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SMEs Perceptions on Food Adulteration in Brunei Darussalam

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ABSTRACT

Food adulterants have recently emerged as one of the biggest issues facing modern society and become widespread in developing countries, despite numerous actions and punishments that have been enacted. Food adulteration is the deliberate or accidental addition of poor-quality ingredients added to the excellent quality of food items that are prohibited by law to increase the product's weight, volume, or appearance, economic benefits and misleading consumers. Islamic ethics place a high value on honesty and integrity, and lying to others, including in economic transactions, is severely forbidden this includes selling and consuming food that has been tampered with or tainted in any way is prohibited by Islamic principles. This covers the addition of dangerous or impure ingredients to food and the use of dishonesty or deception to market food items. Therefore, the purpose of this research is to assess how SMEs in Brunei Darussalam perceive food adulteration to raise awareness of the negative effects of performing and consuming adulterated food. According to interviews with five local SMEs that produce food, there is a high level of awareness about food adulteration since the producers believe that the practice is widespread in the business world. Hence, governments, industry players, scientists and academic researchers should collaborate to invest in the creation of robust infrastructure and rules for food safety, as well as in the creation of innovative and improved techniques for identifying food adulterants.

Keywords: Food Adulteration; halal industry; Islamic view; SMEs; Brunei Darussalam

1 Introduction

Food adulteration is the deliberate or accidental addition of poor-quality ingredients added to excellent-quality food items that are prohibited by law or by regulatory bodies like the FDA to increase the product's weight, volume, or appearance, economic [1] [2] and technical benefits and misleading consumers. This can occur at any point in the food production and distribution chain, from farm to fork [3], and can be carried out by a variety of actors, such as food producers who mix or add low-quality ingredients to the food to boost their profit margins, suppliers who sell subpar raw materials to food producers, food traders who intentionally or unintentionally sell contaminated food items and retailers who sell spoiled or expired food products.



Food adulterants have recently emerged as one of the biggest issues facing modern society and become widespread in developing countries, despite numerous actions and punishments because it is practised as a business strategy, adding to the lack of knowledge about proper food consumption. There have been reports of food adulteration in recent years, such as the discovery of the horse meat scandal in 2013 [4] led to the recall of millions of products and the erosion of consumer confidence. These occurrences demonstrate the importance of safeguarding the security of the food supply and the requirement for ongoing measures to stop food adulteration. Harmful effects on public health, including food poisoning, chronic illness, and even death, are a direct result of this practice [5].

In addition, the issue of food adulteration is regarded as a substantial issue in Islam. Islamic ethics place a high value on honesty and integrity, selling or consuming food that has been tainted in any way is prohibited by Islamic principles. This covers the addition of dangerous or impure ingredients to food and the use of dishonesty or deception to market food items. Therefore, the purpose of this research is to assess how SMEs in Brunei Darussalam perceive food adulteration to raise awareness of the negative effects of performing and consuming adulterated food.

2 Materials and Methods

In addition to a thesis, articles, and reliable websites as the main sources, this study employed a case study on five SMEs in Brunei Darussalam that produce food products and have substantial experience in the halal food industry to share their experience and perception of food adulteration in Brunei Darussalam as the other primary sources. A snowball sampling technique was used to select the five respondents and data were gathered through online interviews using the platforms Zoom Meeting and Google Meet that lasted 20 to 35 minutes. The interviews were not recorded since the participants did not want to be revealed. Due to the request for participants confidentiality [6], the company name was coded as SMEs 1 - SMEs 5 and the name of the key respondents is concealed or secrete. Table 1 are the tabulated descriptions of the five participants:

Table 1: *Interviewee's Descriptions*

Interviewees	Age	Foundation Year	Key Informants	Types of Food Production
SMEs 1	35	2015	Owner	Small bakery (Cake and Polvoron)
SMEs 2	26	2018	Owner	Dates Juice
SMEs 3	24	2013	Owner	Pasta-based (Spaghetti, Mac and Cheese)
SMEs 4	42	2018	Owner	Western Food (Burger, Sandwiches and Taco)
SMEs 5	44	2011	Manager	Halo-halo drinks

3 Results

3.1 SMEs' Perception of Food Adulteration

According to interviews with five local SMEs that produce food, there is a high level of awareness about food adulteration since the producers believe that the practice is widespread in the business world. However, the awareness of food adulteration is only limited to the use of unnecessary additional components, falsifying labels to mislead the consumer, and replacing the primary ingredient with a less expensive one. According to The Administration Assistance and Cooperation System for Food Fraud (AACFF), there are numerous ways to adulterate food, and they are divided into four additional categories: mislabelling, product substitution, diluting, or removal, improper treatments or procedures, absence, falsification, or manipulation of documents, and finally, violation of intellectual property rights (IPR).

All five SMEs believe that adulterating food is a common practice, particularly in other countries like Europe and even ASEAN countries. However, in Brunei, this practice is not considered concerning because SMEs personally believe that the country has a system in place for identifying adulterated foods and preventing the sale of imported goods since each product must be examined and a sample provided to the Ministry of Health before being allowed to be sold in Brunei, as mentioned by SMEs 3:

"I think Brunei has a system for detecting the nutrition of the food under the Ministry of Health, I heard that the distributor whom sales imported food must send a sample to the MOH which will provide a result of the ingredients after 2 weeks whether the product can be sold in Brunei. So, since MOH provide the ingredients we can know whatever the producer put in the food and detect if any adulterants occur. I also believe that not only imported food should be tested but the local product also has to test to give assurance and add quality to their product".

Moreover, SMEs 2 added, *"I assume not only Governmental organization as the only one who provides the detection perhaps there are also private testing laboratories that provide food safety testing services to combat this issue. However, for the local producer as a whole, I'm not sure they want to try these services to assure their customer"*. From the statement, even though there is a high level of awareness among SMEs, the significance and depth of understanding are not recognized.

SMEs 5 also mentioned that food adulteration is not necessarily detrimental; rather, it is only the strategy of the business to obtain more revenue with lesser investment, such as by substituting to more affordable components, and he assumes that the majority of producers will engage in this practice. On the contrary, SMEs 1 believes that it is considered adulteration for the main ingredients to be substituted with a cheaper one if the producer is not updated to the Halal Food Control Division, Ministry of Religious Affairs. This is because SMEs 1 believes that it is an essential component of good business ethics to be honest, particularly when conducting business transactions. Consequently, as a result of the findings shown above, the information regarding food adulterants needs to be disseminated to the general

public, particularly among food producers, to gain a deeper understanding of this issue although awareness is quite high.

4 Discussion

In general, the practice of food adulteration is quite common, therefore it is important to detect food adulterants to ensure that the food we consume is safe and of the quality that we expect. Depends on the type of food adulterants and the method used to detect them. Some food adulterants are easy to detect using simple tests [7], while others can be more challenging and require more sophisticated methods such as chemical analysis. It is also important to note that detecting food adulterants can be limited by the availability of equipment and trained personnel as well as the resources available for testing. In some cases, food adulterants can go undetected for a long time [7], leading to potential health risks for consumers.

Governments have implemented food safety regulations that mandate food producers follow rigorous standards for the quality and composition of their products to tackle the issue of food adulteration [8]. Consumers can also play a role in preventing food adulteration by purchasing products from reputable brands, carefully reading ingredient labels, avoiding foods that appear of poor quality or have an unusual flavour or odour, and examining food packaging for evidence of tampering. Additionally, informing the proper authorities of any suspected cases of food adulteration will assist regulators to become aware of this practice and enhance everyone's access to safe food. It is crucial to inform consumers about the risks of food adulteration and the value of buying food from reliable sources to overcome the lack of understanding about food adulterants.

Governments, industry, scientists and academic researchers should also collaborate to invest in the creation of robust infrastructure and rules for food safety, as well as in the creation of innovative and improved techniques for identifying food adulterants. By following these procedures, we may contribute to ensuring the quality, safety, and security of the food we consume. The Department of Agriculture and Agrifood as well as the Brunei Darussalam Food Authority (BDFA) oversees ensuring food safety and quality in Brunei, and they may have the equipment and resources required to spot food adulterants and uphold the law. Private food testing facilities may also exist in Brunei, helping the food business and giving consumers peace of mind regarding the reliability and safety of food items.

It is important to remember, though, that merely having a lab does not ensure that food adulterants will be found and avoided. There must be sufficient rules and enforcement tools in place to guarantee that food suppliers and producers follow food safety standards, as well as the laboratory must have the instruments, knowledge, and resources needed to conduct efficient food testing.

5 Conclusions

In conclusion, it is essential to note that adulterating food is prohibited and can have detrimental effects on one's health and the business reputation. Both the government and the public have a responsibility to avoid food adulteration such as producers and consumers must be vigilant and knowledgeable about the risks of contaminated food, governments must also implement rigorous food safety standards and make sure that food products are tested for quality and safety. Islam views food adulteration as a morally questionable practice that violates the religion's precepts and is contrary to both health and moral principles. Hence, we are urged to consume pure and clean food and to avoid adulterated or contaminated food.

The scope of this study is constrained, as it only examines how SMEs are perceived. There should be more investigation into the issue of adulteration, such as the consequence of performing it as well as adulterants issues in the cosmetics and pharmaceutical industries. In addition, future research also needs to be studied on the awareness of food adulteration among consumers.

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