



CHARACTERIZING THE U.S. MARKET OF MELONS

Describing the Market Segments of Melon Consumers

Enrique Velasco

*Purdue University Horticulture
and Landscape Architecture*

Ariana Torres

*Purdue University Horticulture
and Landscape Architecture
and Agricultural Economics*

Petrus Langenhoven

*Purdue University Horticulture
and Landscape Architecture*

Bridget K. Behe

*Michigan State University
Horticulture*

Purdue Horticulture Business
hort.purdue.edu/HortBusiness

**Purdue Horticulture and
Landscape Architecture**
ag.purdue.edu/HLA

**Purdue Agricultural
Economics**
ag.purdue.edu/AgEcon

The US is one of the world's biggest producers and consumers of melons. The average American eats almost 9 pounds of cantaloupe and 2 pounds of honeydew each year (Agricultural Marketing Resource Center, 2018). Increased melon consumption is mainly explained by consumer awareness of melon health benefits, year-round availability, creative marketing strategies, and improved cultivars (Lester, 2006). To address these economic opportunities, retailers, growers, and other industry stakeholders should have a clear understanding of the different market segments of melon consumers, and how individuals in these segments value diverse attributes of melons. This information can help industry stakeholders introduce new cultivars, increase melon sales and consumption, and convey key attributes and benefits to consumers.

This publication illustrates the market segments formed by melon consumers in the US. This publication uses data from *Characterizing the U.S. Melon Market* (Torres et al., 2020), a study published by researchers from Purdue University and Michigan State University. Using a

cluster analysis, their study reported on the consumer segments and profiled those groups to help academics, farmers, and retailers better serve the melon consumer. Cluster analysis has been widely used to identify, then describe, consumer segments based on their preferences and attitudes toward foods (Heng and House, 2018). Researchers included several scales from previous research that may potentially influence melon purchase and consumption: General Health Interest (GHI); Cravings for Sweet Foods (CSF); Food Pleasure (FP), adapted from Roininen (2001); and Variety Seeking in Food (VSF), adapted from vanTrijp and Steenkamp (1991). This publication can help farmers and retailers target melon market segments with specific and focused messages to increase consumption and purchasing of melons.

Data and Methodology

Data for the study comes from an online survey of 1,718 individuals who purchased melons in the three months before data collection: late summer of 2018. The survey gathered information on consumers'

demographic characteristics, melon purchases, and consumption. The survey also asked consumer perceptions, knowledge, and market preferences for melons. Researchers distributed the survey online to a representative sample of the US population in terms of age, gender, and household income. Overall, respondents were on average 46 years old, almost half of the sample was female (48%), and most of the sample was comprised of Caucasian/white Americans (77%). About half of the sample had a college education. Less than half (45%) of the respondents reported less than \$50,000 in annual household income, followed by 33% of respondents reporting between \$50,000 and \$100,000 in annual household income, and 22% of respondents earning more than \$100,000 in annual household income. See Torres et al. (2020) for more information on data collection and analysis.

To create richer consumer profiles, researchers adapted four established attitudinal scales in the survey: General Health Interest (GHI), Cravings for Sweet Foods (CSF), Food Pleasure (FP), and Variety Seeking in Food (VSF) (vanTrijp and Steenkamp, 1991; Roininen, 2001). Researchers created market segments using a cluster analysis methodology that groups observations based on similarities of the data. For this purpose, researchers used SAS software (SAS for Windows, v 9.4, SAS Institute Inc.).

Results

Researchers reported the presence of three market segments (clusters) among American melon consumers. **Cluster 1** ("Local Melon Lovers") comprised 34.6% of the sample (N=595), while **Cluster 2** ("Ripe-For-The-Picking") included 44.7% of the sample (N=354), and **Cluster 3** ("Convenient shoppers") composed 20.6% of the sample (N=769). Figure 1 illustrates the distribution of the clusters based on their consumer profile. As seen

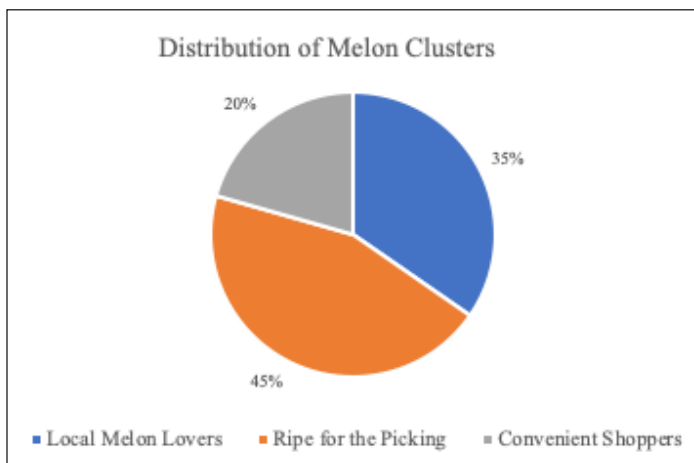


Figure 1. Ripe-For-The-Picking composes the largest segment of melon consumers.

in Figure 1, the largest cluster corresponds to the "Ripe-For-The-Picking" type of consumer, followed by "Local Melon Lovers", and lastly by "Convenient shoppers".

Researchers next profiled the market segments based on their demographic characteristics and attitudes toward GHI, CSF, FP, and VSG scales. The most significant demographic variables, or those which contributed most to the differences between clusters, are listed in Figure 2. Variables like gender, number of children in the household, race, living area, and distance

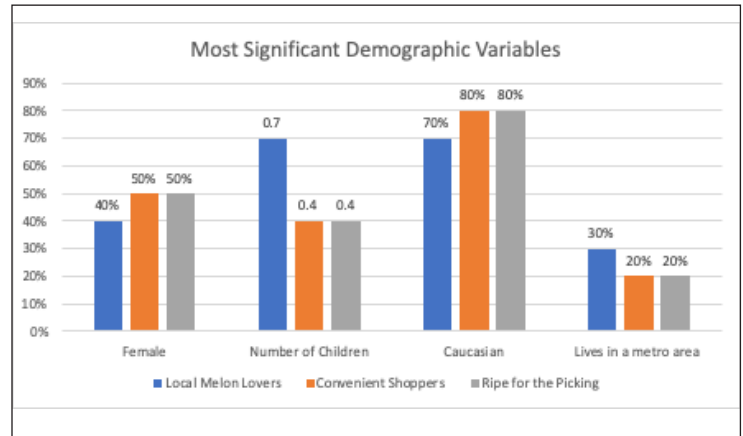


Figure 2. Local Melon Lovers Tend to Be Male, Have More Children, Be Minority, and Live in Metro Areas.

traveled were important in describing the differences between clusters.

As we can see in Figure 2, consumers in the Local Melon Lovers cluster had a lower percentage of women and Caucasian shoppers, a greater number of children, and tended to live in metropolitan areas. Consumers in Cluster 2 and 3 (Ripe-For-The-Picking and Convenient Shoppers) had very similar demographic variables: having the same amount of female participation, a greater proportion of white/Caucasian people in each cluster, fewer children, and traveled shorter distances than consumers in Cluster 1. Understanding these differences helps practitioners find the type of consumer who might belong to each group, and then target them with appropriate marketing messages.

Researchers also compared how consumer perceptions differed among market segments. For example, consumers were asked about the importance they give to melons on their diets, the knowledge they have about melons, and their valuation of local or imported melons. As illustrated in Figure 3, Local Melon Lovers rated highest in all the perception variables. For example, Local Melon Lovers stated they consider melons very important in their diets (80%), that they know a lot about melons (50%), and that they prefer local than regional

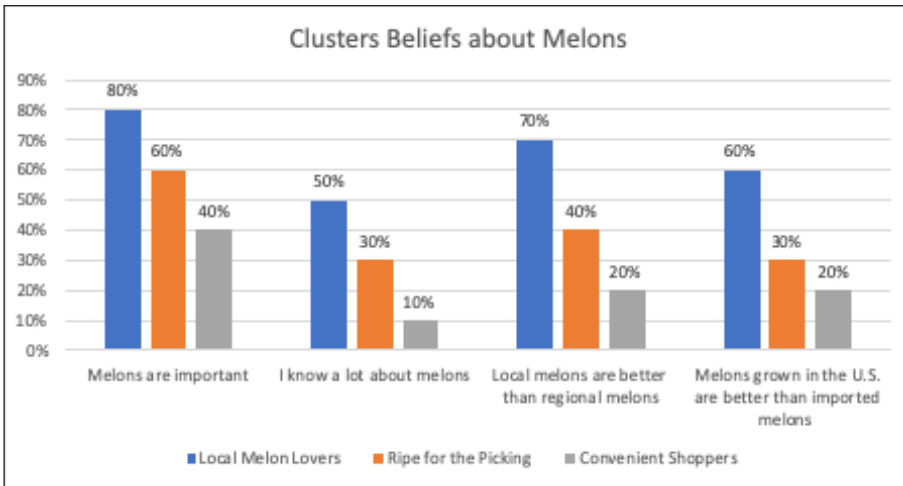


Figure 3. Customers in the Local Melon Lovers market segment preferred local and U.S.-grown melons than regional and imported melons, respectively.

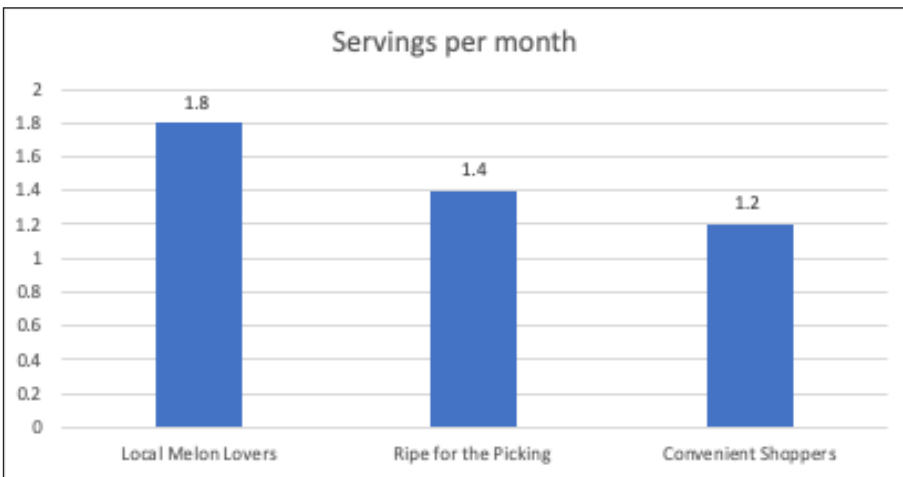


Figure 4. Local Melon Lovers reported consuming more melon servings per month.



Figure 5. Local Melon Lovers paid more for an average melon.

melons (70%), and domestic more than imported melons (60%). On the other hand, Convenient Shoppers rated lowest in all perception variables; they also were the ones who reported knowing the least about melons and having low interest in local melons. Finally, Ripe-For-The-Picking consumers placed their beliefs between Melon Lovers and Convenient Shoppers. For example, 60% of Ripe-For-The-Picking consumers believed melons are important for their diet; similarly, 40% believed local melons are better than regional melons, and 30% believed that melons grown in the U.S are better than imported ones.

Local Melon Lovers reported consuming the most melons in a month, followed by the Ripe-For-The-Picking consumers and Convenient Shoppers, with 1.8, 1.4, and 1.2 servings of melons per month, respectively (Figure 4). Furthermore, and as illustrated in Figure 5, Local Melon Lovers also paid higher prices per melon (\$5.10). The Ripe-For-The-Picking paid \$1 less per highest-paid melon (\$4.10), and the highest price the Convenient Shopper cluster paid was \$3.70. Similarly, the average price paid per melon was higher for the Local Melon Lovers cluster (\$4.10), followed by the Ripe-For-The-Picking group (\$3.20), and the Convenient Shoppers (\$3.70).

Take-Home Message

The main contribution of this publication is the assessment of the US market for melons. Study results reported three distinct clusters among individuals 18 years of age and older. Figure 6 illustrates how US melon consumers are segmented. Local Melon Lovers would be the best target for new melon cultivars because of their high level of consumption and positive attitudes toward melons in their diet. Consumers in this segment tend to be younger and have more children than in the other two segments. Local Melon Lovers were paying more for melons, preferred purchases in local markets (e.g., farmers markets) and tend to have a vast



Figure 6. Segments of US Melon Consumers

knowledge of melons. Marketing campaigns targeting this group should focus on the health and experience attributes of melons.

Ripe-For-The-Picking consumers, placed halfway between Local Melon Lovers and Convenient Shoppers Clusters, indicate the importance to generate marketing messages and labels to appeal to this segment. Given their demographic and consumption characteristics, Ripe-For-The-Picking consumers seem to be the target of marketing and advertising campaigns aiming to increase the market share of melons. For example, generating social media campaigns that target white/Caucasian consumers located in the Midwest can improve the reach of melon retailers to convert Ripe-For-The-Picking into Local Melon Lovers. Marketing efforts should highlight the importance of buying local and information regarding the health and nutrition of melons.

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