Turkish Online Journal of Qualitative Inquiry (TOJQI) Volume 12, Issue 6, June 2021: 745- 757

Factors Influencing the Intention to Use Nutritional Label: Literature Review

Norhidayah Azman^{a*}, Albattat^b, Ahmad^c, Jacquline Tham^d

^{a* b c d} Post Graduate Centre, Management and Science University, University Drive, Off Persiaran Olahraga, Section 13, 40100, Selangor, Malaysia

*Corresponding author: norhidayah_azman@msu.edu.my

Abstract

The rise of food-related diseases in population has prompted a slew of public policy and private-sector interventions, including the use of nutrient labelling. This paper attempts to investigate the different term use to define the use of nutritional label among the researcher in this area. This study identified and synthesized evidence from over 20 years of observational research in the health and diet fields. This paper also highlights type of nutritional label format which is back-of-pack and front-of-pack nutritional label and how both of this type complements each other. Moreover, this paper also discusses the factor that can contribute the intention to use nutritional labelling which is perceive behavior control, attitude and subjective norm. The findings of this paper concluded that c onsumer are attracted to use nutritional label when they understand the meaning of each information provided in the label. It can be suggested that, front-of- pack nutritional labelling much more convenient and easier to use and user-friendly compare to back-of-pack nutritional label. Even though these three factors are usually been highlighted as the major contribution to intention behavior but additional factors also should and can be considered to predict the behavior intention toward actual behavior.

Keywords: Nutritional label; back-of-pack; front-of-pack; intention to use; consumption; consumer

1. Introduction

Noncommunicable diseases (NCDs) such as cardiovascular disease, chronic respiratory disease, diabetes, and cancer are the leading causes of death in the Southeast Asian nation, accounting for nearly 8.5 million deaths each year (Castillo-Carandang et al., 2020). According to Malaysia's Department of Statistics (2020), ischemic heart disease is the leading cause of death in the nation, accounting for 16,325 deaths in 2019. Ischemic heart attack cases have steadily risen over the years. Obesity occurrence is raised when unhealthy foods are consumed on a daily basis. According to the World Population Review in 2019 (Said, 2020), Malaysia has the highest proportion of obese citizens in Southeast Asia. Furthermore, almost half of Malaysian adults are listed as overweight or obese, which is troubling (Abdul Manaf, Hadi Ruslan, Mat Ludin & Abdul Basir, 2020; Sayuti et. al., 2020 and Kit, Saad, Jamaluddin, & Phing, 2020). The rising number of chronic diseases in Malaysia is cause for great concern; hence, immediate action is needed to address this problem. Malaysian consumers have begun to recognize the health risks induced by unhealthy food intake can be avoided and minimized by adopting healthy eating behaviors (Kwon, 2020 and Ghazi et. al., 2020).

It is difficult for society to stop eating refined foods due to the glut of processed foods present in the industry and a hectic lifestyle (Hebebrand & Gearhardt, 2021; Gearhardt & Hebebrand, 2021). Realizing that unhealthy foods do more damage than gain, global and local authorities have prioritized consumer health security (Carins et. al., 2021; McGraw & Mandl, 2021 and Laar et. al., 2021). Given the importance of the nutrition mark in

promoting balanced food selection, customers are compelled to utilize it efficiently when buying food items (Custodio et. al., 2021 and Martin, Lange & Marette, 2021). However, concerns have been posed about the low usage of nutrition labels, especially among developing-country consumers (Bou-Mitri et. al., 2021; Azman & Sahak, 2014). As a result, it is critical to study the function of nutritional label usage and attitude in influencing safe food selection and, as a result, serving as a tool to secure consumer rights.

Despite the fact that the regulatory environment for food labelling varies by country, with nutrition labels being mandatory in certain countries such as, Australia, Malaysia, South Korea and Canada and optional in others (Vanderlee et all., 2021 and Koen, Blaauw, & Wentzel-Viljoen, 2016), nutrition labels have been accepted as one of the tools to help customers make healthier food choices and e (Kanter, Vanderlee, & Vandevijvere, 2018). Nonetheless, it has been revealed that the usage of a nutritional label is also limited in developing countries as opposed to developed countries (Trigo et. al., 2021; Ambak et al., 2014; Grunert & Wills, 2007). Furthermore, it has been reported that, despite the fact that customers in developing markets are well conscious of the value of eating nutritious food, the usage of nutritional labels by consumers while making consumption of food product is still at a low level (Wongprawmas et al., 2021; Darkwa, 2014; Norazlanshah et al., 2013; Rose, 2012). In Korea, it is also argued that, although nutrition label recognition is strong, real nutrition label use is poor (H.-S. Kim, Oh, & No, 2016). There is no exception for Malaysia, where nutritional label use is low despite strong market perception of the value of nutrient labels (Zainol, 2021; Tay et. al., 2021; Azman & Sahak, 2014; Darkwa, 2014; Kumar & Ali, 2011; Ministry of Health Malaysia, 2018; Norazlanshah, et al., 2013; Rose, 2012).

In 2019, a survey commissioned by Food Industry Asia (FIA) and a polling company named IGD discovered that the majority of Malaysians were passionate about reaching optimal health and wellness by eating a healthy diet (The Sun Daily, 2019, May 16). Because of the increase in chronic diseases and obesity rates, customers start to stop eating foods high in calories, fat, sugar, and sodium. Many restaurants and food manufacturers have begun to integrate seasonal, fresh, and balanced meals into their menus in order to meet changing customer demands and requirements. Introducing nutritional label information on food to the marketplace are a positive idea since it provides consumers with an information that can influence their selection and consumption of healthy food product in the market (Deliza et al., 2020; Talati et al., 2019; Talati et al., 2018; Hieke et al., 2015; Grebitus & Davis, 2017). This present paper will discuss the term use of nutritional label, factors that contribute to intention to use nutritional label and discussion for future research.

2 Literature review

2.1 Use of nutritional label

In understanding the term use of nutritional label, Saxena, Sharma and Jain (2021) refer the use of nutritional label when the consumers look at product packaging, pay attention to relevant detail, comprehend it, and retain it in their brain as long-term memory, which they then use to make consumption decisions. They urged that the frequency of usage of nutrition labelling information among the consumer may involve items like what aspects of the food label information are often listened to by the customer, how often, and how much value do they assign to various requirements listed on the food labels. From the definition, they suggest the food industry to focus on providing only certain information in the nutritional label that can catch the consumer attention and relevance to them rather that providing the unnecessary information.

Bergmans (2020) define the term use of nutritional label is when the consumer read, understand and belief the information provided in the nutritional label. His study involves 192 respondents. She urged that when the consumer read and understand, the feeling of believe must be feel by the consumer to ensure the use of nutritional label can be transform into positive behaviour toward the consumption of food product. In this study, belief is where the consumer perceives the nutritional label information can help them to differentiate the food product base on the label of safeness to consume in a long-term period. The finding shows, the consumer who read the nutritional label, need to understand and believe the nutritional information provided regarding the healthiness level of the food product tend to have positive behaviour toward the food product. But she also urged that, the element of believe will encourage the positive behaviour where it can become a good motivator to performed the expected behaviour.

Moreover, according to Ramdan et al. (2018), the usage of nutritional labelling may refer to an individual's degree of comprehension by possessing the tendency to learn, grasp, recognize, and view the details displayed on the nutrient label in graphic format (Graph Chart, Table). The study involves 420 respondents aged 15 and above in Putrajaya by using self-administered questionnaire. In this study, the researcher focusses on the level of literacy as the measurement the use of nutritional label information. They urged that the use of nutritional label is successful only when the consumer read and understand the nutritional information on the nutritional label. According to the study, nutrition label literacy and attitude against nutrition labels have an important impact on

Factors Influencing the Intention to Use Nutritional Label: Literature Review

safe food choice. The results provide interested parties with valuable information and advice in developing successful customer engagement campaigns and encouraging a healthier lifestyle among Malaysian consumers.

Besides that, according to Kodali and Telaprulo (2018) the term of use of nutritional label can be define as read and understand the information on the nutritional label. They urged that the consumer only use the nutritional label when consumer read and understand the information in the nutritional label. Reading the nutritional labelling without understanding the information didn't give any changes in the consumer behavior toward the consumption of healthier food product in the market. From the metanalysis that they have been done, most of the previous research did mention the understanding about the nutritional label information is the important to ensure it can drive expected behavior toward the use of nutritional label. The level of understanding will measure the meaningful of the nutritional information to the consumer (Rachmawati, Shukri, Azam, & Khatibi, 2019).

Gidlöf, Anikin, Lingonblad & Wallin (2017) define the term use of nutritional label as look at the nutritional label information on the food product. In this study the external and internal influence are used to measure the intention to use the nutritional label among the consumer. The external factor such as visual prominence, the number of facings, and the location of each and the internal factor such as brand tastes, price sensitivity, and dietary preferences have been using in this study. The finding shows that consumers tend to use visual saliency in their decision making, directing their visual focus to those who match their preferences based on their experience of product presentation. However, also when correcting for all other internal and external variables, visual focus was by far the most significant indicator of real transactions. In other terms, just staring at a box over a prolonged period of time or continuously for some cause increases the likelihood that this commodity will be purchased. Visible focus is therefore critical for interpreting customer behaviour, even in a cluttered supermarket environment, but it cannot be recorded solely by visual saliency calculations.

Furthermore, the word "use of nutritional labelling" is described as "a consumer-searched act of knowledge" (Stawarz, Ette, & Rüger, 2021; Banterle & Cavaliere, 2009; Grunert & Wills, 2007; Grunert et al., 2010). They urged that only when the consumer search the nutritional information in the food label, only then it can be considered that the consumer is using the nutritional label. The search behavior indicate that the consumer uses the nutritional label rather than read and understand the nutritional label information in the food product.

2.2 Type of nutritional label

2.3 Front of pack nutritional label.

To supplement comprehensive nutrient statements on back-of-pack, these clear, sometimes graphical labels include at-a-glance details on nutritional content on the primary display panel of foods and beverages (hereafter 'foods'

2.4 Type of front of pack nutritional label.

1. Symbols implying that a food is "healthy," "good for you," or "a better option." Many food manufacturers, for example, have endorsed the Smart Choices sign. However, some nutritionists and public health experts believe that the program's inclusion requirements are too lax (Al-Jawaldeh et. al., 2020).



Plate 1: Healthy symbol . Source; Al-Jawaldeh et. al., (2020).

2. Symbols that claim to list the essential nutrients in a food on the front of the box. The color green is often included in these, which might imply positive characteristics. However, the nutrients chosen for inclusion differ and do not have an accurate representation of a product's nutrient profile (Al-Jawaldeh et. al., 2020).



Plate 2: Healthy symbol . Source; Al-Jawaldeh et. al., (2020).

3. Shelf-label markers used by supermarkets to assign a "score" to items, such as Guiding Stars (the more stars, the "healthier" the product, according to the Guiding Stars criteria); or Nuval, which is available in several supermarkets and assigns a numerical score depending on many variables correlated with the food (1 - 100, with 100 being best) (Al-Jawaldeh et. al., 2020).



Plate 3: Shelf-label markers . Source; Al-Jawaldeh et. al., (2020).

4. Symbols that offer basic dietary statistics as well as gradations of positive or negative nutritional ratios. The British "traffic light" scheme, which is voluntary in that region, is an indication of this. (Note: The United Kingdom does not have mandated diet labelling or a mandatory nutrition labelling format; however, if a point is created, nutrition labelling is required) (Al-Jawaldeh et. al., 2020).



Plate 4: Traffic light . Source; Al-Jawaldeh et. al., (2020).

5. Federal dietary guidelines icons, which are meant to offer recommendations about how to build a balanced diet, have also been used to provide nutrition information on packets. The appearance of logos such as My Pyramid, on the other hand, is not defined by a particular nutritional profile of the food. Some have questioned whether the inclusion of such a logo implies that a diet is nutritious, even though the overall weight, saturated fat content, cholesterol, and/or sodium content are strong (e.g. the logo has been used on products that provide 80 percent of the Daily Value for saturated fat and 54 percent of the Daily Value for sodium) (Al-Jawaldeh et. al., 2020).



Plate 5: Federal dietary guidelines icons . Source ; Al-Jawaldeh et. al., (2020).

2.5 Back - of pack nutritional label.

The majority of Back-Of-Pack labels have nutrition tables or nutrition information, as well as ingredient lists. The nutrition table indicates the starch, protein, and fat content, as well as possibly other nutrients, per 100g or serving. Back-Of-Pack tables are found on the back of the package and are required in many nations, including the United States and the European Union (European Food Information Council, 2015).



Plate 6; Back-of-pack nutritional label . Source; Al-Jawaldeh et. al., (2020).

Requirement of Back-Of-Pack nutritional labelling

1. Energy (kJ, kcal), Fat (including saturates), Carbohydrate (including sugars), Protein, and Salt must be given per 100g/ml.

2. Most pre-packaged goods would be required to include nutrition information beginning in December 2016 (or beginning in December 2014 if nutrition information is already provided on a voluntary basis).

- 3. Present the data in a tabular format with numbers matched.
- 4. In the nutrient table, percent RIs can be given per 100g/100ml and/or per portion/consumption unit.

5. Significant amounts of vitamins and minerals can be declared. Amount per 100g/ml and percent NRV per 100g/ml are needed.

2.6 Front- of- pack VS Back-of-Pack

While back-of-pack nutrition labels were intended to assist customers in making healthy decisions (Mazzù, Romani, Baccelloni & Gambicorti, 2021 and Medina-Molina, Rey-Moreno, & Periáñez-Cristóbal, 2021), research from Europe, United States, Australia and New Zealand indicates that the majority of consumers find back-of-pack nutrition labels confusing, especially the numerical information and terminology used (Packer et. al., 2021 and Van Loo, Grebitus, & Verbeke, 2021). Shine, Cowburn and Stockley (2005) have conducted research regarding nutritional label format and their finding found that certain consumer such as older consumer and consumer with low nutritional knowledge are struggling to understand the nutritional label information presented in Back-of-Pack label format. Similar finding also has been shared by Croker, Packer, Russell, Stansfield, & Viner 2020, Champagne et. al., 2020 and Nieto, Alcalde-Rabanal, Mena, Carriedo, & Barquera, 2020. They urged customers had trouble translating details from 'g per 100 g' to 'g per serving' and reading serving size information (Croker, Packer, Russell, Stansfield, & Viner 2020, Champagne et. al., 2020).

Front-Of-Pack nutritional labels format are meant to supplement the Back-Of-Pack nutrition label format as a summary of the nutritional provided in the Back-Of-Pack nutritional label. To supplement comprehensive nutrient statements on the back-of-pack, these clear, frequently graphical labels include at-a-glance details on nutritional content on the primary display panel of foods and beverages (hereafter 'foods') (Muller & Ruffieux, 2020). Most of the previous research found that Front-of-Pack nutritional labelling are found much easier and more friendly to the consumer because it can attract the consumer attention and the information use usually easy to understand because of the graphic design, colour and contrast in measuring each nutrition component in food product (Packer et. al., 2021, Deren et. al., 2021, Feteira-Santos et. al., 2020 and Santos et. al., 2020). Furthermore, the Front-of-Pack nutrient labelling style often highlights the most relevant facts to the user, reducing the amount of time spent reading the nutritional content (Andrews, Netemeyer, Burton, & Kees, 2021, Lim, Rishika, Janakiraman, & Kannan, 2020 and Taillie, Hall, Popkin, Ng, & Murukutla, 2020)

3 Factor that influences the use of nutritional label

3.1 Behavior intention

Intention, according to Ajzen (1991), is a readiness to execute a certain action and the most significant aspect that specifically predicts behavior. Intention is believed to be an immediate antecedent of conduct; people are more likely to engage in a certain behavior if their motivations to engage in such behavior are greater. Because of the uncertainties and challenges in calculating individual actions, behavioral motive has generally been used as a surrogate for actual behavior (Fishbein and Ajzen, 1975). The reason for using intention to forecast an individual's actions is that behavioral intention is deemed an immediate antecedent of behavior. Intention is determined by three factors: the individual's attitude toward a behaviour, subjective standards, and assumed behavioral influence (Fishbein and Ajzen, 2010; Ajzen, 1991).



Figure1: Theory of Planed behavior. Source: (Fishbein and Ajzen, 2010)

3.2 Perceive behavior control

The degree to which an individual assumes they can execute a certain action in a given situation is known as perceived behavioral regulation (Ajzen, 1991). People are unable to engage in actions that they have little influence over. People, on the other side, are more inclined to behave if they feel they have the power and capacity to carry out the action. In other terms, people assume they should practice a certain action if they believe they have the means (e.g., ample time to utilize nutritional labelling) and opportunities (example; the exposure of the nutritional information on the foods product). Actionable behaviour toward nutritional labelling use has a favourable association with perceived behavioural influence and, perceived control was correlated with a desire for more meaningful information. These results imply that by updating labelling programmes to provide more actionable facts, such as the nutritional, environmental, and social advantages of goods, perceived behavioural control will improve and reinforce expecting behaviour. Since the nutritional labelling dimension was also shown to be strongly associated with perceptions, increased labelling information would not only improve perceived behavioural influence, but would also have a beneficial impact on attitudes toward food product.

According to research, if customers have a strong perceived behavioral influence about the use of nutritional label, they would often have a high level of good behavioral intentions to use nutritional label when buying food product in the market (Li, Long, Laubayeva, Cai, & Zhu, 2020; Yadav and Pathak, 2016; Al-Swidi et al., 2014; Padel and Foster, 2005. Many of the obstacles to consume healthier food items, such as price, availability of the product, level of believe toward the nutritional information are associated with low levels of perceived behavioral control and, as a result, lower the intentions to consume healthy food product (Li, Long, Laubayeva, Cai, & Zhu, 2020; Al- Swidi et al., 2014; Vermeir and Verbeke, 2006).

3.3 Attitude

The degree to which an individual has a favorable or unfavorable evaluation of the actions in question is referred to as attitude. The behavioral assumptions regarding the consequences of the actions in question, as well as the assessment of such outcomes, form the basis of one's attitude toward behavior. Behavioral beliefs state that a certain action would result in a specific result (Ajzen, 1991). People are more likely to engage in a certain action if they believe the result would be favorable. Consumers' optimistic attitudes about buying healthy food product indicate that they have knowledge about consumption of healthier food product, but they lack concrete product-related information to convince them of the benefits or impacts of purchasing specific healthier food product, and hence are reluctant to translate their concerns into practises. There is clearly value in strengthening food product nutritional labelling programmes in order to help educate customers and raise demand for goods that support the climate, culture, and personal wellbeing.

Factors Influencing the Intention to Use Nutritional Label: Literature Review

Shaping consumer attitude that are expected to have beneficial outcomes has been found to elicit positive feelings that increase the likelihood of such decisions in using the national label while buying food product in the market, while people who believe that their behaviour would not make a difference are less likely to attempt (Rondoni, & Grasso, 2021). It is possible that customers are already unaware of the ramifications or effects of their buying decisions and therefore are unmotivated to alter them. According to Wansink & Love, 2014, and McCall & Lynn, 2008, customer views about nutritional labels influence their behavioral intentions toward (1) consumption, (2) advice to friends and family, and (3) sharing good word of mouth (Wansink & Love, 2014; McCall & Lynn, 2008). The intensity of the behavioral motive is closely linked to the optimistic or pessimistic attitude; the greater the desire to engage in the behavior, the more often the behavior would be carried out (Kim et al., 2013). The developed Theory of Planned Behavior predicts an association between behavioral intentions and potential real behavior (Ajzen, 1991).

Consumer attitudes developed during the phase of assessing nutritional information influence their subsequent behavior, according to research on nutritional labelling (Suleman, Sibghatullah and Azam, 2021 and Josiam and Foster 2009). Suleman, Sibghatullah, and Azam (2021), for example, looked at how dietary knowledge on food products influences people's choices of energy-dense fast food. They discovered that providing nutritional information alongside price information has an effect on food preferences, with over a third of respondents claiming to have included nutritional information in their buying decisions (Suleman, Sibghatullah and Azam, 2021). Public perceptions about the proposed usage of dietary labelling on restaurant menus in full-service restaurants were studied by Josiam and Foster (2009). They discovered that customer appraisal of menu knowledge influences both purchasing decisions and frequency of dining among some consumer types, based on data obtained from 502 patrons of a restaurant on a university campus in the United States (Josiam & Foster, 2009).

3.4 Subjective norm

Individuals' perceptions of their societal pressure to commit or not perform the action are referred to as subjective norms (Ajzen, 1991). Subjective norms emerge from moral attitudes, which are societal expectations from significant others that accept or disapprove of a person's actions or action, as well as the desire to meet certain pressures (Ajzen and Fishbein, 1980; Ajzen, 1991). Individuals are more likely to engage in a certain activity if they believe that the majority of people who are important to them will approve of it. The external pressure felt to fulfil standards regarding participation in a behavior that must affect the individual's decision to do or not do the behavior is an indicator of social influences called subjective norms. Individuals should be more likely to engage in the action in question if it is socially expected that they do so. If, on the other hand, the social norm is that one should not engage in a behavior, the person should be inclined to do so.

Subjective norms were shown to be the best predictor of a person's actions in numerous studies performed in collective societies, such as Asian countries (Halder, et al., 2016; Sparks & Pan, 2009). According to Hofstede's (2007), Malaysian culture is collectivistic; Malaysians are more inclined to be members of a community, and therefore social expectations have a greater impact on Malaysian consumers' intentions to use menu labelling in restaurants. Many hospitality studies have used Hofstede's cultural aspects to understand customer behaviour (e.g., Ma, et al., 2011; Magnini, 2010; Manrai & Manrai, 2011). Other experiments also discovered that subjective norms are a significant determinant in the TPB when it comes to forecasting Malaysians' intentions to engage in those activities (Shah Alam & Sayuti, 2011; Delvarani et al., 2013).

It may be concluded that subjective norm may be a measurement that influences a consumer's intention to do a certain behavior, in this case, the intention to use nutritional labelling, and several studies have shown that there is a significant relationship between the influence of subjective norm and the intention to use nutritional labelling. In this scenario, if using nutritional label during buying food product is seen as a socially acceptable activity depending on what other significant citizens say of it, then persons are more inclined to do so.

4 Research Methodology

This study identified and synthesized evidence from over 20 years of observational research in the health and diet fields in order to identify discrepancies in determining the various definition for the term use of nutritional label and factors that can affect the decision to use dietary labels for the purchase of nutritious food products. Emerald, Science Direct, and Social Science Database are used to gather relevant materials from academic publications (Azam, et. al., 2021).

5 Discussion

To ensure the nutritional label can give meaningful impact to consumer behavior toward the food product, consumers must be exposed to and aware of food labels for them to have some impact (Feng and Archila-

Godínez, 2021; Enriquez, & Archila-Godinez, 2021; Meijer, Lähteenmäki, Stadler & Weiss, 2021; Carducci et al., 2021). Moreover, consumers were more likely to be exposed if they actively looked for the details on the mark, but active quest was not a sufficient precondition for exposure, which may occur suddenly (Yau et al., 2021; Feng and Archila-Godínez, 2021; Rizwan, 2021; Moon, 2021, Guo, Yao, & Zhu 2020; Theben, Gerards, & Folkvord, 2020; Machín et al., 2019).

The present of nutritional label in some particular format either back of pack or front of pack nutritional label is to create the exposure of the nutritional information to the consumer (Bailey, Wang, & Liu, 2021; Manohar, Rehman & Sivakumaran, 2021; Montaña Blasco, & Jiménez-Morales, 2021; Duffy et. al. 2021 and Stawarz, Ette & Rüger, 2021). This is the reason why some of the food manufacture like to use front of pack labelling format more compare to back of pack nutritional labelling to create the exposure of the nutritional information to the consumer (Ogundijo, Tas & Onarinde, 2021; Egnel et. Al., 2021; Andrews, Netemeyer, Burton, & Kees, 2021; El-Abbadi, Taylor, Micha & Blumberg, 2020; Dréano-Trécant et all, 2020 and Donga, & Patel, 2018).

The availability of this information can be extra advantages to the food manufacturer because it can become a silence salesman to the food manufacturer (Pinto da Rosa et al., 2021; Haushofer, 2021; Wagner & Charinsarn, 2021; Rostamzad, 2020; Polat, Ağçam, Dündar& Akyildiz, 2019; Atikah Ramli, Sriperumbuduru, Ghazi, & Dalayi, 2019; Azizul, Albattat, Ahmad Shahriman, & Irfan, 2019; Asna et. al., 2019 and Maher, Crawley, & Potter, 2018). The availability of the nutritional information is to inform the consumer regarding the composition of the nutrition content in the food product but it also can be use as the indicator level of healthiness of the food product (Latka et. Al., 2021; Didenko et. Al., 2021; Kim, Ellison, McFadden, & Prescott, 2021; Beal et al., 2021; Lacko, Maselko, Popkin, & Ng, 2021, Egnell et al., 2020 and Acton, Vanderlee, & Hammond, 2018). The food manufacturer can use the availability of nutritional label as an inexpensive promotional tool and brand awareness toward the consumer in highlighting the level of safety and health of their product compare to the competitor in the market (Al-Jawaldeh et. Al., 2020; Andreeva et. Al., 2020; Green, Nemecek, Chaudhary & Mathys, 2020; Petrescu, Vermeir, & Petrescu-Mag, 2020; Acton & Hammond, 2020 and Plasek, Lakner, & Temesi, 2020). Moreover, healthy food usually more expensive and it can become a good gold mining for certain food manufacturer (Hardcastle & Caraher, 2021; Morley, 2021; Daniel, 2020; Świetlik, 2020 and Blitstein, Guthrie, & Rains, 2020). Future research should focus on which type of nutritional label format that are mostly expose the consumer with the nutritional information and friendly user and easy to understand. From the perspective of manufacturer, the future research can be done to examine type of nutritional label format that are effective to become their silence salesman especially in Malaysia food industry. In addition, there need a rule and regulations that encourage the use of condensed nutritional information content on the front of food packets may be an essential component of efforts aimed at improving population food intake.

Furthermore, most of previous research typically focuses solely on the factors that can contribute to intention to use nutritional label but, with no research focused on how intention can contribute to real behaviour (Nagaraj, 2021; Flaviana & Annuar, 2021; Hartini et al., 2020; Sanusi, 2020; Johar, Syukri & Shakeerah, 2020; Jaffery, Annuar & Alagiaraj, 2020; Saleki et all., 2020). There is the need for future to study the impact of intention to use with actual behaviour.

6 Conclusion

Determining what is implied by "use of nutritional label" has been a multifaceted topic. This study identifies the issues that guide these concepts, at least from the perspectives of previous scholars. Even though there have different term that been using to describe the behavior of use the nutritional label, it can conclude that its still refer to level of understanding it can be conclude that the level of understanding on the information provided is the main contributor to expected behavior toward nutritional label among the consumer. Consumer are attracted to use nutritional label when they understand the meaning of each information provided in the label. Besides that, this paper also discusses type of nutritional label format which is back-of-pack and front-of-pack nutritional label and how front-of-pack help the consumer in highlighting the important information in nutritional label. It can be suggested that, front-of- pack nutritional labelling much more convenient and easier to use and user-friendly compare to back-of-pack nutritional label. Moreover, this study also highlights the factor that can contribute to the behavior intention to use nutritional label which is perceive behavioral control, attitude and subjective norm. Even though these three factors are usually been highlighted as the major contribution to intention behavior but additional factors also should and can be considered to predict the behavior intention toward actual behavior. Furthermore, this paper analysis addresses the topic that will inspire potential researchers to conduct studies in this field in order to generate new finding in this area.

References

- [1] Abdul Manaf, Z., Hadi Ruslan, A., Mat Ludin, A. F., & Abdul Basir, S. M. (2020). Motivations, barriers and preferences to exercise among overweight and obese desk-based employees. *International Journal of Sport and Exercise Psychology*, 1-15.
- [2] Acton, R. B., & Hammond, D. (2020). Impact of sugar taxes and front-of-package nutrition labels on purchases of protein, calcium and fibre. *Preventive medicine*, *136*, 106091.
- [3] Acton, R. B., Vanderlee, L., & Hammond, D. (2018). Influence of front-of-package nutrition labels on beverage healthiness perceptions: Results from a randomized experiment. *Preventive medicine*, 115, 83-89.
- [4] Aitken, R., Watkins, L., Williams, J., & Kean, A. (2020). The positive role of labelling on consumers' perceived behavioural control and intention to purchase organic food. *Journal of Cleaner Production*, 255, 120334.
- [5] Al-Jawaldeh, A., Rayner, M., Julia, C., Elmadfa, I., Hammerich, A., & McColl, K. (2020). Improving nutrition information in the eastern Mediterranean region: implementation of front-of-pack nutrition labelling. *Nutrients*, *12*(2), 330.
- [6] Andreeva, V. A., Egnell, M., Handjieva-Darlenska, T., Talati, Z., Touvier, M., Galan, P., ... & Julia, C. (2020). Bulgarian consumers' objective understanding of front-of-package nutrition labels: a comparative, randomized study. *Archives of Public Health*, 78(1), 1-9.
- [7] Andrews, J. C., Netemeyer, R., Burton, S., & Kees, J. (2021). What consumers actually know: The role of objective nutrition knowledge in processing stop sign and traffic light front-of-pack nutrition labels. *Journal of Business Research*, *128*, 140-155.
- [8] Asna, M. S., Albattat, A. R., Sofea, A., Aziz, A., & Bahrin, M. (2019). Factors influencing vegetable consumption and weight loss awareness among private university students. *Journal of Management & Science*, 17(2).
- [9] Atikah Ramli, N. A., Sriperumbuduru, V. P. K., Ghazi, H. F., & Dalayi, N. J. (2019). A Study of Caffeine Consumption Patterns and Dependence among Management and Science University Students. Prof. RK Sharma, 13(1), 101.
- [10] Azizul, J., Albattat, A., Ahmad Shahriman, I., & Irfan, K. F. (2019). The Relationship between Food Delivery Apps Attributes Towards Customer Perceived Value Among Young Working Adults in Shah Alam. *International Journal of Scientific & Technology Research*
- [11] Azam, S. M. F., Yajid, M. S., Tham, J., Hamid, J. A., Khatibi, A., Johar, M. G. M. & Ariffin, I. A. (2021). Research Methodology: Building Research Skills. 1st Ed., McGraw-Hill Education (Malaysia) Sdn. Bhd.
- [12] Azman, N., & Sahak, S. Z. (2014). Nutritional label and consumer buying decision: a preliminary review. *Procedia-Social and Behavioral Sciences*, 130, 490-498.
- [13] Bailey, R. L., Wang, T., & Liu, J. (2021). Applying optimal foraging to young adult decision-making after food advertising exposure. *Health communication*, *36*(2), 146-157.
- [14] Beal, T., White, J. M., Arsenault, J. E., Okronipa, H., Hinnouho, G. M., & Morris, S. S. (2021). Comprehensive Nutrient Gap Assessment (CONGA): A method for identifying the public health significance of nutrient gaps. *Nutrition reviews*, 79(Supplement_1), 4-15.
- [15] Bergmans, N. (2020). Stimulating consumers to make healthier food choices in life.
- [16] Blitstein, J. L., Guthrie, J. F., & Rains, C. (2020). Low-income parents' use of front-of-package nutrition labels in a virtual supermarket. *Journal of Nutrition Education and Behavior*, 52(9), 850-858.
- [17] Bou-Mitri, C., Khnaisser, L., Ghanem, M. B., Merhi, S., Fares, J. E. H., Doumit, J., & Farhat, A. G. (2020). Consumers' exposure to claims on pre-packed bread: the case of a developing country, Lebanon. *Nutrition & Food Science*.
- [18] Carducci, B., Keats, E. C., Ruel, M., Haddad, L., Osendarp, S. J. M., & Bhutta, Z. A. (2021). Food systems, diets and nutrition in the wake of COVID-19. *Nature Food*, 2(2), 68-70.
- [19] Carins, J., Pang, B., Willmott, T., Knox, K., Storr, R., Robertson, D., ... & Pettigrew, S. (2021). Creating supportive eating places: a systematic review of food service initiatives. *Health Promotion International*.
- [20] Custodio, M. C., Ynion, J., Samaddar, A., Cuevas, R. P., Mohanty, S. K., Ray, A., & Demont, M. (2021). Unraveling heterogeneity of consumers' food choice: Implications for nutrition interventions in eastern India. *Global Food Security*, 28, 100497.
- [21] Champagne, B., Arora, M., ElSayed, A., Løgstrup, S., Naidoo, P., Shilton, T., ... & Popkin, B. (2020). Healthy Choices for Healthy Hearts: How Front-of-Pack Food Labeling Can Help Reverse the Global Obesity Epidemic. *Global Heart*, 15(1).
- [22] Croker, H., Packer, J., Russell, S. J., Stansfield, C., & Viner, R. M. (2020). Front of pack nutritional labelling schemes: a systematic review and meta-analysis of recent evidence relating to objectively measured consumption and purchasing. *Journal of Human Nutrition and Dietetics*, 33(4), 518-537.

- [23] Daniel, C. (2020). Is healthy eating too expensive?: How low-income parents evaluate the cost of food. *Social Science & Medicine*, 248, 112823.
- [24] De Temmerman, J., Heeremans, E., Slabbinck, H., & Vermeir, I. (2021). The impact of the Nutri-Score nutrition label on perceived healthiness and purchase intentions. *Appetite*, 157, 104995.
- [25] Dereń, K., Dembiński, Ł., Wyszyńska, J., Mazur, A., Weghuber, D., Łuszczki, E., ... & Koletzko, B. (2021). Front-Of-Pack Nutrition Labelling: A Position Statement of the European Academy of Paediatrics and the European Childhood Obesity Group. Annals of Nutrition and Metabolism, 1-6.
- [26] Didenko, N. I., Davydenko, V. A., Magaril, E. R., Romashkina, G. F., Skripnuk, D. F., & Kulik, S. V. (2021). The Nutrition and Health Status of Residents of the Northern Regions of Russia: Outlook of Vertical Agricultural Farms. *International Journal of Environmental Research and Public Health*, 18(2), 414.
- [27] Donga, G., & Patel, N. (2018). A review of research studies on factors affecting consumers' use of nutritional labels. *Nutri Food Sci Int J*, 7(3), 555713.
- [28] Dréano-Trécant, L., Egnell, M., Hercberg, S., Galan, P., Soudon, J., Fialon, M., ... & Julia, C. (2020). Performance of the front-of-pack nutrition label nutri-score to discriminate the nutritional quality of foods products: A comparative study across 8 European countries. *Nutrients*, 12(5), 1303.
- [29] Duffy, E. W., Taillie, L. S., Richter, A. P. C., Higgins, I. C., Harris, J. L., & Hall, M. G. (2021). Parental Perceptions and Exposure to Advertising of Toddler Milk: A Pilot Study with Latino Parents. *International Journal of Environmental Research and Public Health*, 18(2), 528.
- [30] Egnell, M., Boutron, I., Péneau, S., Ducrot, P., Touvier, M., Galan, P., ... & Julia, C. (2021). Randomised controlled trial in an experimental online supermarket testing the effects of front-of-pack nutrition labelling on food purchasing intentions in a low-income population. *BMJ open*, 11(2), e041196.
- [31] Egnell, M., Galan, P., Farpour-Lambert, N. J., Talati, Z., Pettigrew, S., Hercberg, S., & Julia, C. (2020). Compared to other front-of-pack nutrition labels, the Nutri-Score emerged as the most efficient to inform Swiss consumers on the nutritional quality of food products. *PloS one*, 15(2), e0228179.
- [32] El-Abbadi, N. H., Taylor, S. F., Micha, R., & Blumberg, J. B. (2020). Nutrient Profiling Systems, Front of Pack Labeling, and Consumer Behavior. *Current atherosclerosis reports*, 22(8), 1-10.
- [33] Enriquez, J. P., & Archila-Godinez, J. C. (2021). Social and cultural influences on food choices: A review. *Critical Reviews in Food Science and Nutrition*, 1-7.
- [34] European Food Information Council. (2015). Global update on nutrition labelling.
- [35] Feng, Y., & Archila-Godínez, J. C. (2021). Consumer knowledge and behaviors regarding food safety risks associated with wheat flour. *Journal of Food Protection*, 84(4), 628-638.
- [36] Feteira-Santos, R., Fernandes, J., Virgolino, A., Alarcão, V., Sena, C., Vieira, C. P., ... & Santos, O. (2020). Effectiveness of interpretive front-of-pack nutritional labelling schemes on the promotion of healthier food choices: a systematic review. *International journal of evidence-based healthcare*, 18(1), 24-37.
- [37] Gearhardt, A. N., & Hebebrand, J. (2021). The concept of "food addiction" helps inform the understanding of overeating and obesity: Debate Consensus. *The American Journal of Clinical Nutrition*.
- [38] Ghazi, H. F., Abdalqader, M. A., Baobaid, M. F., Hasan, T. N., Alabed, A. A. A., Veerabadran, V., ... & Hasan, T. N. Obesity Knowledge And Its Associated Factors Among Medical Students In A Private University In Shah Alam, Selangor.
- [39] Gidlöf, K., Anikin, A., Lingonblad, M., & Wallin, A. (2017). Looking is buying. How visual attention and choice are affected by consumer preferences and properties of the supermarket shelf. *Appetite*, 116, 29-38.
- [40] Green, A., Nemecek, T., Chaudhary, A., & Mathys, A. (2020). Assessing nutritional, health, and environmental sustainability dimensions of agri-food production. *Global Food Security*, 26, 100406.
- [41] Guo, Q., Yao, N., & Zhu, W. (2020). How consumers' perception and information processing affect their acceptance of genetically modified foods in China: A risk communication perspective. *Food Research International*, 137, 109518.
- [42] Hardcastle, S. J., & Caraher, M. (2021). The role of foodbanks in the context of food insecurity: Experiences and eating behaviours amongst users. *Appetite*, *163*, 105208.
- [43] Haushofer, L. (2021). Anna Zeide, Canned: The Rise and Fall of Consumer Confidence in the American Food Industry.
- [44] Hebebrand, J., & Gearhardt, A. N. (2021). The concept of "food addiction" helps inform the understanding of overeating and obesity: NO. *The American Journal of Clinical Nutrition*.
- [45] Kim, E. J., Ellison, B., McFadden, B., & Prescott, M. P. (2021). Consumers' decisions to access or avoid added sugars information on the updated Nutrition Facts label. *PloS one*, 16(3), e0249355.

- [46] Kit, L. P., Saad, H. A., Jamaluddin, R., & Phing, C. H. (2020). Prevalence of Overweight and Obesity among Primary Healthcare Workers In Perak, Malaysia. *International Medical Journal Malaysia*, 19(1).
- [47] Kodali, S., & Telaprolu, N. (2018). Food label and its influence on consumer buying behavior: a review of research studies. *International Journal of Science and Research (IJSR)*, 7(6), 386-390.
- [48] Kwon, M. (2020). Media Influences on Body Image & Eating Behaviors in Adolescents. In Adolescent Nutrition (pp. 177-235). Springer, Cham.
- [49] Laar, A., Barnes, A., Aryeetey, R., Tandoh, A., Bash, K., Mensah, K., ... & Holdsworth, M. (2020). Implementation of healthy food environment policies to prevent nutrition-related non-communicable diseases in Ghana: National experts' assessment of government action. *Food policy*, 93, 101907.
- [50] Lacko, A. M., Maselko, J., Popkin, B., & Ng, S. W. (2021). Socio-economic and racial/ethnic disparities in the nutritional quality of packaged food purchases in the USA, 2008–2018. *Public Health Nutrition*, 1-13.
- [51] Latka, C., Kuiper, M., Frank, S., Heckelei, T., Havlík, P., Witzke, H. P., ... & van Dijk, M. (2021). Paying the price for environmentally sustainable and healthy EU diets. *Global Food Security*, 28, 100437.
- [52] Li, L., Long, X., Laubayeva, A., Cai, X., & Zhu, B. (2020). Behavioral intention of environmentally friendly agricultural food: the role of policy, perceived value, subjective norm. *Environmental Science and Pollution Research*, 1-13.
- [53] Lim, J. H., Rishika, R., Janakiraman, R., & Kannan, P. K. (2020). Competitive Effects of Front-of-Package Nutrition Labeling Adoption on Nutritional Quality: Evidence from Facts Up Front-Style Labels. *Journal of Marketing*, 84(6), 3-21.
- [54] Machín, L., Curutchet, M. R., Giménez, A., Aschemann-Witzel, J., & Ares, G. (2019). Do nutritional warnings do their work? Results from a choice experiment involving snack products. *Food Quality and Preference*, 77, 159-165.
- [55] Martin, C., Lange, C., & Marette, S. (2021). Importance of additional information, as a complement to information coming from packaging, to promote meat substitutes: A case study on a sausage based on vegetable proteins. *Food Quality and Preference*, 87, 104058.
- [56] McGraw, D., & Mandl, K. D. (2021). Privacy protections to encourage use of health-relevant digital data in a learning health system. *npj Digital Medicine*, 4(1), 1-11.
- [57] Maher, J. K., Crawley, D., & Potter, J. (2018). Real fruit substitution: the case of at-risk American families. *British Food Journal*.
- [58] Mamun, A. A., Hayat, N., & Zainol, N. R. B. (2020). Healthy eating determinants: A study among Malaysian young adults. *Foods*, 9(8), 974.
- [59] Manohar, S., Rehman, V., & Sivakumaran, B. (2021). Role of unfamiliarity and information on consumers' willingness to try new healthy foods. *Food Quality and Preference*, 87, 104037.
- [60] Mazzù, M. F., Romani, S., Baccelloni, A., & Gambicorti, A. (2021). A cross-country experimental study on consumers' subjective understanding and liking on front-of-pack nutrition labels. *International Journal of Food Sciences and Nutrition*, 1-15.
- [61] Medina-Molina, C., Rey-Moreno, M., & Periáñez-Cristóbal, R. (2021). Analysis of the moderating effect of front-of-pack labelling on the relation between brand attitude and purchasing intention. *Journal of Business Research*, *122*, 304-310.
- [62] Meijer, G. W., Lähteenmäki, L., Stadler, R. H., & Weiss, J. (2021). Issues surrounding consumer trust and acceptance of existing and emerging food processing technologies. *Critical reviews in food science* and nutrition, 61(1), 97-115.
- [63] Montaña Blasco, M., & Jiménez-Morales, M. (2021). Breakfast Food Advertising and Prevention of Obesity: Analysis of the Nutritional Value of the Products and Discursive Strategies Used in the Breakfast Ads from 2015 to 2019. *Nutrients*, 13(1), 231.
- [64] Moon, S. (2021). Women's food work, food citizenship, & transnational consumer capitalism: a case study of a feminist food cooperative in South Korea. *Food, Culture & Society*, 1-19.
- [65] Morley, A. (2021). Procuring for change: An exploration of the innovation potential of sustainable food procurement. *Journal of Cleaner Production*, 279, 123410.
- [66] Muller, L., & Ruffieux, B. (2020). What makes a front-of-pack nutritional labelling system effective: The impact of key design components on food purchases. *Nutrients*, *12*(9), 2870.
- [67] Nieto, C., Alcalde-Rabanal, J., Mena, C., Carriedo, Á., & Barquera, S. (2020). Perception of the use and understanding of nutrition labels among different socioeconomic groups in Mexico: a qualitative study. *salud pública de méxico*, 62(3, may-jun), 288-297.
- [68] Ogundijo, D. A., Tas, A. A., & Onarinde, B. A. (2021). An assessment of nutrition information on front of pack labels and healthiness of foods in the United Kingdom retail market. *BMC Public Health*, 21(1), 1-10.

- [69] Packer, J., Russell, S. J., Ridout, D., Hope, S., Conolly, A., Jessop, C., ... & Croker, H. (2021). Assessing the Effectiveness of Front of Pack Labels: Findings from an Online Randomised-Controlled Experiment in a Representative British Sample. *Nutrients*, 13(3), 900.
- [70] Petrescu, D. C., Vermeir, I., & Petrescu-Mag, R. M. (2020). Consumer understanding of food quality, healthiness, and environmental impact: A cross-national perspective. *International journal of environmental research and public health*, *17*(1), 169.
- [71] Pinto da Rosa, P., Pio Ávila, B., Damé Veber Angelo, I., Garavaglia Chesini, R., Albandes Fernandes, T., da Silva Camacho, J., ... & Gularte, M. A. (2021). Impact of different chicken meat production systems on consumers' purchase perception. *British Poultry Science*, 1-9.
- [72] Plasek, B., Lakner, Z., & Temesi, Á. (2020). Factors that Influence the Perceived Healthiness of Food. *Nutrients*, *12*(6), 1881.
- [73] Polat, S., Ağçam, E., Dündar, B., & Akyildiz, A. (2019). Nanoparticles in food packaging: opportunities and challenges. *Health and safety aspects of food processing technologies*, 577-611.
- [74] Rachmawati, D., Shukri, S., Azam, S., & Khatibi, A. (2019). Factors influencing customers' purchase decision of residential property in Selangor, Malaysia. *Management Science Letters*, 9(9), 1341-1348.
- [75] Ramdan, M. R., Zainol, Z., Yahaya, R., Habidin, N. F., & Osman, J. (2018). The effect of nutrition label literacy and attitude towards nutrition label on healthy food choice among consumer in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 8(2), 671-686.
 [76] Diagonal Content of C
- [76] Rizwan, T. (2021). *The Effect of Category Informativeness on Risk Perception* (Doctoral dissertation).
- [77] Rondoni, A., & Grasso, S. (2021). Consumers behaviour towards carbon footprint labels on food: A review of the literature and discussion of industry implications. *Journal of Cleaner Production*, 127031.
- [78] Rostamzad, H. (2020). 2 Biodegradable Films. Food Packaging: Advanced Materials, Technologies, and Innovations, 83.
- [79] Santos, O., Alarcão, V., Feteira-Santos, R., Fernandes, J., Virgolino, A., Sena, C., ... & Costa, A. (2020). Impact of different front-of-pack nutrition labels on online food choices. *Appetite*, 154, 104795.
- [80] Sanusi, G. A. (2020). Factors Influencing the Intention to Use Malaysian Dietary Guidelines Among University Students. *International Journal of Economics, Management and Accounting*, 28(2), 517-543.
- [81] Saxena, M., Sharma, M. K., & Jain, A. (2021). Impact of food selection and usage pattern on consumers' attitude towards food label information. *Journal of Postharvest Technology*, 9(1), 46-52.
- [82] Sayuti, Y., Albattat, A., Ariffin, A., Nazrin, N., & Silahudeen, T. N. A. T. (2020). Food safety knowledge, attitude and practices among management and science university students, Shah Alam. *Management Science Letters*, 10(4), 929-936.
- [83] Stawarz, N., Ette, A., & Rüger, H. (2021). Healthy migrants? Comparing subjective health of German emigrants, remigrants and non-migrants. *The Global Lives of German Migrants: Consequences of International Migration across the Life Course.*
- [84] Świetlik, K. (2020). Trends in Behaviour of Modern Food Consumers in Poland. Zeszyty Naukowe SGGW, Polityki Europejskie, Finanse i Marketing, (23 (72)), 191-207.
- [85] Taillie, L. S., Hall, M. G., Popkin, B. M., Ng, S. W., & Murukutla, N. (2020). Experimental studies of front-of-package nutrient warning labels on sugar-sweetened beverages and ultra-processed foods: A scoping review. *Nutrients*, 12(2), 569.
- [86] Tay, Z., Whitton, C., van Dam, R. M., Chia, K. S., Swinburn, B., Vandevijvere, S., & Rebello, S. A. (2021). Identifying implementation gaps and priorities for the Singapore government to improve food environment policies: perspectives from a local expert panel. *Public Health Nutrition*, 24(4), 585-592.
- [87] Theben, A., Gerards, M., & Folkvord, F. (2020). The effect of packaging color and health claims on product attitude and buying intention. *International journal of environmental research and public health*, *17*(6), 1991.
- [88] Trigo, C., Castelló, M. L., Ortolá, M. D., García-Mares, F. J., & Desamparados Soriano, M. (2021). Moringa oleifera: An Unknown Crop in Developed Countries with Great Potential for Industry and Adapted to Climate Change. *Foods*, 10(1), 31.
- [89] Van Loo, E. J., Grebitus, C., & Verbeke, W. (2021). Effects of nutrition and sustainability claims on attention and choice: An eye-tracking study in the context of a choice experiment using granola bar concepts. *Food Quality and Preference*, 90, 104100.
- [90] Vanderlee, L., Franco-Arellano, B., Ahmed, M., Oh, A., Lou, W., & L'Abbé, M. R. (2021). The efficacy of 'high in'warning labels, health star and traffic light front-of-package labelling: An online randomised control trial. *Public Health Nutrition*, 24(1), 62-74.
- [91] Vyth, E. L., Steenhuis, I. H., Brandt, H. E., Roodenburg, A. J., Brug, J., & Seidell, J. C. (2012). Methodological quality of front-of-pack labeling studies: a review plus identification of research challenges. *Nutrition reviews*, 70(12), 709-720.

- [92] Wagner, U., & Charinsarn, A. R. (2021). What language should be displayed on product packaging? How unconventional lettering influences packaging and product evaluation. *Journal of International Consumer Marketing*, 33(1), 1-18.
- [93] Wang, J., Tao, J., & Chu, M. (2020). Behind the label: Chinese consumers' trust in food certification and the effect of perceived quality on purchase intention. *Food Control*, 108, 106825.
- [94] Wongprawmas, R., Mora, C., Pellegrini, N., Guiné, R. P., Carini, E., Sogari, G., & Vittadini, E. (2021). Food Choice Determinants and Perceptions of a Healthy Diet among Italian Consumers. *Foods*, 10(2), 318.
- [95] Yau, A., Adams, J., Boyland, E. J., Burgoine, T., Cornelsen, L., De Vocht, F., ... & Cummins, S. (2021). Sociodemographic differences in self-reported exposure to high fat, salt and sugar food and drink advertising: a cross-sectional analysis of 2019 UK panel data. *BMJ open*, 11(4), e048139.
- [96] Zainol, Z. (2021). Nutrition Label Knowledge and Attitude to Affect Healthy Food Choice among Young Consumers in Malaysia. *Turkish Journal of Computer and Mathematics Education* (*TURCOMAT*), 12(3), 701-710.
- [97] Zainol, Z., Yahaya, R., Osman, J., & Omar, N. A. (2019). Application of the Tayyib concept among Malaysian muslim consumers: The role of nutrition label. *Journal of Islamic Marketing*.
- [98] Zhu, C., Lopez, R. A., & Liu, X. (2019). Consumer responses to front-of-package labeling in the presence of information spillovers. *Food Policy*, 86, 101723.