



***CONSUMERS' PURCHASE INTENTION TOWARDS EDIBLE BIRD'S NEST
BASED PRODUCTS***

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**CONSUMERS' PURCHASE INTENTION TOWARDS EDIBLE BIRD'S NEST BASED
PRODUCTS**

By

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REPORT DECLARATION FORM

This project report entitled Consumer's Purchased Intention towards Edible Bird's Nest Based Products is prepared by Siti Nur Soleha binti Awang and submitted to the Faculty of Agriculture in fulfillment of the requirement of PPT4999 for the award of the degree of Bachelor of Science (Agribusiness) is based on my original works.

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ABSTRACT

Edible bird's nest (EBN) has been known very nutritious and can cure several of diseases. It is the expensive animal products that have been consumed by human. Traditionally, EBN was consumed as raw and served as a soup. But now, there were already has been processed into a form of products such as in form of drinking, cosmetics products and supplements. A lot of people aware about its benefit but their awareness does not mean that they have an intention to purchase on it. Hence, this study aimed to study the consumers' purchase intention towards edible birds' nest (EBN) based products among Malaysian consumers. The specific objective is to identify the association between socio-demographic profile and consumers' purchasing intention towards Edible Bird Nest (EBN) based products and to determine the factors that influencing consumers purchase intentions towards EBN-based products. These factors included attitude towards intention to purchase edible bird's nest based products, subjective norms, perceived behavioral control, as well as demographic characteristics such as gender, income, race, marital status, occupation and religion. 400 respondents were selected around Klang Valley area to complete the questionnaire. Findings concluded that attitude, subjective norm and perceived behavior were the factors that influencing consumers to have intention in purchasing EBN based products. Among these variables, attitude was the strongest predictor. Besides that, demographic characteristic such as race and income was found significant in purchase intention of EBN based products. In fact, majority of respondents have intention in purchasing edible bird nest. These findings also can help the entrepreneur to understand that race and income become the main things that can influence consumers' purchase intention towards EBN based products.

Keywords: purchase intention, EBN based products, attitude, subjective norms, perceived behavioral control



ABSTRAK

Sarang burung sangat dikenali dengan khasiat yang ada padanya dan kelebihanannya dalam menyembuhkan pelbagai penyakit. Ia merupakan produk paling mahal yang dihasilkan daripada haiwan. Secara tradisi, sarang burung ini dimakan mentah dan dihidangkan sebagai sup. Akan tetapi sekarang, ia telah diproses dalam bentuk produk minuman, produk kosmetik dan produk tambahan. Ramai pengguna sedar akan kebaikan dalam memakan produk sarang burung, tetapi tidak semestinya mereka mempunyai niat untuk membeli produk berasaskan sarang burung. Oleh itu, kajian ini dilaksanakan bagi mengkaji niat pembelian pengguna terhadap produk berasaskan sarang burung. Secara spesifiknya, tujuan kajian ini adalah bagi mengkaji hubungan antara sosiodemografi pengguna dengan niat pembelian produk berasaskan sarang burung dan untuk mengkaji faktor-faktor yang mempengaruhi niat pembelian pengguna terhadap produk berasaskan sarang burung. Faktor-faktor ini termasuklah tingkahlaku pengguna, norma subjektif dan kawalan kelakuan persepsi dan juga ciri-ciri profil demografi pengguna seperti jantina, pendapatan, bangsa, status perkahwinan, pekerjaan dan agama. Seramai 400 responden dipilih di sekitar Lembah Klang untuk menjawab borang soal jawab. Hasil kajian menunjukkan tingkahlaku pengguna, norma subjektif dan kawalan kelakuan persepsi adalah faktor yang mempengaruhi niat pengguna untuk membeli produk berasaskan sarang burung. Antara semua faktor ini, tingkahlaku pengguna adalah petunjuk utama. Selain itu, ciri-ciri demografi seperti bangsa dan pendapatan didapati penting dalam niat pembelian produk berasaskan sarang burung. Tambahan pula, majoriti pengguna mempunyai niat untuk membeli produk berasaskan sarang burung. Hasil kajian ini juga dapat membantu usahawan untuk memahami bahawa bangsa

dan pendapatan menjadi perkara penting dalam mempengaruhi niat pembelian pengguna terhadap produk berasaskan sarang burung.

Katakunci: niat pembelian, produk berasaskan sarang burung, tingkahlaku, norma subjektif, kawalan kelakuan persepsi



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CHAPTER ONE

INTRODUCTION

1.0 Introduction

Chapter one will give an introduction to the background of the edible bird nest, followed by edible bird nest industry in Malaysia, benefit of edible bird nest and edible bird nest products that available in the market. Next, problems statement of the study will be discussed and the research question and research objective will be highlighted. Finally, the significance of the study will be discussed.

1.1 Background of the Edible Bird Nest

Edible bird nest is known as the bird nest that comes from the swiftlets that can be consumed by human. There are 24 types of species of swiftlets in the world but, only a few can produce nests that can be eaten and be commercialize which are White-nest Swiftlet (*Aerodramus fuciphagus*) and the Black-nest Swiftlet (*Aerodramus maximus*). Another species also have been exploited for traded worldwide is Glossy Swiftlet or White-bellied Swiftlet (*Collocalia esculenta*) which produce nest mixed with mosses is also being exploited in recent years (Cranbrook, 1984; Leh, 1993; Lau & Melville, 1994; Broad, 1995; Lim & Cranbrook, 1999; Koon, 2011). Edible bird nests were made entirely from their saliva. Chinese delicacy believed that edible bird nest have a number of medicinal, therapeutic and pharmaceutical qualities, and identified as the most expensive animals products that have been consumed by human. They get their food outside and only returning at night to roost. Therefore, swiftlets farming is similar like apiculture but bees just cannot be fully domesticated (Connolly, 2016).

Globally, the range of the swiftlets is rather restricted to the tropical and sub-tropical regions extending from the western Indian Ocean such as Seychelles Islands through southern continental Asia, Indonesia, Palawan in the Philippines, northern Australia, New Guinea, and the islands in the south-west of Pacific. However, the edible bird nest are limited to the South-east Asian nations only (Chantler & Driessens, 1995; Koon, 2011). The main producers in commercialized quantities of edible bird nest in the world was Indonesia (Sumatra, Java, Kalimantan & the Lesser Sunda Islands), followed by Thailand, Malaysia including Sabah and Sarawak, Vietnam (Nguyen Quang, 1990; 1993), and Myanmar. Although there are edible bird nest colonies in Hainan Island in China (Fan & He, 1996), Andaman and Nicobar Island in the Indian Sea (Sankaran, 1995; 1998), the production is small and insignificant compared to the Asean nations. Fortunately, Malaysia was located at strategic location which covered with a lot of trees either in the form of pristine forests, secondary regrowth, farmland, paddy fields or plantations, which can provides a lot of food for the swiftlets (Koon, 2011).

1.2 Edible Bird Nest Industry

This industry started after the Asian Economic Crisis in 1997 to 1998. During that crisis there was a lot of abandon building that leaved by its owner because of depressed that forced them to close down their businesses. Based on this, they think rather than leave this idle, the can convert it to swiftlet farming to gain money (Ibrahim et al, 2009). Traditionally, edible bird nests were collected from caves. But now it is change to new system called swiftlet farm house (Thornburn, 2015). At that time, there was only one research and development (R&D) company specializing in the establishment of swiftlet farms in Malaysia and had almost single-handedly aided and helped grow the industry into becoming the lucrative industry as today and a lot of people started to invest in swiftlet farming and cultivate swiftlets to produce edible bird nest. Due to the

industry expansion, many swiftlet farming companies have now been established a lot number of swiftlets farms all over the country (Merican, 2007).

Edible Bird Nest (EBN) industry is one of the industries that have a big potential to be developed and it is expected to generate high new sources of income to the country. Edible bird nest was believed to be very nutritious, delicious and able to cure several of diseases. Since the arrival of Chinese traders, the awareness of the greatness of bird nest has been known and it was the starter point of hunting the swiftlets. Traditionally, the way of people eating the edible bird nest (EBN) is by double boiled it with rock sugar to make a delicacy known as “bird nest soup” and the Chinese called it as *yan wo* which means that swallows nest. Chinese and Vietnamese was valued this soup because of its nutritious and good for health. Actually, during Tang Dynasty (618-907 A.D) the edible bird nest was traded in China and historically source state that the Admiral Cheng He introduced bird nests to the imperial court of the Ming Dynasty at years between 1368 and 1644 and claim that Borneo was the main source of edible bird nest to be traded for Chinese (Babji et al., 2015). Obviously, the market price for edible bird nest product was high which is RM3,000 – RM 5,000 / KG (National Transformation Programme Annual Report, 2016). In fact, Malaysia is the second largest producer of edible bird nest in the world after Indonesia and Thailand (Henry, 2005 ; Connolly, 2016).

Edible Bird Nest (EBN) was introduced in Malaysia on year 1878 with the first harvest of EBN in Guah Niah, Sarawak. During 1934, the harvesting activity of EBN in the caves was controlled because of over exploitation that caused the number of swiftlets decreases. Fortunately, a few decade ago, they found a new way on how to get EBN without hardship but more systematic, efficient and environmental friendly which are by doing swiftlet farming. This industry has big potential in market and become most preferred farming by people in getting

high income for better life economy (Lim & Cranbook, 2002). Based on National Agri-Food Policy (2011-2020), total export EBN for processed product is projected to increase from RM 1.7 billion in year 2010 to RM5.2 billion in year 2020.

Edible bird nest was getting high demand from China, Taiwan and Hong Kong (Iswanto, 2002 ; Idris et al., 2014). It is because they believed the EBN really beneficial. Basically, there are two uses of EBN which are they serve as exotic delicacy and as materials for medicinal products for the purpose of improving physical strength (Winarno, 1994 ; Idris et al, 2014). At first, edible bird nest was consumed as exotic food, but now they already process it and produce products such as tonic and medicine (Amy & David, 1994 ; Idris et al., 2014). Edible bird nest was regarded as a tonic by Chinese, albeit of secondary importance as their ginseng called *Panax ginseng* (Reid 1993 ; Idris et al., 2014). Furthermore, EBN also being listed in a Seventeenth Century London Pharmacopeia (Wootton, 1910 ; Idris et al., 2014). Edible bird nest mostly taken for medication and rehabilitation purposed and there is untested claims that the EBN can cure cancer or AIDS (Lim & Cranbrook,2002 ; Idris et al., 2014). A part from that, there is a facts that edible bird nest also can be damaged because of contamination from pesticides residues, animals, drugs and heavy metals and also from others contaminants such as bacteria, viruses, yeast and fungi that may cause food-borne diseases (Budiman, 2002 ; Idris et al., 2014).

There were studies have shown that the EBN contain for about 50-60% protein and this protein consist of 17 amino acids such as aspartic acid, glutamic acid, serine, glycine, histidine, threonine, arginine, alanine, isoleucine, leucine, phenylalanine and lysine, 25% carbohydrate and 10% water and also small amounts of minerals such as calcium, phosphorus, potassium and Sulphur (Wang, 1921 ; Idris et al., 2014). The special protein in edible bird's nest contains

bioactive molecules which aid the growth and development of tissues, boost the immune system and protect the body against diseases. Carbohydrate is a source of energy, and when combined with protein, enables its other properties to function more effectively; it can also promote the metabolism of fats. The epidermal growth factor contained in edible bird's nest and water soluble protein can directly stimulate cell division, regeneration and tissue reconstruction, bringing about significant nourishing effects which aid healing. Researchers have also discovered that edible bird's nest improves immunity, slows down ageing, and prolongs life expectancy. Overall, the nutritional and health benefits are immense.

As a natural nourishing supplement, it can be consumed by both men and women of all ages. Women for instance, will find their skin smoother and firmer. For men, long-term consumption will rejuvenate and restore energy, boost immunity and enhance strength generally. Besides that, consuming edible bird's nest during pregnancy helps to make the baby strong besides enhancing its complexion and boosting its immunity. For old folks with digestion problems are frail or suffering from osteoporosis, arthritis, etc., consuming edible bird's nest will help strengthen the lungs, prevent coughs and regulate imbalances in the body. Children and those who are weak or recovering from an illness as well as those working long hours will find that edible bird's nest is the best natural health supplement (Swiftlet Eco Park, 2012).

1.3 Edible Bird's Nest Products

It is expected that the future of edible bird's nest (EBN) industry is very promising and encouraging. A lot of scientific research being slowly demonstrated the medicinal benefits of edible birds' nest. Many EBN-based products are entering the market as beauty and skincare

products, drinking and health supplements (Zukefli & Chua, 2016). There were varying in term of price and form of EBN-based products. Different concentrated of bird's nest in producing EBN products will lead to different price of products which it can be too expensive or cheaper. Table 1.3.1 shows some example of EBN-based products that are currently in the market.

Table 1.3.1: Examples of EBN-based products that are currently in the market

Form	Products
Drinking	<ul style="list-style-type: none"> • Bird Nest Drink • Regular Bird Nest Collagen • Bird nest extra collagen • Bird nest collagen drink • Ginseng rock sugar bird nest drinks • Concentrated bottled bird's nest drinks • Brand's Bird's nest drink with rock sugar • Brand's Bird's nest drink, sugar free • Brand's Bird's nest drink with rock sugar 1.4 fl. oz • ECOLITE Bird's nest of rock sugar • ECOLITE Collagen Bird's nest Drink • Bottled Bird's nest series <ul style="list-style-type: none"> ▪ with rock sugar ▪ with rock sugar (less sugar) ▪ with wild American ginseng ▪ with pearl powder & collagen (less sugar) • Walit junior –apple flavor • Walit junior –strawberry flavor • Walit junior –lychee flavor • Collacalia bird nest drink • Bird's nest juice plus Aloe Vera • Bird's nest collagen drink • Bird's nest energy drink
Beauty	<ul style="list-style-type: none"> • My Scheming Bird's nest Collagen Mask • Bird's nest shower milk with royal jelly • Bird's nest beauty soap • Bird's nest shampoo • Bird's nest Nutri-Collagen – Whitening Cleanser

	<ul style="list-style-type: none"> • Bird's nest Nutri-Collagen – Whitening Advancer • Bird's nest Nutri-Collagen – Whitening Essence • Bird's nest Nutri-Collagen – Whitening Cream • Collagen Soap
Medicine/Supplement	<ul style="list-style-type: none"> • Bird nest Cordyseps • Walit Plus M7 • Walit Plus W • Walit Plus Series – Walit Plus IQ • Walit Plus M • Bird's Nest Plus with Hydrolyzed Collagen & Pearl • Double Red Nest • Coenzyme Q10 • Walit Gold Plus

Sources: (Bio-essence, 2013; Brands, 2013; Ecolite, 2013; Eu Yang Sang, 2013; Persada, 2013; Polleney, 2013; Saffya Pearl, 2013; Walit Gold, 2013; AG Walit, 2014; Algaprima, 2014; Angkasa, 2014; Banyan Bird Nest, 2014; Betamusifa Trading, 2014; Cahya Walit, 2014; Ginvera, 2014; Jastech Creative, 2014; Ketella, 2014; Misha, 2014; My Scheming, 2014; Ramalingam., 2014).

Pictures of Edible Bird's Nest Based Products



1.4 Problem Statement

Malaysia is a very fortunate country because it has large regions of green grasses, pristine forests, farmlands, rice fields and crop plantations. These areas provide plenty of food for swiftlets. Hence, this industry has tremendously expanded in the last few years, and it is expected that the future of the industry includes continued growth. Currently, Malaysia is not only trying to catch up with well performing EBN producers from Indonesia and Thailand, but also from neighbor countries such as Myanmar, Vietnam and Cambodia.

According to Zukefli and Chua (2016), recently, the global demand for edible bird's nest (EBN) has markedly increased. The highest demand was in Asia which mostly demanded by China (main consumers') which is for about 160 tons per annum. Malaysia is the third largest supplier of EBN after Indonesia and Thailand. Malaysia was contributes approximately 10% of the 210 tons of EBN produced annually, which is worth up to 4 billion dollars in. The trade of EBN was estimated to earn several hundred million dollars in foreign exchange which make it as major economies for main supplier of EBN such as Indonesia, Thailand and Malaysia itself. The trade value of EBN has increased dramatically from approximately \$170 million in 1989 to \$380 million in 2004 and it is expected to keep increasing in future with rising demand from East Asian countries.

It is expected that the future of EBN industry is very promising and encouraging. A lot of scientific research being slowly demonstrated the medicinal benefits of edible birds' nest. Many EBN-based products are entering the market as beauty and skincare products, drinking and health supplements. A long time ago, people consume a raw edible bird nest by make it as a soup but now, it is already processed as tonic drinking, cosmetics and pharmaceuticals products as well as health supplements as convenient for the customer to consume it. A variety of edible

bird nest (EBN) product is selling in the market. The demand for edible bird nest product is always there especially from Chinese community because they believe about its' benefit. Obviously, everyone knows about its' benefit. In fact, Malaysia also is the main producer and exporter of edible bird nest in the world. Based on the Malaysian Federation of Bird's Nest Merchants Association record, the annual production of EBN in Malaysia has reached a value of 1 billion ringgits (\$290 million). EBN was highly demanded from other country especially China because of the exotic value and their belief that EBN was nutritious and can cure varies of diseases. Even though, Malaysian citizen know and aware about its benefits but still EBN-based products does not highly consumed by people in Malaysia. Hence, it is important to study and know the factors that influencing the decision making by consumers in purchasing EBN products and their perception about EBN products to develop new strategies to increase the consumption of EBN products among Malaysian citizen.

Since an EBN products are not really many and still new in the market, identifying consumer awareness and knowledge about EBN is vital. Furthermore, knowing consumers attitude toward EBN products and knowing how their perceived the value of EBN also need to recognize. In addition, identifying the role and an influencer among consumers and the perceived behavioral control that lead them to purchase EBN products also important. Thus, understanding the factors that effects purchase intention among Malaysians towards edible bird nest products is important which will contributes to the growth of the EBN market industries in future. Therefore, identifying the association socio demographic characteristics towards purchase intention on EBN products is also very important.

1.5 Research Questions

The research questions are as follow:

1. Is there an association between socio demographic profile and consumers' purchasing intention towards EBN products?
2. What are the factors that influencing consumers to have intentions to purchase edible bird nest based products?

1.6 Research Objectives

The general objective of this research is to study the consumers' purchase intention towards edible birds' nest (EBN) based products among Malaysian consumers.

Specific objectives are:

1. To identify the association between socio-demographic profile and consumers' purchasing intention towards Edible Bird Nest (EBN) based products.
2. To determine the factors that influencing consumers purchase intentions towards EBN-based products.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Literature review aims to understand an overall perception towards intention purchasing factors for edible birds' nest based products. Moreover, a framework and theory will be studied to

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