information about the health or nutritional value of foods?  
(Frequencies)  
1 36 Newspapers  
2 39 Magazines  
3 4 Radio  
4 5 Food Labels  
5 1 In Store Displays  
6 6 Other (Doctor)  

(Q3) In the past month, how many times have you purchased each of the following products? (Enter number for each)  
(Frequencies)  
1 41.7 Preserves  
2 57.1 Jam/Jelly  
3 8.3 Molasses  
4 53.6 Syrup  
5 53.6 Honey  

Please tell me how well each of these statements reflect your behavior.  

(Q10) Do you use honey in your household?  
1 73 Yes  
2 11 No  

For the next statements please tell me to what extent you agree or disagree.  

1 = Disagree, 2 = Somewhat Disagree, 3 = Not sure, 4 = Somewhat Agree, 5 = Agree  

(Q11) I would use honey more frequently if it were easier to use. (%)  
1 2 3 4 5  
42.7 49.7 12.2 32.9  

(Q12) I think honey should come in jars. (%)  
1 2 3 4 5  
31.7 98.9 19.5 49.1  

(Q13) Honey should come in tamper-proof containers. (%)  
1 2 3 4 5  
19.5 3.8 8.3 3.8 64.6  

(Q14) Honey is healthier than other sweeteners. (%)  
1 2 3 4 5  
1 2 3 4 5  
11.0 3.6 11.0 9.8 64.6  

(Q15) Honey has medicinal properties. (%)  
1 2 3 4 5  
1 2 3 4 5  
28.0 2.4 19.5 12.2 37.8  

(Q16) All honey tastes alike. (%)  
1 2 3 4 5  
1 2 3 4 5  
56.1 4.9 7.3 6.1 25.6  

If not honey user, go to demographics  

n=72  

(Q17) I am a frequent user of honey. (%)  
1 2 3 4 5  
18.0 9.7 9.7 25.0 37.5  

(Q18) Honey brands do not influence my purchase. (%)  
1 2 3 4 5  
44.4 9.7 2.8 42.0 40.3  

(Q19) Before I purchase honey, I compare prices of available brands. (%)  
1 2 3 4 5  
38.9 2.8 1.4 37.7 47.2  

(Q20) I tend to purchase the most inexpensive honey. (%)  
1 2 3 4 5  
63.9 69.4 42.4 12.5 13.9  

(Q21) I find honey labeling to be very helpful. (%)  
1 2 3 4 5  
31.9 2.8 9.7 8.3 47.2  

(Q22) It is important for me to know where the honey I buy is produced. (%)  
1 2 3 4 5  
1 2 3 4 5  
50.0 2.8 42.8 2.8 41.7  

(Q23) Are you familiar with creamed honey?  
(Frequencies)  
1 30 Yes  
2 40 No  
3 3 Not Sure
(Q24) Are you familiar with spun honey?
(Frequencies)
1_23 Yes 2_48 No 3_2 Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste?
(Frequencies)
1_10 Better 2_15 Same 3_7 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey:
(Frequencies)
1_10 Easier to use 2_15 Same 3_7 More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey?
(Frequencies)
1_6 Yes 2_53 No 3_13 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste?
(Frequencies)
1_0 Better 2_3 About the same 3_13 Worse

(Q32) Have you ever purchased or tried Texas honey?
(Frequencies)
1_52 Yes 2_5 No 3_15 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste?
(Frequencies)
1_19 Better 2_25 About the same 3_7 Worse

(Q35) Do you purchase a particular brand of honey?
1_35 Yes 2_38 No

(Q36) What form of honey do you generally purchase? (frequencies)

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
<th>Creamed</th>
<th>Spun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jar (%)</td>
<td>a 39</td>
<td>d 3</td>
<td>g 0</td>
</tr>
<tr>
<td>Squeeze bottle (%)</td>
<td>b 34</td>
<td>e 2</td>
<td>h 0</td>
</tr>
<tr>
<td>Tub (%)</td>
<td>c 3</td>
<td>f 0</td>
<td></td>
</tr>
</tbody>
</table>

DEMOSGRAPHICS

(Q37) 1_30 Male 2_54 Female

(Q38) What is your ethnic background?
1_75 White 2_5 Black 3_3 Hispanic 4_1 Other

(Q39) My age is in the following bracket:
1_1 Under 20 2_21-40-49 3_24-20-29 4_19-50-59 5_16-30-39 6_2-60+

(Q40) My marital status is:
1_71 Married 2_6 Single 3_0 Widowed 4_6 Divorced

(Q41) How many persons in your household like honey? 2_70 persons (Average)

(Q42) My school education includes: (mark highest level of attainment).
1_0 Grade School 2_1 Part of High School 3_8 All of High School
4_17 Part of College 5_38 All of College 6_20 Graduate School

(Q43) My household gross annual income is:
1_0 Under $12,000 2_12,000-23,999 3_24,000-35,999
4_36,000-47,999 5_48,000-79,999 6_80,000+

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Table B.9f. Frequencies and Percentage Responses to Honey Questionnaire, Income Over $80,000, DFW Area

Interviewer ____________
Store _________________
Day ___________ Hour _______
1. ______ Honey Purchaser
2. ______ Random Shopper

HONEY QUESTIONNAIRE

(Q1) How often do you grocery shop?
(Frequencies)
1. 5.3 times/week
2. 2.5 times/weekly
3. 1.7 Weekly
4. 1.1 Bimonthly
5. 2.0 Monthly
6. 3.0 Other (Specify)

(Q2) Where do you usually read or hear information about the health or nutritional value of foods? (Frequencies).
a. 19 Newspapers
b. 16 Magazines
c. 10 Radio
d. 10 Television
e. 11 Food Labels
f. 12 In Store Displays
g. 6 Other (Doctor)

(Q3) In the past month, how many times have you purchased each of the following products? (Enter number for each) (%)
a. 53.1 Preserves
b. 78.1 Jam/Jelly
c. 94.4 Molasses
d. 68.8 Syrup
e. 59.4 Honey

PLEASE TELL ME HOW WELL EACH OF THESE STATEMENTS REFLECT YOUR BEHAVIOR. n=33

1 = Not sure, 2 = Rarely, if ever, 3 = Seldom, 4 = Sometimes, 5 = Usually

(Q4) I run my household on a strict food budget. (%) 1 2 3 4 5
0 60.2 24.2 9.1 6.1 0

(Q5) Price is an important consideration in my grocery shopping. (%) 1 2 3 4 5
0 27.3 32.0 30.1 18.2 49.5

(Q6) When I get food coupons, I redeem them. (%) 1 2 3 4 5
0 12.1 12.1 15.2 60.6

(Q7) I buy low-fat foods when possible. (%) 1 2 3 4 5
0 9.1 0 15.2 75.8

(Q8) I buy low calorie foods when possible. (%) 1 2 3 4 5
0 18.2 61.2 24.2 51.5

(Q9) The meals we prepare at home are nutritionally balanced. (%) 1 2 3 4 5
0 3.0 3.0 3.0 12.1 78.8

(Q10) Do you use honey in your household?
1. 25 Yes
2. 8 No

FOR THE NEXT STATEMENTS PLEASE TELL ME TO WHAT EXTENT YOU AGREE OR DISAGREE. n=33

1 = Disagree, 2 = Somewhat Disagree,
3 = Not sure, 4 = Somewhat Agree, 5 = Agree

(Q11) I would use honey more frequently if it were easier to use. (%) 1 2 3 4 5
60.8 9.1 3.0 9.1 18.2

(Q12) I think honey should come in jars. (%) 1 2 3 4 5
36.4 3.0 9.1 6.1 45.4

(Q13) Honey should come in tamper-proof containers. (%) 1 2 3 4 5
21.2 6.1 12.1 3.0 54.5

(Q14) Honey is healthier than other sweeteners. (%) 1 2 3 4 5
9.1 0 6.1 6.1 78.8

(Q15) Honey has medicinal properties. (%) 1 2 3 4 5
27.3 3.0 15.2 9.1 45.4

(Q16) All honey tastes alike. (%) 1 2 3 4 5
69.7 3.0 15.2 0 12.1

(Q17) I am a frequent user of honey. (%) 1 2 3 4 5
0 23.1 0 11.5 63.4

(Q18) Honey brands do not influence my purchase. (%) 1 2 3 4 5
53.8 3.8 3.8 3.8 34.6

(Q19) Before I purchase honey, I compare prices of available brands. (%) 1 2 3 4 5
46.2 3.8 0 7.6 42.3

(Q20) I tend to purchase the most inexpensive honey. (%) 1 2 3 4 5
65.4 0 3.8 0 30.8

(Q21) I find honey labeling to be very helpful. (%) 1 2 3 4 5
30.8 7.6 0 3.8 53.8

(Q22) It is important for me to know where the honey I buy is produced. (%) 1 2 3 4 5
53.8 3.8 3.8 7.6 30.8

(Q23) Are you familiar with creamed honey? (Frequencies)
1. 13 Yes
2. 13 No
3. 0 Not Sure
(Q24) Are you familiar with spun honey? (Frequencies)
1 2 Yes 3 0 No 0 Not Sure

(Q25) Compared to regular liquid honey, how does creamed or spun honey taste? (Frequencies)
1 6 Better 2 5 Same 3 2 Worse

(Q26) Compared to regular liquid honey, is creamed or spun honey: (Frequencies)
1 6 Easier to use 2 5 Same 3 2 More difficult to use

(Q27) What do you think creamed honey is? (Look for key words).

(Q28) What do you think spun honey is? (Look for key words).

(Q29) Have you ever purchased or tried Canadian honey? (Frequencies)
1 1 Yes 2 2 No 3 3 Not sure

(Q30) When you think of Canadian honey, what is the first thing that comes to mind?

(Q31) Compared to other honey, how does Canadian honey taste? (Frequencies)
1 1 Better 2 0 About the same 3 0 Worse 4 7 Not sure

(Q32) Have you ever purchased or tried Texas honey? (Frequencies)
1 21 Yes 2 0 No 3 5 Not sure

(Q33) When you think of Texas honey, what is the first thing that comes to mind?

(Q34) Compared to other honey, how does Texas honey taste? (Frequencies)
1 9 Better 2 7 About the same 3 1 Worse 4 6 Not sure

(Q35) Do you purchase a particular brand of honey?
1 15 Yes 2 11 No

(Q36) What form of honey do you generally purchase? (frequencies)

<table>
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<tr>
<th>Form</th>
<th>Liquid</th>
<th>Creamed</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Jar (%)</td>
<td>a 2</td>
<td>d 1</td>
<td>g 0</td>
</tr>
<tr>
<td>Squeeze bottle (%)</td>
<td>b 16</td>
<td>e 2</td>
<td>h 0</td>
</tr>
<tr>
<td>Tub (%)</td>
<td>c 2</td>
<td>f 0</td>
<td></td>
</tr>
</tbody>
</table>

**DEMOGRAPHICS**

(Q37) What is your gender?
1 8 Male 2 25 Female

(Q38) What is your ethnic background?
1 29 White 2 2 Black 3 1 Hispanic 4 1 Other

(Q39) My age is in the following bracket:
1 0 Under 20 2 6 20-29 3 10 30-39 4 15 40-49 5 20 50-59 6 25 60+

(Q40) My marital status is:
1 29 Married 2 2 Single 3 0 Widowed 4 2 Divorced

(Q41) How many persons in your household like honey? 2.76 persons (Average)

(Q42) My school education includes: (mark highest level of attainment).
1 0 Grade School 2 0 Part of High School 3 1 All of High School
4 12 Part of College 5 15 All of College 6 5 Graduate School

(Q43) My household gross annual income is:
1 Under $12,000 2 $12,000-23,999 3 $24,000-35,999
4 $36,000-47,999 5 $48,000-79,999 6 Over $80,000
Table B.10. Mean Values of Responses and Results of ANOVA on Means, by Income, Q4-Q22

<table>
<thead>
<tr>
<th>Question Characteristics</th>
<th>Mean Value</th>
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<td>&lt;12,000</td>
<td>12,000-23,999</td>
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<td>36,000-47,999</td>
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<td>3.43</td>
<td>3.38</td>
<td>3.35</td>
<td>3.12</td>
<td>2.61b</td>
</tr>
<tr>
<td>5  Price Sensitivity</td>
<td>4.70</td>
<td>4.43</td>
<td>4.44</td>
<td>4.43</td>
<td>4.15</td>
<td>3.82b</td>
</tr>
<tr>
<td>6  Coupon Redemption</td>
<td>4.11</td>
<td>4.10</td>
<td>3.92</td>
<td>4.05</td>
<td>4.05</td>
<td>4.24</td>
</tr>
<tr>
<td>7  Low Fat Foods</td>
<td>3.74b</td>
<td>4.29</td>
<td>4.04</td>
<td>4.34</td>
<td>4.34</td>
<td>4.58a</td>
</tr>
<tr>
<td>8  Low Calorie Foods</td>
<td>3.33b</td>
<td>3.84</td>
<td>3.69</td>
<td>3.99</td>
<td>4.14</td>
<td>4.09</td>
</tr>
<tr>
<td>9  Balanced Meals</td>
<td>4.63</td>
<td>4.24</td>
<td>4.42</td>
<td>4.33</td>
<td>4.51</td>
<td>4.61</td>
</tr>
<tr>
<td>11 Honey Convenience</td>
<td>2.67</td>
<td>2.09</td>
<td>2.57</td>
<td>2.68</td>
<td>2.88</td>
<td>2.15</td>
</tr>
<tr>
<td>12 Honey in Jars</td>
<td>3.18</td>
<td>2.95</td>
<td>2.79</td>
<td>2.64</td>
<td>3.00</td>
<td>3.21</td>
</tr>
<tr>
<td>13 Tamper Proof Containers</td>
<td>4.92a</td>
<td>3.48b</td>
<td>4.54a</td>
<td>3.99</td>
<td>3.90</td>
<td>3.66</td>
</tr>
<tr>
<td>14 Healthier Sweetener</td>
<td>4.11</td>
<td>4.26</td>
<td>4.21</td>
<td>3.79</td>
<td>4.13</td>
<td>4.45</td>
</tr>
<tr>
<td>15 Medicinal Properties</td>
<td>3.81a</td>
<td>3.53</td>
<td>3.64</td>
<td>3.00b</td>
<td>3.29</td>
<td>3.42</td>
</tr>
<tr>
<td>16 Tastes Alike</td>
<td>2.26</td>
<td>1.83</td>
<td>2.03</td>
<td>1.99</td>
<td>2.40</td>
<td>1.82</td>
</tr>
<tr>
<td></td>
<td>(n=16)</td>
<td>(n=33)</td>
<td>(n=69)</td>
<td>(n=55)</td>
<td>(n=72)</td>
<td>(n=26)</td>
</tr>
<tr>
<td>17 Frequent User</td>
<td>3.75</td>
<td>3.76</td>
<td>3.55</td>
<td>3.40</td>
<td>3.54</td>
<td>3.96</td>
</tr>
<tr>
<td>18 Brand Influence</td>
<td>3.50</td>
<td>2.06</td>
<td>2.66</td>
<td>2.71</td>
<td>2.86</td>
<td>2.62</td>
</tr>
<tr>
<td>19 Brand Price</td>
<td>4.00</td>
<td>3.06</td>
<td>3.69</td>
<td>3.64</td>
<td>3.24</td>
<td>2.96</td>
</tr>
<tr>
<td>20 Honey Price</td>
<td>3.06a</td>
<td>2.28</td>
<td>2.63a</td>
<td>1.96</td>
<td>2.07</td>
<td>2.31</td>
</tr>
<tr>
<td>21 Honey Labeling</td>
<td>4.13</td>
<td>3.52</td>
<td>3.04</td>
<td>3.53</td>
<td>3.36</td>
<td>3.44</td>
</tr>
<tr>
<td>22 Honey Origin</td>
<td>3.50</td>
<td>3.06</td>
<td>2.81</td>
<td>2.93</td>
<td>2.84</td>
<td>2.58</td>
</tr>
</tbody>
</table>

aIndicates a mean larger than across groups at the 5% level of significance. If not indicated otherwise, no difference is present.

bIndicates a mean smaller than across groups at the 5% level of significance.
<table>
<thead>
<tr>
<th>Store Name</th>
<th>Kroger 694</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store Location</td>
<td>3304 Denton Highway</td>
</tr>
<tr>
<td></td>
<td>Halton City, TX</td>
</tr>
</tbody>
</table>

Sample Store #1

**Retail Distribution Data**

<table>
<thead>
<tr>
<th>Honey Location:</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____ Jelly Spreads</td>
</tr>
<tr>
<td>_____ Specialty Foods</td>
</tr>
<tr>
<td>_____ Baking Sweeteners</td>
</tr>
<tr>
<td>_____ Produce</td>
</tr>
<tr>
<td><strong>X</strong> Syrup</td>
</tr>
<tr>
<td>_____ Special Display</td>
</tr>
<tr>
<td>_____ Other</td>
</tr>
</tbody>
</table>

**Shelf Location:**

<table>
<thead>
<tr>
<th>Top</th>
<th>Eye Level</th>
<th>Lower</th>
<th>Bottom</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>X</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Shelf Space:**

<table>
<thead>
<tr>
<th>11.5 Linear Feet</th>
<th>18 Facings</th>
<th><strong>X</strong> End of Aisle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>X</strong></td>
</tr>
</tbody>
</table>

**Sizes:**

<table>
<thead>
<tr>
<th>8 oz.</th>
<th>2 lb.</th>
<th>16 oz.</th>
<th>5 lb.</th>
<th><strong>X</strong> Squeeze Bottle</th>
<th><strong>X</strong> Tub</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>X</strong></td>
<td></td>
<td><strong>X</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Brands:**

Bee Maid, Burleson's, Clover Maid, Kroger, Walkers

**Promotions:**

<table>
<thead>
<tr>
<th>Signs</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>X</strong> No</td>
<td><strong>X</strong> No</td>
</tr>
</tbody>
</table>

96
Retail Distribution Data

Store Name: Kroger 224
Store Location: 3510 Alta Mesa
Fort Worth, TX

Sample Store #2

Honey Location:

- Jelly Spreads
- Baking Sweeteners
- Syrup
- Other

- Specialty Foods
- Produce
- Special Display

Shelf Location:

- Top
- Eye Level
- Lower
- End of Aisle
- Bottom

Shelf Space:

- 20 Linear Feet
- 24 Facings
- X End of Aisle

Sizes:

- 2 oz.
- 2 lb.
- 16 oz.
- 5 lb.
- X Tub

Brands:

Bee Maid, Burleson's, Clover Maid, Cost Cutter, Kroger

Promotions:

- Signs: Yes
- Display: Yes
- No

- No
Retail Distribution Data

Store Name: Skaggs 240
Store Location: Little Rd. & I-20
Arlington, TX

Sample Store #3

Honey Location:

- X Jelly Spreads
- Specialty Foods
- Baking Sweeteners
- Produce
- Syrup
- Special Display
- Other

Shelf Location:

- X Top
- 8 Linear Feet
- Eye Level
- 12 Facings
- Lower
- End of Aisle
- Bottom

Sizes:

- X 8 oz.
- X 2 lb.
- X Squeeze Bottle
- X 16 oz.
- 5 lb.
- X Tub

Brands:

Allen Apiories (Pure Honey), Aunt Sue’s, Bee Maid, Burleson’s, Busy Bee, North Dallas Honey, Pure Natural Honey, Sue Brand

Promotions:

- X Yes
- No
- X Yes
- No
Retail Distribution Data

Store Name: Kroger 402
Store Location: 3612 North Beltline Rd.
Irving, TX

Sample Store #4

Honey Location:

- [ ] Jelly Spreads
- [x] Baking Sweeteners
- [x] Syrup
- [ ] Specialty Foods
- [ ] Produce
- [ ] Special Display
- [ ] Other

Shelf Location:

- [x] Top
- [ ] Eye Level
- [ ] Lower
- [ ] Bottom

Shelf Space:

- [ ] 11 Linear Feet
- [ ] 18 Facings
- [ ] End of Aisle

Sizes:

- [x] 8 oz.
- [x] 2 lb.
- [x] Squeeze Bottle
- [x] 16 oz.
- [ ] 5 lb.
- [x] Tub

Brands:

Bee Maid, Burleson's, Clover Maid, Cost Cutter

Promotions:

- [x] Signs: Yes
- [ ] No
- [x] Display: Yes
- [ ] No
Retail Distribution Data

Store Name  Kroger 434
Store Location  514 Carrier Parkway
                Grand Prairie, TX
Sample Store #5

Honey Location:

_____Jelly Spreads       _____Specialty Foods
_____Baking Sweeteners  _____Produce
_____Syrup               _____Special Display
_____Other

Shelf Location:

_____Top
_____Eye Level
_____Lower
_____Bottom

Shelf Space:

_____8 Linear Feet
_____12 Facings
_____End of Aisle

Sizes:

_____8 oz.       _____2 lb.       _____Squeeze Bottle
_____16 oz.      _____5 lb.       _____Tub

Brands:

Bee Maid, Burleson's, Clover Maid, Cost Cutter Brand, Honeycomb Brand, Kroger

Promotions:

Signs_____Yes  Display_____Yes
         _____No       _____X No
Retail Distribution Data

Store Name: Albertsons 4271
Store Location: 2121 North Collins
Arlington, TX 76011

Honey Location:

- X Jelly Spreads
- ___ Specialty Foods
- ___ Baking Sweeteners
- ___ Produce
- ___ Syrup
- ___ Special Display
- ___ Other

Shelf Location:

- X Top
- ___ 8 Linear Feet
- ___ Eye Level
- ___ 16 Facings
- ___ Lower
- ___ End of Aisle
- ___ Bottom

Sizes:

- X 8 oz.
- X 2 lb.
- X Squeeze Bottle
- ___ 16 oz.
- ___ 5 lb.
- X Tub

Brands:

Albertson's, Allen Apiories, Aunt Sue's, Bee Maid, Burleson's, Langenes

Promotions:

- Signs ___ X Yes
- Display ___ No

- Display ___ X Yes
- Display ___ X No
Retail Distribution Data

Store Name: Kroger 485
Store Location: 2550 Gus Thomasson Rd.
Dallas, TX Sample Store #7

Honey Location:
- [ ] Jelly Spreads
- [ ] Specialty Foods
- [ ] Baking Sweeteners
- [ ] Produce
- [x] Syrup
- [ ] Special Display
- [ ] Other [between crackers and pancake mixes]

Shelf Location:
- [x] Top
- [ ] 12 Linear Feet
- [ ] Eye Level
- [ ] 15 Facings
- [ ] Lower
- [ ] End of Aisle
- [ ] Bottom

Sizes:
- [x] 8 oz.
- [x] 2 lb.
- [x] Squeeze Bottle
- [x] 16 oz.
- [ ] 5 lb.
- [x] Tub

Brands:

Promotions:
- [x] Signs
- [ ] Yes
- [ ] No
- [x] Display
- [ ] Yes
- [ ] No
- [x] No
Retail Distribution Data

Store Name: Kroger 409
Store Location: 2019 Masters
Dallas, TX

Sample Store #8

Honey Location:

- Jelly Spreads
- Specialty Foods
- Baking Sweeteners
- Produce
- Syrup
- Special Display
- Other

Shelf Location:

- Top 6 Linear Feet
- Eye Level 10 Facings
- Lower
- End of Aisle
- Bottom

Shelf Space:

- 6 Linear Feet
- 10 Facings
- End of Aisle

Sizes:

- 8 oz.
- 2 lb.
- Squeeze Bottle
- 16 oz.
- 5 lb.
- Tub

Brands:

Promotions:

- Signs
- Yes
- No

- Display
- Yes
- No

- No
Retail Distribution Data

Store Name: Skaggs 4203  
Store Location: 2121 S. Buckner  
Dallas, TX 75227  
Sample Store #9

Honey Location:

- X Jelly Spreads
- -----Specialty Foods
- -----Baking Sweeteners
- -----Produce
- -----Syrup
- -----Special Display
- -----Other

Shelf Location:  

- X Top
- -----Eye Level
- -----Lower
- -----End of Aisle
- -----Bottom

Shelf Space:

- 6 Linear Feet
- 12 Facings

Sizes:

- X 8 oz.
- X 2 lb.
- X Squeeze Bottle
- X 16 oz.
- 5 lb.
- X Tub

Brands:

Promotions:

- Signs X Yes
- ------No
- Display------Yes
- X No
Retail Distribution Data

Store Name: Skaggs 4219
Store Location: 822 East Centerville Rd. (at Broadway)
Garland, TX 75041
Sample Store #10

Honey Location:

- [X] Jelly Spreads
- [ ] Specialty Foods
- [ ] Baking Sweeteners
- [ ] Produce
- [ ] Syrup
- [ ] Special Display
- [ ] Other

Shelf Location:

- [X] Top
- [10] Linear Feet
- [ ] Eye Level
- [12] Facings
- [ ] Lower
- [ ] End of Aisle
- [ ] Bottom

Sizes:

- [ ] 8 oz.
- [X] 2 lb.
- [X] Squeeze Bottle
- [X] 16 oz.
- [ ] 5 lb.
- [X] Tub

Brands:

Promotions:

- [X] Yes
- [ ] No

Display: [ ] Yes

- [X] No
Retail Distribution Data

Store Name: Skaggs 4246
Store Location: 7007 Arapaho Rd.
Dallas, TX 75248

Sample Store #11

Honey Location:

- [x] Jelly Spreads
- [ ] Specialty Foods
- [ ] Baking Sweeteners
- [ ] Produce
- [ ] Syrup
- [ ] Specialty Display
- [ ] Other

Shelf Location: Shelf Space:

- [ ] 2 Top
- [ ] 5 Linear Feet
- [ ] Eye Level
- [ ] 12 Facings
- [ ] Lower
- [ ] End of Aisle
- [ ] Bottom

Sizes:

- [x] 8 oz.
- [x] 2 lb.
- [x] Squeeze Bottle
- [x] 16 oz.
- [ ] 5 lb.
- [x] Tub

Brands:

Promotions:

- Signs: Yes [x] No [x]
- Display: Yes [x] No [x]
Retail Distribution Data

Store Name: Skaggs 4207
Store Location: 11445 Garland Rd. (at Jupiter)
Dallas, TX 75218
Sample Store #12

Honey Location:
- X Jelly Spreads
- Specialty Foods
- Baking Sweeteners
- Produce
- Syrup
- Special Display
- Other

Shelf Location:
- X Top
- 8 Linear Feet
- Eye Level
- 28 Facings
- Lower
- End of Aisle
- Bottom

Sizes:
- X 8 oz.
- 2 lb.
- Squeeze Bottle
- X 16 oz.
- 5 lb.
- Tub

Brands:

Promotions:
- Signs X Yes
- Display X Yes
- No
- X No