Preferences of Young Consumers in Bogor City in Consuming Honey during the Covid 19 Pandemic

Preferensi Konsumen Usia Muda di Kota Bogor dalam Mengonsumsi Madu di Masa Pandemi Covid 19

N. H. Rachmani, A. Apriantini*, & L. Cyrilla ENSD

Department of Animal Production and Technology, Faculty of Animal Science, IPB University Jl. Agatis, Campus of IPB Darmaga Bogor 16680, Indonesia *Corresponding author: astariapriantini@yahoo.com (Received 18-10-2022; Revised 21-11-2022; Accepted 07-12-2022)

ABSTRACT

During the COVID-19 pandemic, people's habits in consuming highly nutritious food increased, especially to increase the body's immunity. Consuming honey is one of the way because it has high content and boosts immunity. Research on consumer preferences in consuming honey was carried out to determine the level of consumer preference. Respondents of as many as 108 people were selected with an age range of 20 to 30 years and domiciled in Bogor City, and the sample was selected purposively. Respondents chose to consume honey with a brand and packaging they are interested in that is plastic bottles, because of the ease of distribution and storage. This type of honey consumes as much as 34.8% of forest honey. Respondents were 29.6% more likely to consume honey once a month. Consumers choose honey packaged using plastic bottles, 51.9%. Honey consumption is most often done by consuming honey alone without adding any food. Consumer decision-making is influenced by factors on the level of consumer preference for a product, so it is necessary to conduct research to determine consumer preferences.

Keywords: attributes, consumption, honey, preferences

ABSTRAK

Saat kondisi pandemi COVID-19, kebiasaan masyarakat dalam mengonsumsi pangan yang berkhasiat tinggi semakin banyak terutama untuk untuk meningkatkan imunitas tubuh. Mengonsumsi madu menjadi salah satu cara karena memiliki kandungan dan manfaat yang tinggi dalam meningkatkan kekebalan tubuh. Penelitian preferensi konsumen dalam mengonsumsi madu dilakukan untuk mengetahui tingkat kesukaan konsumen. Responden sebanyak 108 orang dipilih dengan rentang usia 20 hingga 30 tahun yang berdomisili di Kota Bogor, dan sampel dipilih secara *purposive sampling*. Responden memilih mengonsumsi madu yang memiliki merek serta kemasan yang diminati yaitu kemasan botol plastik, karena kemudahannya dalam pendistribusian maupun dalam penyimpanannya. Jenis madu paling banyak mengonsumsi jenis madu hutan sebanyak 34.8%. Responden sebanyak 29.6% lebih sering mengonsumsi madu selama sebulan sekali. Konsumen memilih madu dengan kemasan menggunakan botol plastik 51.9%. Konsumsi madu paling sering dilakukan dengan cara mengonsumsi madu saja tanpa penambahan pangan apapun. Pengambilan keputusan konsumen dipengaruhi faktor terhadap tingkat preferensi konsumen suatu produk sehingga perlunya dilakukan penelitian untuk mengetahui kesukaan konsumen.

Kata kunci: atribut, konsumsi, madu, preferensi

INTRODUCTION

Indonesia has a relatively low level of honey consumption, which is around 15 grams/capita/year, while in developed countries such as Germany, Japan, England, and France, the consumption level has reached 1500 grams/ capita/ year (Pusat Perlebahan Nasional 2008). The low consumption of honey is partly because many people think that honey is only useful as medicine. Hence, the consumption level of Indonesian people for honey is still very low. Dirjen BPDASPS (2013) states that the level of public honey consumption is still very low, with the level of honey consumption per capita of Indonesian people only ranging from 10 to 15 grams/per capita/year, equivalent to one tablespoon per person per year.

Honey was consumed during the COVID-19 pandemic to increase the body's immunity. The immune system has an important role in maintaining health, and good body immunity can prevent germs or viruses from entering the body. Honey is rich in vitamin C, antioxidants, anti-inflammatories, and detoxification which helps cleanse the body and boost immunity so that it is not easily infected with COVID-19. Efforts are made to increase the body's immune system during this pandemic by consuming healthy food and drinks, taking supplements or vitamins, getting enough rest, exercising regularly, and reducing stress (Kusumo *et al.* 2020).

Consumer decision-making is an important aspect for producers to determine whether consumers will make purchases or not make purchases based on the decisions that consumers make. Consumer knowledge and factors influenced by consumer knowledge of the information they have are closely related to consumer decisions about the products they buy (Sumarwan 2011). The consumer decision-making process and the influence of the consumer's situation will provide a different result for each consumer. The steps of information search are also affected by the consumer's needs for the product they are looking for.

Assael (1998) defines preferences as likes, choices, or something consumers prefer. Several studies and different companies have conducted research on consumer preferences for a product. Consumer preference is essential in marketing because it is closely related to the company's success in achieving its goals, which are purchasing decisions made by consumers based on consumer preferences.

Consumers will choose products with good quality that are directly related to honey products because the products made must be able to get consumer satisfaction (Suranto 2005). Honey companies have carried out various strategies for existing market competition, including offering various types of brands, prices, packaging, and different flavors to consumers. Companies must know the desires of consumers and market conditions so that consumers can accept products. Consumer response to a product needs the company's attention if it wants to survive in its industry. To analyze consumer preferences in making purchases, it is necessary to pay attention to the determining factors that form the basis of consumer behavior itself. Determinants can be grouped into three categories: environmental influences, product differences, and individual influences and psychological processes (Kotler *et al.* 2007).

Consumer preferences are important in marketing because they are closely related to the company's success as a basis for determining marketing strategies in achieving goals, that purchasing decisions based on consumer preferences to achieve consumer satisfaction. Understanding consumers will guide producers to appropriate and efficient marketing policies so they can find out what consumers like and dislike, and determine the order of importance of a product attribute or the product itself. This consumer preference analysis will obtain the order of importance of what product characteristics are the most important or the most preferred.

MATERIALS AND METHODS

This research was conducted on consumers who consume honey with an age range of 20 to 30 years in Bogor City. The location was chosen by purposive sampling with the consideration that the city is near the center of the capital city of Jakarta, so it is hoped that the number of samples taken will vary and be able to represent all individuals in Indonesia who are active and have a habit of consuming honey to boost immunity. Data was collected by distributing questionnaires to respondents online through online forms with specific criteria for respondents who can fill out questionnaires. This research was conducted from December 2020 to February 2021.

Tools and Materials

The tools used in this research are communication devices, laptops, books, and stationery. The materials used in this research are paper, internet network, and respondent questionnaire data.

Methods

Questionnaires were distributed to respondents online via an online form with specific criteria for respondents. The questionnaire was randomly spread to the respondent with criteria that a community located in Bogor with ages 20 to 30 years and every consuming product honey who filled them out. The overall stages in the research are presented in the diagram in Figure 1.

Questionnaires were distributed to respondents randomly with the criteria that people who were located in the city of Bogor aged 20 to 30 years and have consumed honey products.

Data analysis

a. Validity test

Before being used as a data collection instrument, questionnaire statements should be tested for validity and reliability. A validity test is carried out to show the extent to which a measuring instrument is capable and properly used to measure something. Validity testing was conducted on 30 respondents as a minimum requirement for validity trials. The validity test is done by comparing the value of the r count (for each item) with the r table for a degree of freedom (df)=n-k. In this case, n is the number of samples,

Rachmani *et al.* Jurnal Ilmu Produksi dan Teknologi Hasil Peternakan 1 (1): 13-18

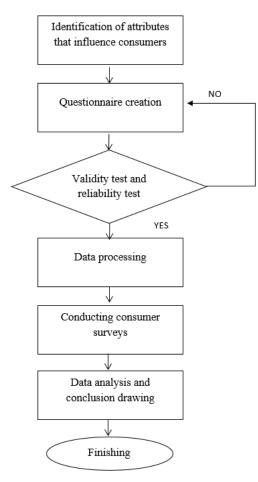


Figure 1. Flow chart procedure

and k is the number of items. The question is valid if r count > r table (Ghozali 2005).

b. Reliability Test

A reliability test is used to determine the consistency of a measuring instrument. A measuring instrument is reliable if it is used repeatedly by researchers who show the same results (Rakhmat 2001). Through the reliability test criteria using the Alpha formula is r count > r table with a significance level of 0.05, the measuring instrument is declared reliable. The results of processed data on the reliable test obtained a Cronbach value of 0.675 (Table 1). This shows that the questions on the questionnaire are reliable so that research can be continued. The test used in this study is a descriptive test. The purpose of descriptive research is to make descriptions objectively classify, analyze, and interpret the data studied to make it easier to understand the variables used in the research.

c. Descriptive Test

The data obtained in this study were processed using descriptive analysis. Data analysis results are the average value of respondents who are in the city of Bogor, which is determined by the Slovin method using a tolerance limit of 10% (Sugiyono 2011). The data obtained is presented in tabular form and analyzed descriptively.

Mean:
$$\overline{X} = (\overline{X} + \overline{X} + \overline{X} + \overline{X} + \cdots \overline{X} - \overline{n})/n$$

Information: \overline{X} = Average N = Amount of data Xn = I-th data value, (I=1,2,3,...n)

RESULTS AND DISCUSSION

Amount respondents based on BPS data (2016) obtained amount public Bogor city numbered 178,783 people with a range of 20-30 years old, so based on results calculated with method Slovin, the respondent data will be taken totaling 108 people. The characteristics of consumers measured in this study are types of gender, age, education level, amount of income, and type of work data are shown in Table 1.

Table 1.	Characteristics	respondents
----------	-----------------	-------------

Characteristics	Frequency (n)	Percentage (%)
Gender		
Man	33	30.5
Woman	75	69.5
Total	108	100
Age		
20-25 years	96	89
26-30 years	12	11
Total	108	100
Total Income		
Rp0-Rp500,000	50	46.2
>Rp500,000 Rp1,000,000	16	14.8
>Rp1,000,000- Rp1,500,000	11	10.3
>Rp1,500,000- Rp2,000,000	4	3.7
>Rp2,000,000	27	25
Total	108	100

The number of consumer respondents consuming honey is 108, as shown in Table 1. Gender the number of women, is much higher than men. Male consumers are 30.5%, and female consumers are 69.5%. Most consumers who buy honey are female because women are more selective in buying a product. The theory put forward by Lury (1998) is that 80% or more of the decisions to purchase or consume goods are determined by women. Consumers between 25-40 years dominate more because, generally at that age consumers think more logically and rationally in choosing products that are beneficial to health. In general, adult consumers tend to have a fairly high level of health products, one of which is honey which has many health benefits (Nurrahmi *et al.* 2018).

The results showed that honey consumers in Bogor city were dominated by the age range of 20-25 years. In this age range, the number of respondents reached 89%, and at the age of 26-30 years, it reached 11%. Young adults have busy activities, so consumers consume honey to increase

their body immunity and as a substitute for exercise to stay fit and maintain their immunity. The study results (Putriwindani 2011) state that consumers with an age range of 26-35 years consume honey to support health during their busy lives and are interested in consuming honey because honey is very good for the health of the body. This age also shows that consumers already have reasons and needs that can fulfill their needs or only satisfy their desires for a product.

The income of the respondents is in Table 1. The income per month for the research respondents varied from a nominal value of less than Rp. 500,000.00 to more than Rp. 2,000,000.00. there 46.2% of respondents with an income of less than Rp. 500,000.00, and the lowest percentage is in the total income of respondents with the range of Rp. 1,500,000.00-Rp. 2,000,000.00, as much as 3.7%. Income is a factor in the level of consumption of a product by consumers. This is because according to Sukirno and Sadono (2005), there is a unidirectional relationship between income and consumption. High income can increase interest in consuming a product. So the higher the income, the higher the purchase of a product. Financial ability is an important factor influencing consumer behavior in consuming products.

Consumer Preferences in Consuming Honey

a. Brand attributes

Consumer preferences are defined as individual tastes for product choices, measured by utility, from various goods (Indarto 2011). Attributes such as quality, price, promotion, and packaging attached to the product can influence consumer preference for selecting the product. The attributes observed in this study were brand, packaging, and type of honey. Consumer preferences for brand attributes are presented in Figure 2.

The distribution of respondents based on preference for honey brands is shown in Figure 2. The results show that consumers prefer honey products with a brand on the packaging as much as 80.6% and those not branded as much as 19.4%. A brand is one of the attributes that consumers pay attention to in buying a product. Brands can identify the products in the packaging and display product information. Consumers can find the composition of ingredients, halal, expiration date, and other things considered important on the packaging brand before buying a product.

b. Packaging attribute

Packaging attributes are also considered important in selecting a product. Packaging is the first attraction consumers see in a product, so packaging is one of the consumer factors in buying a product. Packaging attributes in consumer preferences are presented in Figure 3 below.

The results in Figure 3 show that consumers choose honey packaged using plastic bottles 51.9%, glass bottles 37%, and sachet packaging 11.1%. Most consumers' preference for packaging uses plastic bottles. Plastic bottle packaging is considered easier and more secure regarding the safety of honey products. Consumers can easily carry the product anywhere when buying in large quantities, and it does not break or spill easily when using plastic bottles. Glass bottles are perceived to have a higher security level than other packages and do not damage the product easily, but this packaging is more difficult to distribute.

c. Honey type

Honey, especially in Indonesia has various types of honey that come from various types of bees and types of flowering plants as feed. The choice of various types of honey is an attraction for consumers. Consumer preferences in choosing the type of honey are presented in Figure 4.

The results in Figure 4 show that consumers consume the most types of forest honey, as much as 34.8% then 12% cottonwood honey, 12% multiflora honey, 5.5% longan honey, 0.9% rambutan honey, and 34.8% other types of honey where the respondents consumed pollen honey, Angkak honey, rubber honey, ruay honey and Arabic honey that comes from the Black Seed flower. Forest honey in

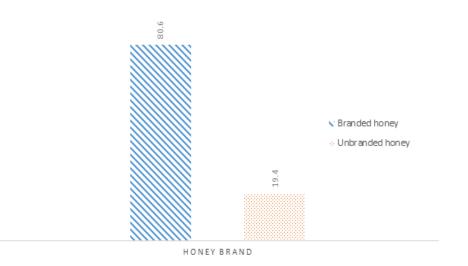
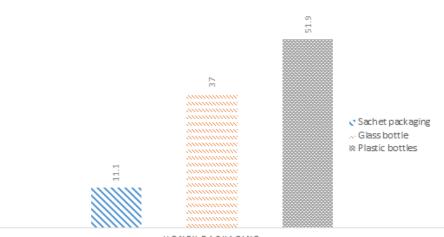


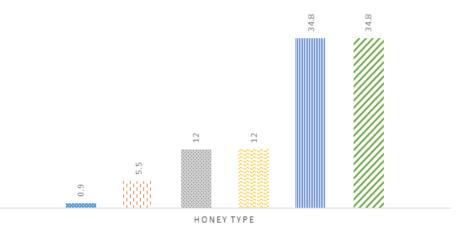
Figure 2. Preferences consumer attribute brand

Rachmani *et al.* Jurnal Ilmu Produksi dan Teknologi Hasil Peternakan 1 (1): 13-18



HONEY PACKAGING

Figure 3. Consumer preferences for packaging attributes



📱 Rambutan honey 🔐 Longan honey 💥 Multiflora honey 🛫 Cottonwood honey 🟢 Forest honey 🗷 Other honey

Figure 4. Consumer preference for the type of honey

Indonesia is widely produced, given Indonesia's potential which has a variety of flowering plants. According to data from the Ditjen BPDASPS (2009), honey production in Indonesia is dominated by forest honey as much as 70%, and the rest comes from honey beekeeping originating from *Apis mellifera* and *Apis cerana* bees. So respondents consume more forest honey because it is easy to find honey products of this type and those that consumers have trusted with their quality as genuine honey.

Honey Consumption Rate

Consumption is the use of goods and services that will meet human needs. The level of honey consumption among consumers in the city of Bogor is presented in Table 2. The level of honey consumption among respondents in the Bogor city area can be seen in Table 2. The frequency of honey consumption among the respondents varied according to their needs. The table shows that 29.6% of

respondents consume honey more often once a month, 27.8% of respondents are uncertain about consuming honey, 22.2% of respondents consume honey every day, and at least 20.4% of respondents consume honey once a week. So, it is known that the frequency of honey consumption among respondents is still low, which is in line with the amount of honey consumed by respondents. Table 2 shows that most respondents consumed 1-3 tablespoons (15-45 mL) of honey as much as 85% per day, followed by 4-6 spoons (60-90 mL), which was 3.7%, and 7-10 spoons (105-150 mL) as much as 2%. The results of Table 2 show that the average level of honey consumption is still low in the city of Bogor. This is directly proportional to data from the Dirjen BPDASPS (2013) the level of honey consumption per capita in Indonesia is still low, only around 10-15 grams/ per person/year or the equivalent of one tablespoon per person per year. The level of consumption in Indonesia is

Rachmani *et al.* Jurnal Ilmu Produksi dan Teknologi Hasil Peternakan 1 (1): 13-18

Table 2. Levels of honey consumption			
Honey consumption rate	Frequency (n)	Percentage (%)	
Frequency of honey consumption	24	22.2	
Every day			
Once a week	22	20.4	
Once a month	32	29.6	
Uncertain	30	27.8	
Total	108	100	
The amount of honey consumed (mL/day)			
1-3 scoops (15-45 mL)	92	85	
4-6 scoops (60-90 mL)	4	3.7	
7-10 scoops (105-150 mL)	12	11.3	
Total	108	100	
Consumption of honey + addition			
other food*			
Honey only	83	45.4	
Honey + cereal	4	2.2	
Honey + cake	7	4	
Honey + bread	21	11.2	
Honey + kind of drink	33	18.4	
Honey + milk	15	8.4	
Honey + processed milk	8	4.4	
Other	10	6	
Total	181	100	

Table 2. Levels of honey consumption

considered low compared to developed countries such as Japan and Australia, which have reached the range of 1200-1500 grams/person/year.

Honey as a functional food, along with the times has varied kinds in terms of production, especially to attract consumer interest and increase honey consumption rates. One of them is honey consumed as an addition to certain foods. Honey functions both as a sweetener and to increase the nutritional value of a food product. Consumer behavior in consuming honey with the addition of other food products can be seen in Table 2. The table shows that 45.4% only consumed honey without adding any food, 18.4% consumed the addition of honey to drinks, 11.2% consumed honey with bread, 8.4% consumed honey with dairy products, 4.4% consumed honey with dairy products, 4% consumed honey with cakes and at least 2.2% of respondents consumed honey with cereals. Last, 6% of respondents chose other things such as adding honey to everyday dishes, that is chicken or meat products or fruit as snacks. So, the table results show that respondents consumed more honey without adding food.

CONCLUSION

Consumption of honey products during the COVID-19 pandemic has increased due to the high properties of honey in increasing the body's immunity. Consumers prefer wild

honey because it is easy to obtain and has a high antioxidant content. Brand attributes and packaging are consumers' choices in determining product purchases, honey packaging with plastic bottles is the most choice because the product is light and easy to carry anywhere. Consumer preferences prefer to consume honey alone without the addition of other foods. The highest level of honey consumption for honey consumers is once a month, with a total of 15-45 mL.

REFERENCES

- Assael, H. 1998. Consumer Behavior and Marketing Action 6th Edition. South Western College Publishing, New York.
- **BPS (Badan Pusat Statistik)**. 2016. Statistik Daerah Kota Bogor. Badan Pusat Statistik Kota Bogor, Jakarta.
- **Dirjen BPDASPS**. 2013. Tingkat Konsumsi Madu Indonesia. Kementerian kehutanan direktorat jenderal BPDASPS, Jakarta.
- **Ditjen BPDASPS**. 2009. Statistik kehutanan. 2008: Data produksi madu. Kementerian Kehutanan, Jakarta.
- Ghozali. 2005. Persyaratan Instrumen. Rineka Cipta, Jakarta.
- **Indarto, R.** 2011. Analisis preferensi konsumen terhadap building kartu GSM dengan smartphone (studi bulding smartphone oleh telkomsel dan xl). Tesis. Universitas Indonesia Press, Jakarta.
- Kotler, Philip, Keller. 2007. Manajemen Pemasaran, Jilid I, Edisi Kedua belas. PT. Indeks, Jakarta.
- Kusumo, A. R., F. F. Wiyoga, H. P. Perdana, I. Khairunnisa, R. I. Suhandi, & S. S. Prastika. 2020. Jamu Tradisional Indonesia: Tingkatkan Imunitas Tubuh Secara Alami Selama Pandemi. Jurnal Layanan Masyarakat. 4(2):465-471.
- Lury. 1998. Peran Karakteristik Merek, dan Karakteristik Hubungan Pelanggan. Jurnal Manajemen. 6(1):1-8.
- Nurrahmi, M., R. Saepudin, & B. Zain. 2018. Strategi Pemasaran Madu Hutan di Kota Bengkulu. Jurnal Sain Peternakan Indonesia. 13(2).
- **Pusat Perlebahan Nasional.** 2008. Lebah Madu, Cara Beternak dan Pemanfaatannya. Jakarta.
- Putriwindani. 2011. Analisis proses keputusan pembelian dan kepuasan konsumen madu pramuka di PT. Madu Pramuka serta implikasinya terhadap bauran pemasaran. Skripsi. Institut Pertanian Bogor, Bogor.
- Rakhmat, J. 2001. Metode Penelitian Komunikasi. PT. Remaja Rosdakarya, Bandung.
- Sugiyono. 2011. Metode Penelitian Kuantitatif, Kualitatif dan R&D. Alfabeta, Bandung.
- Sumarwan, U. 2011. Perilaku Konsumen: Teori dan Penerapannya dalam Pemasaran. Ghalia Indonesia, Bogor.
- Suranto, A. 2005. Khasiat dan Manfaat Madu Herbal. Agromedia Pustaka. 2: 34-43.
- Sukirno, Sadono. 2005. Pengantar Teori Makro Ekonomi. PT. Raja Grafindo Persada. Jakarta.