UNIVERSITI PUTRA MALAYSIA

PURCHASING BEHAVIOUR OF YOUNG-ADULT CONSUMERS FOR CANNED TUNA PRODUCTS IN KUALA LUMPUR, MALAYSIA

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By

NOVA ZUHRA ABDULLAH

Thesis Submitted to the School of Graduate Studies, University Putra Malaysia, in Fulfilment of the Requirements for the Degree of Master Science

October 2005

Dedicated

To

My Lovely Parents

Who Gave A Strong Encouragement So Much

During My Study

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master Science

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Tuna is practically the only fish processed and traded at an international scale (Josupeit, 2004). The trade has evolved into an enormous international industry. The size and scope of this industry has made it one of the world's most lucrative industries. Malaysia also involved into this industry by being the pioneer in the tuna processing industry in South East Asia in the 1960s, when it formed the Malayan Marine Industry (MMI). However, the markets in the tuna products industry vary according to region and countries, with markedly different types of consumers; each requires a different market approach and adopts certain basic purchase decision making styles. Consumers make purchase decisions based on the learning process, which ultimately affects their buying behaviours. Therefore, understanding consumer decision making styles is essential in the food processing industry, particularly in the lucrative tuna products industry, to maintain competitive advantage.

The objectives of the study are to determine decision making styles of young-adult consumer for canned tuna products purchases, to investigate relationship of decision making styles with socio-demographic background and to recommend appropriate strategies of canned tuna marketing to current market situation. The sample sizes of 400 respondents were used for the study. Data were analyzed by descriptive analysis, factor analysis, t-Test and analysis of variance (ANOVA).

Results of the descriptive analysis showed that more than half (77.5%) of the respondents consumed canned tuna products approximately one to three times a month, 17.8% four to six times a month, and 4.8% more than six times a month. Results of factor analysis gave a ten-factor solution but only eight factors were reliable. The eight factors are health consciousness, convenience consciousness, taste focused, brand consciousness, ethical concern, habitual and brand loyalty, familiarity and eating habit, and price equals quality concern. Results of t-test and ANOVA showed that eight socio-demographic variables have relationship on canned tuna products purchase decision making styles, namely gender, age, race, education level, occupation, marital status, residential area and position in family. Income level and size of household do not seem to influence consumer canned tuna products purchase decision making styles.

The study proves the existence and difference of young-adult consumer decision making styles of purchasing canned tuna products. Malaysia has the potential to be a player in the largely lucrative tuna products industry, even though the industry has only been a niche market here. By understanding the consumer decision making styles of tuna products consumption, food manufacturers and marketers in Malaysia are able to seriously and meticulously approach this industry to gain competitive edge. Certainly, there is an urgent need for developments in the tuna processing

industry in Malaysia in terms of fishing gears and methods, production technology, joint venture, training programs, product innovations and market segmentation based on socio-demographic background and consumer lifestyles.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
Sebagai memenuhi keperluan untuk memperoleh ijazah Master Sains

GELAGAT PEMBELIAN OLEH PENGGUNA DEWASA MUDA UNTUK PRODUK TUNA DALAM TIN DI KUALA LUMPUR, MALAYSIA

Oleh

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Tuna adalah satu-satunya ikan yang diproses dan didagangkan di peringkat antarabangsa (Josupeit, 2004). Perdagangan ini telah memajukan industri ini kepada industri antarabangsa. Saiz dan skop industri ini juga telah menjadikannya salah satu industri paling lumayan di dunia. Malaysia juga telah berkecimpung di dalam industri ini dengan menerajui industri pemprosesan tuna di rantau Asia Tenggara pada tahun 1960an apabila tertubuhnya Malayan Marine Industry (MMI). Walau bagaimanapun, pasaran untuk industri pemprosesan tuna berbeza-beza mengikut rantau dan negara, yang rata-rata mempunyai pelbagai jenis pengguna, dan setiap satu memerlukan pendekatan yang berbeza dan menggunakan gaya pembuatan keputusan yang berlainan. Pengguna membuat keputusan berdasarkan proses pembelajaran, yang seterusnya akan mempengaruhi gelagat pembelian mereka. Dengan itu, pemahaman terhadap gaya pembuatan keputusan pengguna amat penting di dalam industri pemprosesan makanan, terutamanya di dalam industri produk tuna yang lumayan dalam mengekalkan kelebihan bersaing.

Objektif kajian ini adalah untuk menentukan gaya pembuatan kuputusan pengguna dewasa muda berkenaan pembelian produk tuna, mengkaji hubungkaitnya dengan latarbelakang sosio-demografik pengguna dan memberi saranan strategi yang berpatutan bagi pemasaran produk tuna dalam tin pada situasi pasaran semasa. Saiz sampel 400 pengguna telah digunakan di dalam kajian ini. Analisis data telah dilaksanakan menggunakan analisis deskriptif, analisis faktor, ujian-t dan analisis varians (ANOVA) untuk kajian ini.

Keputusan kajian analisis deskriptif menunjukkan bahawa lebih daripada separuh (77.5%) daripada pengguna membeli produk tuna dalam tin lebih kurang satu hingga tiga kali sebulan, 17.8% empat hingga enam kali sebulan, dan 4.8% lebih dari enam kali sebulan. Keputusan faktor analisis telah memberikan penyelesaian sepuluh faktor, tapi hanya lapan faktor sahaja yang andal. Lapan faktor ini adalah kesedaran tentang kesihatan, kesedaran terhadap kesenangan membeli, fokus citarasa, kesedaraan penjenamaan, pengaruh etika, kelaziman dan kesetiaan jenama, kebiasaan dan tabiat pemakanan, dan pengaruh harga dan kualiti. Keputusan ujian t dan ANOVA menunjukkan bahawa lapan variabel sosio-demografik iaitu jantina, umur, kumpulan etnik, tahap pendidikan, pekerjaan, status, kawasan penginapan dan kedudukan di dalam keluarga mempunyai hubungan yang positif dengan gaya pembuatan keputusan berkenaan pembelian produk tuna dalan tin. Tahap pendapatan dan saiz keluarga tidak memainkan peranan dalam mempengaruhi gaya pembuatan keputusan pembelian produk tuna dalam tin.

Kajian ini membuktikan kewujudan dan perbezaan gaya pembuatan keputusan pengguna dewasa muda di dalam pembelian produk tuna dalam tin. Malaysia mempunyai potensi untuk menjadi salah satu peneraju di dalam industri produk tuna walaupun industri ini masih lagi menjadi pasaran niche. Dengan pemahaman gaya pembuatan keputusan pengguna di dalam pembelian produk tuna, pengusaha makanan di Malaysia mempunyai kebolehan untuk mendekati industri ini dengan lebih serius dan teliti untuk mendapatkan kelebihan bersaing. Sememangnya terdapat keperluan segera untuk pembangunan di dalam industri pemprosesan tuna di Malaysia di dalam segi peralatan dan kaedah perikanan, teknologi pengeluaran, usahasama, program latihan, innovasi produk dan pembahagian pasaran berdasarkan kepada latarbelakang sosio-demografik dan gaya hidup pengguna.

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LIST OF ABREVIATIONS

ADB	Asian Development Bank
ZEE	Exclusive Economic Zone
USA	United State of America
UK	United of Kingdom
FAO	Food Agricultural Organization
MIDA	Malaysia Industrial Development Authority
USDA	United State Department of Agriculture
MMI	Malaysian Marine Industry
FAMA	Federal Agricultural Marketing Authority
SERI	Socio-Economic and Environmental Research Institute
LKIM	Lembaga Kemajuan Ikan Malaysia
IOTC	Indian Ocean Tuna Commission
EU	European Union
FRL	Food-Related Lifestyle
CSI	Consumer Style Inventory
CFA	Confirmatory Factor Analysis
ANOVA	Analysis of Variance
EFA	Explanatory Factor Analysis
PUFA	Polyunsaturated Fatty Acid

CHAPTER 1

INTRODUCTION

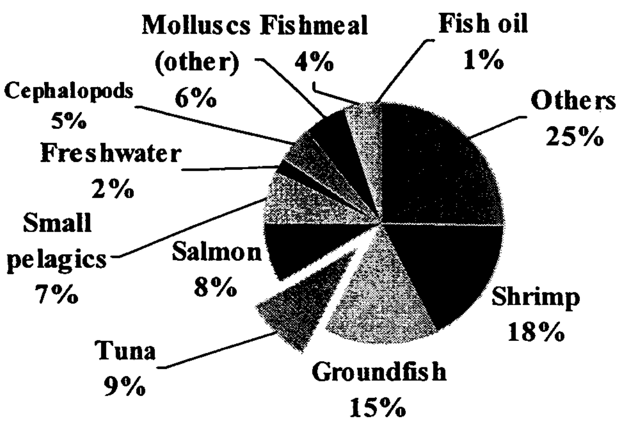
This chapter comprises five main sections: Section 1.1 describes background of study; Section 1.2 presents problem statement of study; Section 1.3 presents objectives of study; Section 1.4 presents significance of study and the last section i.e., Section 1.5 presents structure of this study.

1.1 Background of Study

1.1.1 The Global World Canned Tuna Market

Changing lifestyles have certainly brought an effect on the food market as whole, including canned tuna products. A trend towards eating snacks rather than formal meals and the growth of single person households have increased the demand for single-serve portions. Consumers today seek mobile and easy-to-prepare food products. In line with this trend, canned products are one of the convenience package of the future. They provide excellent and durability to protect food integrity, and with new technologies, are lightweight and easy to open.

In the global tuna industry, the Asia-Pacific region remains as the major source of tuna raw material and also the leading producer and supplier of canned tuna to the world market. Tuna has been fished for thousands of years, taking an important place in the culture and myth around the world. It supports the world's most lucrative fishery industry. Currently, nearly 80 nations are harvesting tuna worldwide. Tuna is consumed in many forms such as raw, cooked, smoked, dried and canned. The world tuna market is divided into two segments namely non-canned and canned tuna. The main internationally traded non-canned tuna are raw material for canning (fresh, frozen and frozen pre-cooked loins) and tuna for direct consumption (fresh/chilled and frozen). Canned tuna is generally traded in the following product forms: solid, chunk, and others such as flakes, grated and smoked. Among the categories of products, INFOFISH (2004) reported that more than half of tuna consumed is canned. This is because the trend towards large out-of-town one-stop stores has made the transportation of large quantities of bulky items, such as cans, much easier.



Source: INFOFISH, 2004

Figure 1.1: Seafood Products Traded

Tuna is the third largest major fish commodity traded internationally, after shrimp and groundfish, accounting for about 9% of total trade value (Figure 1.1). Tuna is generally tasteful and nutritious. It is an excellent source of high quality protein, vitamins and minerals and is low in saturated fat, but high in beneficial selenium and Omega-3s. Because of these characteristics, tuna is one the most favored food in the world, including Malaysia.

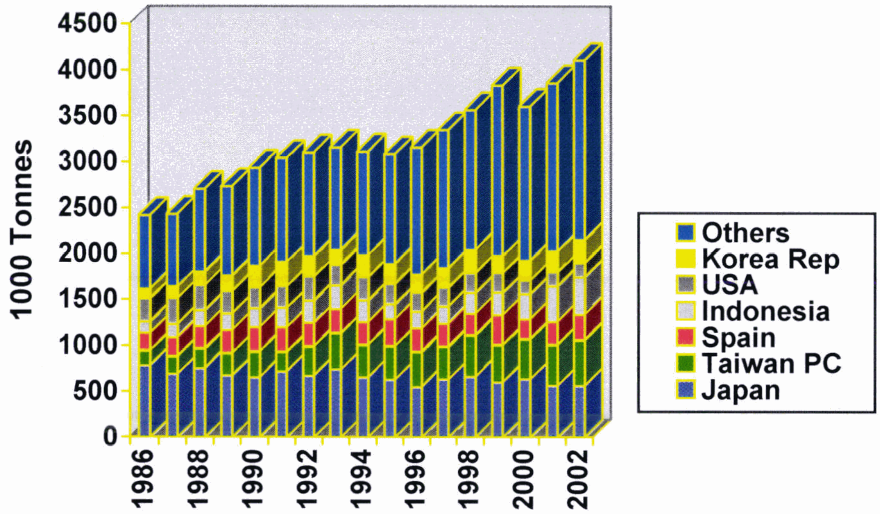
The most important tuna species in the world are Yellowfin, Bigeye, Bluefin, Skipjack, and Albacore. The specific name, size and weight of the important species are presented in Table 1.1.

Table 1.1: Commercially Important Tuna Species in the World

Common Name	Scientific Name	Size	Weight
Yellowfin	*Thunnus albacares*	160-200cm	40-130kg
Bigeye	*Thunnus obesus*	90-180cm	20-80kg
Bluefin			
➢ Northern Bluefin	*Thunnus thynnus*	160-200cm	40-130kg
➢ Southern Bluefin	*Thunnus maccoyii*	160-200cm	40-130kg
Skipjack	*Katsuonus pelamis*	48-80cm	3-6kg
Albacore	*Thunnus allalunga*	40-90cm	4-15kg

Source: ADB/INFOFISH, 1991

Tuna catches have been increasing and considered as a big scale fishing industry due to high world demand, particularly in Japan, the USA and Europe. Looking at Figure 1.2, tuna catching countries show an upward trend of their catch from 1986 to 2002. The total catch of the five main tuna species also expanded quite rapidly from 1986 to 2002, which is from 2.5 million tonnes to over 4 million tonnes. The main tuna catching nations are concentrated in Asia, with Japan and Taiwan (Province of China) as the main producers. Other important tuna catching nations in Asia are Indonesia, the Republic of Korea and the Philippines. Japan continues to be the world's major tuna catching country, even though total catches have contracted in recent years. In 2002, Japanese tuna production was only 565, 000 tonnes, compared to 780,000 tonnes in 1986 and 1993.



Source: INFOFISH, 2004

Figure 1.2: Tuna Catches by Country (1986-2002)

Tuna are harvested, then processed and packaged to be marketed in various forms. According to ADB/INFOFISH (1991), internationally traded tuna product forms include:

- Chilled, Deheaded and Gutted or Gilled and Gutted,
- Frozen, Deheaded and Gutted or Gilled and Gutted,
- Canned, "Solid packs" (a mixture of pieces of tuna),
- Canned, "Chunks" (a mixture of pieces of tuna),
- Canned, "Flakes" (smaller pieces of tuna),
- Canned, "Grated" (packed pieces of tuna flesh),
- Oil and meals, and
- Pet food and Animal feed.

The changing consumer preferences to the more easy-to-prepare processed fishery canned products, brought about by changing lifestyles, as well as a general increase