

## Preferences and Factors Influencing the Purchase Intention of Healthy Snacks among Millennials in Jakarta

Grace Aurelia Kahono<sup>1</sup>, Della Rahmawati<sup>1\*</sup>, I Kadek Putra Yudha Prawira<sup>2</sup>,  
Maria D.P.T. Gunawan Puteri<sup>1</sup>, Abdullah Muzi Marpaung<sup>1</sup>

<sup>1</sup>Department of Food Technology, Faculty of Life Sciences, Swiss German University, Alam Sutera,  
Tangerang, Banten 15143 Indonesia

<sup>2</sup>Department of Food Science and Technology, Faculty of Agricultural Technology, Bogor Agricultural  
University, Jl. Raya Dramaga Bogor, 16680 West Java, Indonesia

*\*Corresponding author: della.rahmawati@sgu.ac.id*

### Abstract

Trend of healthy eating has been increasing almost over all region in the world, including Indonesia. More than half (75%) of urban Indonesians are willing to have healthier diet. This growing trend will influence food industries in coming years, including snack industries in Indonesia, since Indonesia is the country with the biggest snacking habit in Asia Pacific. The snacking habit is popular with all ages, especially Millennials. Nowadays, Millennials have been shifting their snacking behaviors into a healthier snack consumption more rapidly than any other groups. The objective of this study was to know the preferences and the factors influencing the purchase intention of healthy snack among Millennials in Jakarta, as Jakarta is the capital city of Indonesia and it covers urban population. The study was carried out by market survey to 475 Millennials in Jakarta who had interest in consuming healthy snack in Jakarta and the data was analyzed using Friedman Test and Wilcoxon Signed-Rank Test. The research revealed that yogurt was the preference of healthy snacks among Millennials in Jakarta, compared to healthy biscuit/ cookies, snack bar, fruit and vegetable (including their products). In addition, taste became the most influential intrinsic factor, while price and convenience were the most influential extrinsic factors to the purchase intention of healthy snacks among them.

**Keywords:** Healthy Snack, Intrinsic Factors, Extrinsic Factors, Purchase Intention, Millennials

### Introduction

Indonesia is the country with the biggest snacking habit in Asia Pacific. Twenty four percent of Indonesians are snacking on a daily basis, also known as ‘Snack Frenzy’ [1]. A snacking habit is popular with all ages, especially Millennials, people who were born between 1981-1996 [2]. Consumer research by Mintel (2016) showed that 77% of Millennials eat snacks every day, a higher proportion than any other age group. The reasons for snacking are varied; hunger, for an energy boost, to save time, boredom, and others. The importance of snacking gives opportunity for food companies to develop snack products, especially for young consumers.

Nowadays, Millennials have been shifting their snacking behaviors into a healthier snack consumption more rapidly than any other age groups [3]. The shifting pattern in snack consumption has been driven by the growing trend, ‘healthy eating’, which is also led by Millennials [4]. The trend is believed to keep growing in the future due to better level of knowledge and education about health and healthy eating [5]. This growing trend will influence the food industry in coming years, as more people will be interested in adopting healthy snacking habits along with the convenience and the availability [6]. The global healthy snack market has been annually rising every year [7].

The trend of healthy snacking is also entering Indonesia as Indonesians start to have awareness of the importance of a healthy diet. The majority of urban Indonesians (75%) are willing to have healthier diet, such as avoiding refined sugar, consuming more food with high protein, and others [8]. According to Snapcart Indonesia, Indonesians consumers are disappointed by the lack of healthy snacks option in the market. Therefore, the trend of snacking and healthy diet in Indonesia become a good opportunity for snack food producers to develop healthy snack products in Indonesia [9].

However, Nielsen Survey in 60 countries revealed that each country has specific preferences of healthy snack, and thus food industry needs to consider local tastes when developing healthy snacks [10]. Besides preferences, today’s consumers also consider several factors in choosing healthy snacks, such as taste, nutrition, healthiness, and convenience. These influential factors can be divided into two categories; intrinsic and extrinsic characteristics [11].

Based on previous researches, this research will give information about the preference and the most influential intrinsic and extrinsic factors for consumers' purchase intention towards healthy snack products among Millennials of Jakarta that may help the food industry to develop healthy snacks.

## **Materials and methods**

The method used is by distributing the 5-point Likert scale online questionnaire to 475 respondents. The questionnaire consists of three sections; preferences of healthy snacks, intrinsic factors, and extrinsic factors. There are 4 questions regarding preferences of healthy snacks where the respondents are asked to rate their interest towards four types of healthy snacks; yogurt, healthy cookies, snack bar, fruit and vegetable (including their products). There are 5 questions regarding intrinsic factors where the respondents are asked towards the importance of five intrinsic factors; taste, texture, appearance, ingredients, and aroma. There are 7 questions regarding extrinsic factors where the respondents are asked towards the importance of seven extrinsic factors; price, packaging, convenience, advertising, label, packaging, and environment. All information and questions in the questionnaire are based on in-depth interview to several experts, literature review, and previous researches.

Slovin Formula was used to determine the number of respondents required in this study [12]. The validity and reliability of the questionnaire is tested by Pearson Product Moment Correlation Test and Cronbach's Alpha. The data from the market survey is being analyzed using Friedman Test and Wilcoxon Signed-Rank Test.

## **Results and discussion**

Based on Friedman Test,  $p$  value preferences of healthy snack, intrinsic factors, and extrinsic factors are less than 0.05. Therefore, Wilcoxon Test is performed to know in which group the difference exist.

### **Preferences of Healthy Snacks**

Based on Friedman Test, preference of healthy snacks has  $p$  value of 0.000, which is less than 0.05. Therefore, there are preference healthy snack different among Millennials in Jakarta.

**Table 1.** Ranks Preferences of Healthy Snacks

<i>Preferences of Healthy Snacks</i>	<i>Value*</i>
Yogurt (P1)	2.75
Healthy cookies (P2)	2.60
Snack bar (P3)	2.47
Fruit, vegetable products (P4)	2.18

\*the highest value means the most preferred healthy snack

\*N= 475, value= mean

Based on the ranks (Table 1), yogurt has the highest rank which means that it is more preferred than other healthy snacks; healthy cookies, snack bar, and fruit and vegetable (including their products). Further analysis was conducted by Wilcoxon Test to know whether there is significant preference different between yogurt and other healthy snacks (Table 2). The  $p$  value which is less than 0.05 indicates that there is significant preference different between two healthy products. The result is yogurt<sup>a</sup>, healthy cookies<sup>b</sup>, snack bar<sup>b</sup>, fruit and vegetable products<sup>c</sup>.

**Table 2.** Wilcoxon Test of Preferences of Healthy Snacks

<i>Preferences of Healthy Snacks</i>	<i>P1</i>	<i>P2</i>	<i>P3</i>	<i>P4</i>
P1	-	0.027*	0.001*	0.000*
P2	0.027*	-	0.066	0.000*
P3	0.001*	0.066	-	0.000*
P4	0.000*	0.000*	0.000*	-

\* $p$  value < 0.05, there was significant different.

The result of the research which indicated that yogurt is more preferred than healthy biscuit/ cookies, snack bar, and fruit and vegetable (including their products) is supported by fact that demand of dairy products is increasing in Indonesia. Dairy products, such as yogurt, sour milk, cheese held the second largest market share in Indonesia in 2013 [8].

### Intrinsic Factors

Based on Friedman Test, intrinsic factors have  $p$  value of 0.000, which is less than 0.05. Therefore, there are intrinsic factor different among Millennials in Jakarta.

**Table 3.** Ranks Intrinsic Factors

<i>Intrinsic Factors</i>	<i>Value*</i>
Taste (I1)	3.63
Ingredients (I2)	3.14
Appearance (I3)	2.80
Texture (I4)	2.78
Aroma (I5)	2.66

\*the highest value means the most preferred healthy snack

\*N= 475, value= mean

**Table 4.** Wilcoxon Test of Intrinsic Factors

<i>Intrinsic Factors</i>	<i>I1</i>	<i>I2</i>	<i>I3</i>	<i>I4</i>	<i>I5</i>
I1	-	0.000*	0.000*	0.000*	0.000*
I2	0.000*	-	0.001*	0.002*	0.000*
I3	0.000*	0.001*	-	0.996	0.015*
I4	0.000*	0.002*	0.996	-	0.022*
I5	0.000*	0.000*	0.015*	0.022*	-

\* $p$  value < 0.05, there was significant different.

Based on ranks (Table 3), taste has the highest rank, followed by ingredients, appearance, texture, and aroma. Wilcoxon Signed-Rank Test was performed to know whether there is significant intrinsic factor different between taste and others (Table 4). The  $p$  value which is less than 0.05 indicates that there is significant intrinsic factor different. The result from Wilcoxon Test is taste<sup>a</sup>, ingredients<sup>b</sup>, appearance<sup>c</sup>, texture<sup>c</sup>, and aroma<sup>d</sup>.

The result of this research which indicated that taste is the most influential intrinsic factor is in accordance with previous researches [11]. The result could be explained by the fact

that human behavior towards food consumption is strongly influenced by the effects of taste and flavor as it brings pleasure value to them [10, 13].

### Extrinsic Factors

Based on Friedman Test, extrinsic factors have  $p$  value of 0.000, which is less than 0.05. Therefore, there are intrinsic factor different among Millennials in Jakarta.

**Table 5.** Ranks Extrinsic Factors

<i>Extrinsic Factors</i>	<i>Value*</i>
Price (E1)	4.69
Convenience (E2)	4.67
Brand (E3)	4.07
Packaging (E4)	3.96
Environment (E5)	3.68
Label (E6)	3.55
Advertising (E7)	3.38

\*the highest value means the most preferred healthy snack

\*N= 475, value= mean

Based on ranks for extrinsic factors (Table 5), price gets the highest rank, followed by convenience, brand, packaging, environment, label, and advertising. Wilcoxon Signed-Rank Test was conducted to know whether there is significant extrinsic factor different between price and others (Table 6). The  $p$  value which is less than 0.05 indicates that there is significant extrinsic factor different. The result is price<sup>a</sup>, convenience<sup>a</sup>, brand<sup>b</sup>, packaging<sup>b</sup>, environment<sup>c</sup>, label<sup>cd</sup> and advertising<sup>d</sup>.

Based on the result, price and convenience are the most influential extrinsic factors are in accordance with the previous research [11, 14]. Price is more important than brand in choosing snacks [15], because for most people, price is highly associated with products quality.

**Table 6.** Wilcoxon Test of Extrinsic Factors

<i>Extrinsic Factors</i>	<i>E1</i>	<i>E2</i>	<i>E3</i>	<i>E4</i>	<i>E5</i>	<i>E6</i>	<i>E7</i>
E1	-	0.250	0.000*	0.000*	0.000*	0.001*	0.002*
E2	0.240	-	0.000*	0.000*	0.000*	0.000*	0.000*
E3	0.000*	0.000*	-	0.096	0.000*	0.000*	0.000*
E4	0.000*	0.000*	0.096	-	0.010*	0.000*	0.000*
E5	0.000*	0.000*	0.000*	0.010*	-	0.123	0.044*
E6	0.001*	0.000*	0.000*	0.000*	0.123	-	0.653
E7	0.002*	0.000*	0.000*	0.000*	0.044*	0.653	-

\**p value* < 0.05, there was significant different.

Nowadays, convenience is important, especially among young population of urban Indonesians. They are adopted to easy-to-eat food due to the changing lifestyle where people need to reduce preparation and eating time, and thus increased the necessity of convenience food. Due to price consideration and convenience, smaller package sizes are often preferred since it has cheaper price and has less weight (lighter) [8].

## Conclusions

Yogurt is the most preferred or the favorite healthy snacks among Millennials in Jakarta compared to healthy biscuit/ cookies, snack bar, and fruit and vegetable (including their products). Taste becomes the most influential intrinsic factor, while price and convenience become the most influential extrinsic factors in the purchase intention of healthy snacks among them.

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