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

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

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

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OCTOBER 2005

Chairman : Rosli Saleh, PhD
Faculty : Agriculture

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.
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, kesedaran 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 dalam 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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my younger sister Masna Dewi Abdullah, my younger brother Royhan Putra, and my beloved husband Marwan Nusuf.
I certify that an Examination Committee met on 28th October 2005 to conduct the final examination of Nova Zuhra Abdullah on her Master of Science thesis entitled “Purchasing Behaviour of Young-Adult Consumers for Canned Tuna Products in Kuala Lumpur, Malaysia” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

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Date: 07 FEB 2006
DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations, which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.

NOVA ZUHRA ABDULLAH

Date: 28 October, 2005
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<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
</tr>
<tr>
<td>ZEE</td>
<td>Exclusive Economic Zone</td>
</tr>
<tr>
<td>USA</td>
<td>United State of America</td>
</tr>
<tr>
<td>UK</td>
<td>United of Kingdom</td>
</tr>
<tr>
<td>FAO</td>
<td>Food Agricultural Organization</td>
</tr>
<tr>
<td>MIDA</td>
<td>Malaysia Industrial Development Authority</td>
</tr>
<tr>
<td>USDA</td>
<td>United State Department of Agriculture</td>
</tr>
<tr>
<td>MMI</td>
<td>Malaysian Marine Industry</td>
</tr>
<tr>
<td>FAMA</td>
<td>Federal Agricultural Marketing Authority</td>
</tr>
<tr>
<td>SERI</td>
<td>Socio-Economic and Environmental Research Institute</td>
</tr>
<tr>
<td>LKIM</td>
<td>Lembaga Kemajuan Ikan Malaysia</td>
</tr>
<tr>
<td>IOTC</td>
<td>Indian Ocean Tuna Commission</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>FRL</td>
<td>Food-Related Lifestyle</td>
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<tr>
<td>CSI</td>
<td>Consumer Style Inventory</td>
</tr>
<tr>
<td>CFA</td>
<td>Confirmatory Factor Analysis</td>
</tr>
<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
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<tr>
<td>EFA</td>
<td>Explanatory Factor Analysis</td>
</tr>
<tr>
<td>PUFA</td>
<td>Polyunsaturated Fatty Acid</td>
</tr>
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</table>
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.

![Seafood Products Traded](source)

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

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Size</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>Yellowfin</td>
<td><em>Thunnus albacares</em></td>
<td>160-200cm</td>
<td>40-130kg</td>
</tr>
<tr>
<td>Bigeye</td>
<td><em>Thunnus obesus</em></td>
<td>90-180cm</td>
<td>20-80kg</td>
</tr>
<tr>
<td>Bluefin</td>
<td><em>Thunnus thynnus</em></td>
<td>160-200cm</td>
<td>40-130kg</td>
</tr>
<tr>
<td>Northern Bluefin</td>
<td><em>Thunnus maccyoi</em></td>
<td>160-200cm</td>
<td>40-130kg</td>
</tr>
<tr>
<td>Skipjack</td>
<td><em>Katsuonus pelamis</em></td>
<td>48-80cm</td>
<td>3-6kg</td>
</tr>
<tr>
<td>Albacore</td>
<td><em>Thunnus allalunga</em></td>
<td>40-90cm</td>
<td>4-15kg</td>
</tr>
</tbody>
</table>

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.
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