# CONSUMERS' PERSPECTIVE TOWARDS MALAYSIAN TRADITIONAL FOOD: SAMBAL BELACAN (CHILLI SHRIMP PASTE), A PRELIMINARY INVESTIGATION

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#### **ABSTRACT**

Sambal belacan or chilli shrimp paste is a condiment that is widely consumed by Malaysians. With the aim to gather information concerning the elaborated definition of the term "sambal belacan", four focus group sessions were conducted. Three key themes to convey the definition were presented from the analyses of the transcripts. These were ingredients, techniques and sensory attributes of Malaysian sambal belacan. The results suggest that the basic ingredients for sambal belacan are fresh chillies, belacan and salt. The mixture, when pounded in a mortar with a pestle, produces a desirable texture. There were 38 varieties of additional ingredients reported. Most participants stated that it enhances appetite for enjoying meals. The participants also stated unfavourable characteristics of sambal belacan due to the presence of chilli seeds, watery texture and strong aroma of belacan. Research on product development of sambal belacan is recommended as it is crucial to explore consumers' demands for new varieties of sambal belacan and market it as one of Malaysia's food identity.

**Keywords:** Chilli-shrimp paste, consumer perspective, cultural food, focus groups, food definition, *sambal belacan* 

## INTRODUCTION

Studies on food culture and food heritage are undertaken to bring to light the characteristics of traditional foods or dishes, or ingredients of everyday consumption which are not appreciated for the important cultural and historical value they possess. Hence, why research about *sambal belacan*?

From a marketing point of view, the study intends to serve various purposes: firstly, to identify a true definition of the term *sambal belacan*; secondly, to revive and augment the popularity of a historically important food ingredient which is part of the Malaysian

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eating culture; and thirdly, to raise awareness about the product. Specifically, the research undertaken will serve to raise awareness for those not familiar with the product, stimulate interest about *sambal belacan* in regards to the ancient production method and consumption habits, and facilitate future promotion as a unique Malaysian symbol of food culture. The ultimate objective is to efficiently disseminate the knowledge and historical importance of a traditional Malaysian condiment to the local consumer as well to tourists, professionals in the culinary field, educators of foodservice and food preparation related studies, and practitioners in the field, including producers, marketers and other stakeholders in the supply chain.

In terms of etymology, the word *sambal* is not uniquely Malay. It is also used in South Indian cuisines called *sambar*, which is a fiery hot version of dal, or spiced lentil curry (Oseland, 2006). However, *sambal* in Malaysia, as well as in Indonesia and Singapore, are not curries. They are pureed or finely chopped chilli-based pastes served in small bowls when extra heat and flavour is desired in foods being consumed.

Although *sambals* generally use chillies as their foundation, they can contain a variety of other ingredients, including shallots, garlic, palm sugar, *belacan*, lemon grass and green mangoes. The regional variations of *sambals* are seemingly endless. Some *sambals* are cooked; others are made of uncooked ingredients. Some are mildly flavoured; however, the majority of *sambals* are very spicy and hot. *Sambal* is used as a base or in *rempah* (spice paste) for cooking and it can also be served as a condiment to a finished dish. However, *sambal belacan* should not be confused with other terms of *sambal* although the function is similar, that is to complement the flavours, to add taste highlights or to aid digestion (Passmore, 1991). The name *sambal belacan* is uniquely Malay and it refers to the uncooked version which has not undergone any cooking process. Nevertheless, whatever ingredients are used in a *sambal*, the final product tends to be a dish featured in rice-based cuisines and eaten in combination with coconut milk-based curries and vegetables. The copious variations make it important to distinguish *sambal belacan* and other *sambal* dishes.

## Dissimilarities between Sambal Belacan and Other Sambal Dishes

In countries such as Malaysia, there are numerous *sambal* dishes. Among the most popular is *sambal tumis* (stir-fried *sambal*), which can be made with fresh or dried chillies or a combination of both. The dried chillies are usually cut into lengths and soaked in warm water to soften before use. It has a different flavour from the fresh chillies. To reduce the heat, some or all of the seeds have to be discarded before preparation (Hutton, 2005). After they are grounded, the chillies together with *belacan*, onions, garlic and tamarind juice are fried in lots of oil. The *sambal tumis* is an important complement to *nasi lemak* (a national heritage dish in Malaysia). The exclusion of this component would make the *nasi lemak* dish incomplete. Anchovies, prawn, squid or eggs are optional ingredients usually added to *sambal tumis*.

Conversely, *sambal belacan* (sam-bahl blah-chan) which is the focus of this study is slightly different from *sambal tumis*. Although its absence would not make a significant difference to how the entire meal is prepared and served, it can enhance a meal if the *sambal belacan* is well prepared. Traditionally, *sambal belacan* is served as a condiment at the dinner table, or a side dish, or sometimes as a substitute for fresh chillies. It is the key accompaniment that goes well with rice, the Malaysian staple food, and almost every meal, together with raw vegetables and edible leaves as in *ulam*, crispy fried fish as well as other dishes.

Sambal belacan has many applications and will taste right by adding to it a variety of choice ingredients such as tomato, mango, fermented durian, dried shrimp, onions, and anchovies. It is also a popular dressing for fried fish and can be used as a base for frying rice or cooking vegetable dishes; and added to desiccated coconut in preparing salad dressings such as in *kerabu* salad. Sambal belacan, as the name implies, is made of fresh red chillies and belacan (dried shrimp paste) and it is usually served uncooked. Though its basic content are chillies and belacan, sambal belacan can be prepared in many ways each with its own uniqueness. Some argue that belacan should be roasted in a dry pan or traditionally roasted over a gas flame on the back of a spoon to enhance its flavour and kill bacteria. The toasted belacan and the red chillies combined with some cili padi (bird'seye chillies) are usually mashed or crushed together using batu lesung (mortar and pestle) (Oseland, 2006). Others prefer to simply use raw belacan in their sambal.

# Basic Ingredients That Constitute a Sambal Belacan

## Chilli

Chillies were first brought to Malaysia by Portuguese traders in the fifteenth century (Oseland, 2006). Since then, chillies have been incorporated in many Malaysian culinary preparations to enliven curries, stews, soups, salads and *sambal*. It imparts pungent taste and heat, known as *pedas* to food. Chillies have since become an integral part of the Malaysian diet.

There are many different types of chillies available in the market. However, chillies used in the preparation of *sambal belacan* are known as *cili merah*. They are distinctively soft to the touch, with glossy skin, bright red colour and a narrow fingerlike body pointed at the end. They are usually 3.5 inches long and about ½ inch in diameter at their thickest part. It is also referred to as fresh red Holland chillies. *Cili padi* or fresh Thai chillies, normally referred to as bird's eye chillies, are smaller than *cili merah*. Available in red and green, this bird's eye chillies have a fearsome hot taste, designed for strong palates and normally used together with red chillies to produce *sambal belacan*. The green ones are hotter and have a stronger pungent smell compared to the red ones.

Lada kering or dried red chillies are produced by leaving the chillies under the hot sun to dry and shrink. Dried chillies have a more caramelized taste than the fresh red chillies. The dried red chillies are normally pounded (grounded) and used in making the cooked version of sambal called sambal tumis (stir-fried sambal) and many other dishes in Malaysia.

#### Belacan

*Belacan* is a seafood product in the form of a paste obtained by salt fermentation of fresh tiny shrimps called *geragau* or prawns or both. It has a unique taste and aroma, two critical factors in the final product. This ingredient is also used as a flavour enhancer of traditional foods such as *laksa* and *asam pedas*.

*Belacan* is also available in other Southeast Asian countries but goes by many names such as *kapi* in Thailand, *ngapi* in Myanmar, *terasi* in Indonesia and *prahoc* in Cambodia (Lam, 1989). It is called *mam tom* in Vietnamese, and *bagoong alamang* in Tagalog. In Malaysia, *belacan* is traditionally made of tiny shrimps called *udang geragau* or *udang baring*.

The process of making *belacan* takes between 6 to 8 weeks. The final product has some unique characteristics. It is thick, has a sticky consistency (paste), and salty taste with a strong distinctive shrimp odour. Its colour ranges from light brownish red to light purplish red. *Belacan* can only be consumed as a condiment because of its high salt content as a preservative. This popular component of the Malaysian diet is regulated by the government. *Belacan* shall contain not less than 15 per cent of salt and 25 per cent of protein and not contain more than 40 per cent of water and 35 per cent of ash. It shall be clean and wholesome and shall not contain any extraneous matter. However, it may contain permitted preservative, colouring and flavour enhancer. Table 1 shows the chemical composition of *belacan*.

Table 1: The Chemical Composition of Belacan

Protein, %	28 - 40
Ash, %	21.1 - 37.8
Moisture, %	27 - 40
Fat, %	0.6 - 2.5
Salt (NaCl), %	13 - 27
Carbohydrate	0
pН	7.2 - 7.8
Calcium, %	2 - 3.4
Iron, %	0.02
Thiamine	Trace
Riboflavin, %	0.001
Niacin, %	0.004

Source: Adnan (1984)

Belacan is hygroscopic (the ability of a substance to attract, absorb, and hold water molecules) (Lam, 1989). However, its shelf life can be extended if the product is occasionally dried to reduce the moisture content to 40% or lower which, together with the high salt content, avoid spoilage. Hence, this 'high salt with intermediate moisture' product does not need refrigeration, although the majority of consumers prefer it stored in the refrigerator.

Commercial *belacan* production in Peninsular Malaysia is concentrated in the states of Perak, Selangor, Pulau Pinang and Melaka. Table 2 provides the statistics according to Annual Fisheries Statistics (1980).

Table 2: Production of Belacan in Peninsular Malaysia

Region	Belacan Production (Metric Tons)		
Perak	1,461.5		
Selangor	640.2		
Pulau Pinang	371.2		
Johor	214.7		
Melaka	6.0		
Terengganu	4.1		
Kedah	3.0		

Source: Adnan (1984)

# Other Popular Ingredients Added to Sambal Belacan

A variety of ingredients can be added to a traditional *sambal belacan* to enhance its appeal. Some examples are sugar, vinegar, onions, shallots and garlic, seafood such as small dried shrimp, anchovies, fish fillet, and fruits such as *limau kasturi*, tamarind juice, tomato, mango, pineapple, *belimbing buluh* and fermented durian paste.

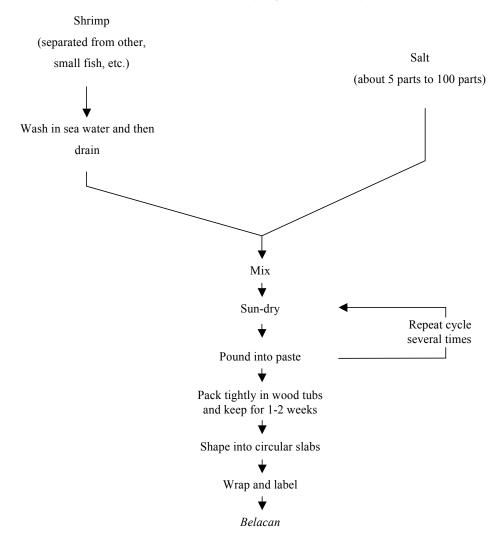
# Different Types of Sambal Belacan

The taxonomy of *sambal belacan* can be described as endless. Hundreds of types of *sambal belacan* can be created from the basic recipe of *belacan* and chillies. *Asam, bajak* or *badjak, balado, jeruk, kemiri, lonte, mangga, trassi, manis, pedas-pedas, setan, taliwang, tumis*, and *ulek* are some of the popular *sambal*. Their names vary according to the ingredients used in the process (Hutton, 2005).

## Commercialization of Sambal Belacan

Although most Malaysians, especially the Malays, know how to produce *sambal belacan*, many consumers choose to buy one that is readily available at supermarkets as a result of the different lifestyles (work-life balance) and family composition (single consumer). Commercially, there are some well known brands of *sambal belacan* available such as the popular bottled brand 'G-Tra' launched in 2008 by an entrepreneur from Jitra (Othman, M. personal communication, September 28, 2009). However, this product is only available at certain supermarkets in some parts of Malaysia, and it has not gained much popularity because the product has not been strategically marketed and therefore consumers at large are still not aware that there is a ready to use *sambal belacan* that is commercially available.

*Belacan* production techniques can vary according to local traditions. A sample traditional method of commercial *belacan* manufacturing is presented in Figure 1.



Source: Lam (1989)

Figure 1: Commercial Production of Belacan

## LITERATURE REVIEW

Historical records show that food has always played an important role in the cultural evolution of mankind. Food consumption and food choice variety has been at the centre of this evolution: eating culture, rituals, and food preferences based on environmental and social conditions emerged (Camillo, Kim, Ryan, & Moreo, 2005). Societies have adopted specific food preferences according to their tastes, environments, and economies. They have also chosen their food and drinks that became symbols of the individual culture, and eating habits have evolved reflecting people's own tastes and preferences. These events have created food cultures, rituals, and symbols that have been shared among people across continents.

The gastronomic elements or uniqueness of foods that a country offers have not only established cultural patrimony and contributed to the local economy, they also have the potential of attracting people to visit the country (Bessière, 1998; Boyne & Hall, 2004; Cayot, 2007; De Roest & Menghi, 2000; Lopez & Martin, 2006; Trichopoulou, Soukara, & Vasilopoulou, 2007). In gastronomic tourism, for example, food products and culinary specialties become the vehicle for a closer understanding of cultures in that they act as markers of peoples and territories (Lopez & Martin, 2006). Bessière (1998) stated that the heritage featuring more specifically food and gastronomy is considered as an element of tourist development at the local level. Potential tourists for instance, use this attribute as a medium in forming images of a tourism destination which they are going to visit (Bessière, 1998).

Local cuisines as well as traditional foods are amongst factors influencing attractions for a destination. According to Cayot (2007), the phrase 'traditional food' refers to a product with specific raw materials, and/or with a recipe known for a long time, or with a specific process. Traditional foods are an expression of culture, history and lifestyle (Trichopoulou, et al., 2007). They reflect the history and culture of a region and can be an attraction for many tourists (Inskeep, 1991). In Malaysia, for example, as mentioned by Hutton (2005), cuisines are as varied as its people such as Malays, Chinese and Indians who continue to craft their own cuisines, while cross-cultural scrounging in the kitchen has led to a number of uniquely Malaysian dishes.

These local traditional dishes could be promoted as an aggregate of tourism products. Tourists can enjoy and savour the local cuisines. Although they probably need to be adapted for the tourists' palate, they can still retain their unique characters and use of local ingredients (Inskeep, 1991). Other than the tourists, food consumers in general need to be satisfied. Today's customers are demanding for a wider variety of tastes. Additionally, with the pressure to preserve culinary traditions, concern rises about making efforts to produce traditional food products (De Roest & Menghi, 2000). In Malaysia, for example, there is a wide variety of dishes that have the potential to be presented as Malaysian cuisines.

Hutton (2005) suggests that it is almost impossible to make generalizations on what Malaysians eat because of the variations in their food choices and preferences. Despite regional differences, the food can be described as spicy and flavourful, although this does not necessarily mean chilli-hot, but on most occasions, even if the main dishes are not hot, there will be a chilli-based condiment or sauce such as sambal on hand to add the extra 'zing' or dynamism. As previously mentioned, the term sambal is derived from the South Indian sambar, which is a very hot version of spiced lentil curry (Oseland, 2006). However, sambal in Malaysia refers to the chilli-based condiment which is indispensable throughout Malaysia regardless of Malay, Chinese, Indian and indigenous communities living in the country. It is available in various kinds, according to the substances added to increase or vary its strength and pungency; the most common is shrimp paste or belacan. Sambal belacan has existed for many generations, consumed by our ancestors and therefore, it is considered as a Malaysian heritage food. The earliest documentation which mentioned about sambal belacan was written in a paper on preparation techniques and control of belacan (Adnan, 1984). It used to be enjoyed mainly by the Malays and involved a painstaking job of pounding in a mortar with a pestle before it could be served. The belacan had to be roasted over a charcoal fire to bring out the aroma, prior to mashing it with chillies using a granite mortar and pestle (Oseland, 2006). The pounding process was believed to bring the best flavour out of the ingredients. Despite its pungent odour when raw and during roasting, belacan gives an irresistible extra flavour to a variety of dishes, especially to sambal belacan (Hutton, 2005). It is undeniably one of the Malaysians' favorite dishes. In fact, some Malaysians might say "what's a meal without sambal belacan?" The hot aftertaste characteristic makes it appealing for those who love spicy foods.

A global search of published literature revealed no literatures using focus groups to study *sambal belacan*, except articles on *belacan* (Adnan, 1984). Nevertheless, previous studies focused on the processing and not on the definition and characteristics of *sambal belacan*. As mentioned by Guerrero et al. (2009), definition of traditional food includes elaboration of traditional ingredients, traditional composition and traditional types of processing. Hence, in this paper, the researchers endeavour to explain the true definition of a Malaysian *sambal belacan* as a distinctive condiment among many others. Specifically the authors wanted to draw attention to a condiment which is produced and consumed by most Malaysians, but which has not been given due emphasis on the heritage and symbolic value of a traditional-historical local product to be proud of. Thus once defined and explained, it will raise awareness and inspire appreciation for a product commonly consumed but rarely praised.

This study is conducted as an attempt to investigate what the consumers' interpretations of the term *sambal belacan* are. Findings can be used as a basic guide to conduct more research on *sambal belacan* for the consumer market and as a potential Malaysian tourism product in the future. The term *sambal belacan* will be elaborated based on ingredients which Malaysians incorporate into this condiment, the production process and the typical sensory attributes of *sambal belacan*. It is hoped that the study will help to preserve

this traditional food item and that *sambal belacan* continues to survive over time. It is also hoped that the younger and future generations in Malaysia will appreciate this food heritage and promote it as a Malaysian food identity.

## METHODOLOGY

This study adopts the qualitative approach of gathering and analyzing data using structured interview and focus group discussions. A focus group can be defined as a gathering of a small group of participants who share a common interest or characteristic, invited and assembled by a moderator, who uses the group and its interactions as a way to gain information about a particular issue (Gibbs, 1997; Lewis, 1995; Marczak & Sewell, 1998). The purpose of focus groups is to promote a comfortable atmosphere of disclosure in which people can share their ideas, experiences, and attitudes about a topic, a product, or a service. Participants "influence and are influenced," while researchers play various roles, including that of moderator, listener, observer, and eventually inductive analyst (Krueger & Casey, 2000; Wolff, Knodel, & Sittitrai, 1993).

## **Focus Group Interview Process**

# **Recruitment of Participants**

Four focus group interviews were conducted with the purpose of gaining the participants' interpretation and perspectives of the Malaysian *sambal belacan*. The participants comprised *sambal belacan* consumers from various backgrounds, including executive chefs, food and beverage directors, catering officers, academicians, food consultants and food writers. They were selected using purposive sampling method based on certain common characteristics such as familiarity with local traditional foods and work experience that relate to the topic of this study, including being consumers of *sambal belacan*.

The first two focus group interviews concentrated on participants closely related to food services including executive chefs, food and beverage directors, catering officers, academicians, food consultants and food writers; while the third and fourth focused on consumers whose nature of work are more diverse. Each focus group consisted of six to eight participants. According to Krueger (1994), a group of between six to ten participants is acceptable in order to keep the group small enough for everyone to have an opportunity to share insights and yet large enough to provide diversity of perceptions.

The age of participants ranged from twenty-four (24) to fifty-seven (57) years. Participants were first contacted via telephone, and were provided with a preliminary introduction by the researcher, a brief description of the research topic, and the requirements for participation

in the focus group discussions. If these individuals were consumers of *sambal belacan*, and they agreed to participate in the focus group discussion on a predetermined schedule, an invitation letter was then sent through email. Table 3 shows the demographic profile of the actual focus group members who participated in the study.

**Table 3: Demographic Profile of Participants In The Focus Group (FG) Discussion Sessions** 

	Groups' Characteristics			
Demographic Variables	FG 1 FG 2		FG 3	FG 4
	(n=6)	(n=8)	(n = 7)	(n=8)
Gender				
Male	4	7	4	5
Female	2	1	3	3
Race				
Malay	6	8	7	8
Chinese	-	-	-	-
Indian	-	-	-	-
Occupation				
20-29	-	_	2	5
30-39	-	1	-	1
40-49	3	5	5	-
50-59	3	2	-	2
Executive Chef	1	1	2	-
F&B Director	4	1	1	-
Academicians	1	1	2	1
Culinary Consultant	-	2	-	-
Catering Officer	-	2	-	1
Food Writer	-	1	-	-
Research Officer	-	_	-	1
Tutor	-	-	-	1
Staff Nurse	-	-	-	1
Secretary	-	-	-	2
Student	-	-	2	1

The focus group sessions were conducted in several hotels in Kuala Lumpur and Selangor between April to September 2008. Each session lasted approximately 2 hours. Participants were asked to read and sign a consent form before the discussion started. Upon completion, a token of RM100 per person was given for their time and participation. Participants were also informed and advised an aspects of confidentiality and their rights to refuse to answer a particular question or to withdraw their consent.

They were also reminded that the discussion would be audio-taped and transcribed so that the data obtained could be analyzed, synthesized, and summarized. The focus group interviews were moderated by the researcher. He/She would be there to listen and observe. Data would be analyzed inductively.

## **Pre-set Questions for Discussion**

A list of questions was prepared in advance to initiate and guide the discussions so as not to disrupt the spontaneous nature of focus group sessions. Questions were arranged in a sequence from general to specific questions of critical interest (Krueger, 1994). Participants were encouraged to share their opinions even when they differed from what others had said and there would be no right or wrong answers but rather differing points of view.

In order to create a comfortable environment and put the participants at ease, a brief introduction session prior to the beginning of the focus group discussion was arranged. Each participant was asked to provide brief information of themselves, their names and the nature of their job in the food industry. This also served as a means to provide some additional demographic information for later referencing of responses during the analysis. The discussion on *sambal belacan* was initiated by asking each participant to describe their understanding of *sambal belacan*. The descriptions included the recipe, preparation technique, and sensory attributes. Participants were also encouraged to talk about their insights with regards to implicit meaning of the Malaysian *sambal belacan* and their perceptions on the acceptance of Malaysians towards *sambal belacan*. Examples of questions asked during the focus group sessions are listed in Table 4.

# **Table 4: Pre-set Questions To Initiate the Focus Group Discussions**

- 1. How would you describe sambal belacan?
- 2. What are the basic recipes of sambal belacan?
- 3. What are other ingredient(s) that would be added in the *sambal belacan*?
- 4. If you were to make sambal belacan on your own, how would you prepare it?
- 5. Please describe the sensory characteristics (attributes that you can see or feel) of the common *sambal belacan*. For example colour, smell, taste and texture.

The discussion ended with a session where participants had to write their responses in an Individual Response Form which was prepared in advance. They were given ten minutes to write about their description of *sambal belacan*. They were also encouraged to write about any other information related to *sambal belacan* that they thought was missing during the discussion.

The Individual Response Forms were compiled, re-typed and transferred into a word document. Recorded data from each focus group were transcribed verbatim into word document, translated and checked by a panel of judges. The raw data were exported to NVivo7 software to be analyzed. Words or sentences by the participants were grouped into meaningful categories.

# RESULTS AND DISCUSSION

The following results represent the insights of twenty-nine *sambal belacan* consumers from various backgrounds. Three key themes on the scope of definition associated with *sambal belacan* were identified. These were ingredients, techniques and sensory attributes of the Malaysian *sambal belacan* (Figure 2).

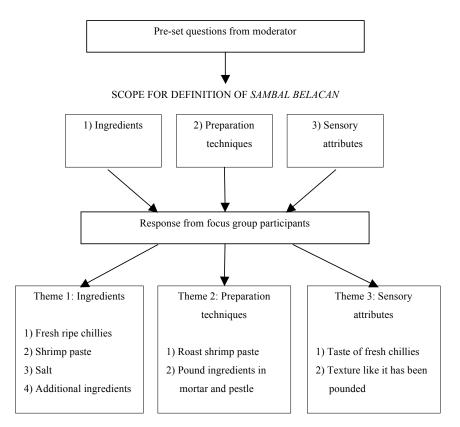


Figure 2: Scope and Definition of Sambal *Belacan* Based On the Pre-Set Questions Posed To the Focus Group Participants

The findings of this study not only helped to look into how *sambal belacan* can best be defined, but it has also helped to suggest that *sambal belacan* was named after the main ingredients used in the preparation. This food can be assumed to be traditionally a Malay food as the word *sambal belacan* in Malay linguistics is actually chilli and shrimp paste.

# **Synthesis of the Themes:**

# Theme 1: Ingredients used in sambal belacan

When asked to elaborate on their interpretation of *sambal belacan*, participants explained common ingredients used in *sambal belacan*; the ingredients were categorized into two types: basic ingredients and additional ingredients. Most of the participants mentioned that there were three (3) basic ingredients (chillies, shrimp paste and salt) of *sambal belacan* while the other ingredients were considered as add-ons to enhance the taste based on one's preference. Table 5 shows the basic ingredients and top 15 additional ingredients starting from the most frequently mentioned during all the focus group discussions.

Table 5: Basic and Other Ingredients Commonly Used In Sambal Belacan

Basic Ingredients	
Chilli	
Shrimp paste	
Add-ons (top 15 from 38 types mentioned)	No. of times being mentioned
Other rare add-on ingredients (24 types)	103
Limau kasturi	80
Tomato	48
Shallot	31
Tempoyak (fermented durian paste)	30
Sugar	28
Anchovies	27
Tamarind juice	27
Mango	19
Pineapple	19
Bacang (local mango)	18
Lemon	13
Belimbing buluh (bilimbi)	12
Vinegar	11
Garlic	10

Many participants stated that *sambal belacan* is made with fresh ripe chilli, described as having red colour, and can be either the normal size chilli or the shorter type or a combination of both. Green chillies were used by those who liked to acquire hot but grassy taste in their *sambal belacan* (Oseland, 2006). Some participants stated that *sambal belacan* made by using green chilli is suitable to be mixed with anchovies. Other participants stated that dried chillies are rarely used in *sambal belacan* because of the different flavour compared to fresh chillies. The shrimp paste (*belacan*) is made from tiny shrimps called *geragau* which have been fermented, preserved and then processed. The final product is then sold in blocks or 'discs' with colour that ranges from pink to blackish brown. All agreed that *belacan* has unique characteristics such as being thick, salty, with a very strong aroma of shrimp. Due to its saltiness, it can never be consumed without a carrier, and is used as a condiment that helps improve the aroma and taste of another dish such as *sambal belacan*. One participant had different views regarding the basic ingredients for *sambal belacan*. She recalled her childhood experience and indicated that salt was not added to the product.

There were thirty-eight (38) varieties of supplementary ingredients which were typically added in relatively small amounts into *sambal belacan* mentioned throughout the discussion. These supplementary ingredients consist of shallot, durian and garlic. However, the ingredients mentioned frequently were mostly acidic in nature such as *limau* 

kasturi, tomato, tamarind juice, mango, pineapple, local mango, lemon and belimbing buluh. Kalamansi lime or calamondin was mentioned as the most important additional ingredient to sambal belacan. Normally, the fresh lime juice would be squeezed on the sambal belacan just before serving. Durians which had thirty occurrences throughout the transcripts were inclusive of fermented durian known as tempoyak which was added in by some people to give an exquisite taste to their sambal belacan. In hotels, chefs have created standardized recipes for their operations. One of the participants explained that the additional ingredients gave bulk to sambal belacan and this resulted in a thicker product which could be sliced, diced, chopped or squeezed into the sambal belacan. He also mentioned that the mixture of all the fresh ingredients will produce a distinct aroma that will make a delicious sambal belacan.

# Theme 2: The preparation of sambal belacan

There are many different methods in preparing sambal belacan. Some keep to the traditional way while others modified it by using modern equipment. The discussions on preparation of sambal belacan focused on participants' perceptions on selection and prepreparation of the basic ingredients, the chilli and the belacan; followed by the type of grinding equipment used as in Figure 3.

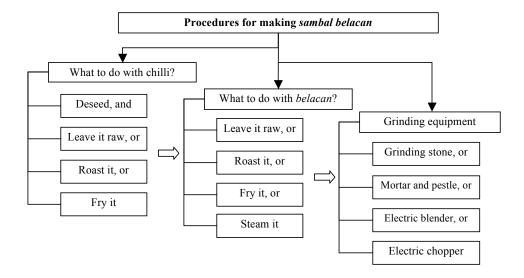


Figure 3: Method of Preparing Sambal Belacan

# The chilli

Four different ways to deal with chilli is presented in Figure 3 based on the participants' experience in preparing *sambal belacan*. Greater emphasis was placed on utilizing fresh chillies to make *sambal belacan* and many participants were keen to remove the seeds. Many participants indicated that chilli should not go through a cooking process like frying

or roasting. These participants explained that if *sambal belacan* underwent a cooking process it would be usually referred to as *'sambal tumis'* with the addition of *belacan*, dried chilli, and salt. While the real one should be made of dried chilli, some prefer to use fresh chilli. Although the basic ingredient is the same, it is referred to as *sambal tumis* and not *sambal belacan*.

# The shrimp paste (belacan)

There were fifty occurrences in the transcripts which indicated that the *belacan* must be roasted to bring out the aroma. Other acceptable methods were frying the *belacan*, or leaving it uncooked. There was only one reference from the interview transcript which stated that *belacan* should be steamed. When asked to elaborate the reasons, they explained: "We roast belacan because we want to bring out the aroma. So when we serve it, the nose experiences it first, then the eyes, before it is consumed. It gives the impression of: Wow, that's sambal belacan!".

Traditionally, people staying in the village toasted the *belacan* over glowing charcoal until some moisture from the *belacan* evaporated. The rationale behind this process would be to deplete moisture content in *belacan* so that it could absorb the juice that came out from the chillies while pounding the chillies and refrain it from getting into the eyes (Oseland, 2006). A participant interestingly shared his thoughts on the initial preparation of *sambal belacan* from a religious viewpoint. He was a Muslim, who used the concept of *makruh* to explain how certain foods such as shrimps derived from seafood had to undergo a specific cooking process before it could be consumed.

This section mainly deals with participants' perceptions on the initial preparation of the basic ingredients for *sambal belacan*. However, in order to define *sambal belacan*, the process involved in the preparation of the product also needs to be considered as it plays an important role in determining whether the desired end product is achieved.

# Grinding equipment for sambal belacan

The methods of grinding *sambal belacan* have evolved over the years; from using grinding stones to electric food processors (Lam, 1989). The grinding stone which is known as *batu giling* and mortar and pestle are traditional tools for grinding spices. Both require a meticulous and messy process. Although it is tiring to pound the ingredients for making *sambal belacan*, it is believed that the pounding action is considered best for flavour extraction. A participant shared her fond memories pounding chillies and suggested that the traditional method of pounding in mortar may contribute to the taste of *sambal belacan*: "The way I've been brought up, I always had to pound chilli and spices for cooking. And every time I pounded, chilli splashed into my eyes. I'm sure everybody must have had this experience but, still we have to pound. Pounding will extract the extra flavour and mix all the ingredients naturally." (Female, aged 33).

Another participant sees the act of pounding using the mortar as an appropriate way to convey the authentic meaning of *sambal belacan*. However, contemporary life style may allow for the use of alternative equipment such as a blender. Although some may argue that the results are not the same, others believe that a blender can deliver the same results. It is important, however, that even in the commercial sector, chefs should perform their social responsibility of preserving the original form of *sambal belacan* as well as other authentic Malaysian foods to avoid misinterpretation of this precious food heritage by the future generations.

However, as for all food preparation, time is usually the limitation and thus prohibiting many from practising the old fashion way of preparing *sambal belacan*, especially those in the food service industry. Besides time restriction, the process of pounding the ingredients using mortar and pestle is distressing for those living in apartment buildings as it produces a loud noise. Now, with many technologies available in food processing, many opt to use electric blenders or food choppers. Although using the food processor or electric blender as a tool is idiomatically seen as a crime (Oseland, 2006), it is obviously the best choice of equipment for those seeking convenience in practising their culinary knowledge.

One participant expressed that the texture of *sambal belacan* produced using a chopper is similar to the one prepared using a mortar and pestle. Her notion received positive responses by other participants.

The participants expressed that the techniques for the production of *sambal belacan* have great influence on the aroma and texture of *sambal belacan*. To most of them, the preferred texture of *sambal belacan* is *sambal belacan* with pounded texture, and with strong aroma of the roasted shrimp paste. These characteristics were important to justify the traditional *sambal belacan*.

# Theme 3: The sensory attributes of sambal belacan

The type and amount of ingredients added to *sambal belacan* are usually determined through sensory evaluation for the taste, texture, colour and aroma of *sambal belacan*. When asked to elaborate on the sensory characteristics of *sambal belacan*, the participants' responses were on the four different attributes (texture, taste, colour and aroma). However, greater emphasis was placed on the texture of *sambal belacan* followed by taste, colour and aroma.

## Taste of sambal belacan

The taste of *sambal belacan* varies depending on other added ingredients and processing of the ingredients. However, the common taste descriptors of *sambal belacan* based on the transcribed data were associated with the authenticity of the taste, the taste of freshly prepared products, different levels of spiciness from the chilli, pleasurable taste of shrimp paste, slightly salty and slightly sweet and sour. Accordingly, a participant stated that "the taste is strong, it must be hot, it must have sour taste, it must be mild sweet and maybe a little bit of prawn flavour inside, prawn base inside."

The proportion of chilli and shrimp paste used in the recipe contributes much to the taste of *sambal belacan*. However, only a few participants mentioned about the proportion of ingredients while others described it as estimations made based on acquired taste. The Malays were associated with the preference of having more *belacan* in their *sambal belacan*. However, the Chinese and Indians incorporate less *belacan* in their cooking. For example, regarding the Chinese's *sambal belacan*, there will be more chilli content than the *belacan*, the ratio is in the range of eight to one (8:1). However in Malaysia, it's like fifty-fifty (50:50), fifty-twenty, or fifty-thirty.

Interestingly, a participant suggested commercializing *sambal belacan* in a convenient form which will enable it to be consumed on-the-go, like sauce or ketchup. It will also minimize the time and effort put in the preparation of *sambal belacan*.

## Texture of sambal belacan

Many of the focus group participants suggested that Malaysian *sambal belacan* should be thick but at the same time should have some moisture produced from the mechanical reaction applied to the chilli when pounded.

One participant commented that he liked to see the rough particles of ingredients of *sambal belacan*, for example, the chilli with tomato or onion chunks on the *sambal belacan* when consuming it with local salads or *ulam*.

Another participant described his preference for the texture of pounded chilli rather than machine blended, which he believed would have to be added some water, making it very thin and watery, thus less favourable.

Others mentioned that *sambal belacan* should have a nappè (French term for a creamy compound coating certain foods) consistency. In other words, it should be pounded thinly until it becomes like puree of chilli to coat the back of the spoon.

The texture of *sambal belacan* from the consumers' perspectives from the four focus group sessions can be concluded as below.

## Colour of sambal belacan

Respondents indicated that colour plays an important role in *sambal belacan*. Although the original *sambal belacan* was normally prepared using red chillies, other additional ingredients will make it look more appetizing. However, the shrimp paste is available in different colours, from pale pink to dark brown. The colour of shrimp paste used will affect the colour of *sambal belacan*. There were also some concerns raised on the additives used to improve the colour of shrimp paste.

# Aroma of sambal belacan

The perception about *belacan* has always been like a love and hate thing. Many relate the smell that it produces as a sign of its good quality. Conversely, some participants did have negative views on the unpleasant odour when discussing its distinctive smell of greater intensity when purchased in bulk.

In sum, the discussion on taste, texture, colour and aroma of *sambal belacan* from the consumers' perspective from the four focus group sessions have provided useful insights which are summarised in Table 6 below.

Table 6: Consumers' Perspective on the Taste and Colour of Sambal Belacan

	Summary of focus groups' responses on taste, texture, and colour				
Criteria	Group 1	Group 2	Group 3	Group 4	
Taste	Maintain its authentic fresh taste; use quality belacan that has a sort of fishy sweetness from the shrimp, mild spiciness, slightly sour, leaving an after taste of belacan after consuming.	I should have the taste of fresh raw chillies; scorching hot taste; less spicy; add palm sugar to reduce the spiciness, sour taste from freshly squeezed lime or tamarind juice. Unfavourable characteristics include difficult to digest, too spicy to enjoy, home-made sambal belacan tastes better, food associated with spiciness to be avoided at all courses, sambal belacan purchased at supermarkets	sambal belacan should taste like it is freshly made; it should be spicy hot with strong shrimp flavour, little sweet, sour and salty; something not to be missed during lunch; extra hot even if it causes discomfort; original taste must be preserved in ready-to-use product. Unfavourable characteristics include dry black belacan only suitable in making rojak; if burned	Often referred to as spicy condiment with unique taste; should have different level of spiciness and saltiness; it may appeal to anyone after the first tasting; sambal belacan that contains green chillies has hot grassy herblike pungency. Unfavourable characteristics include the dislike if it lacks of spiciness; some dislike it if it contains small amount of belacan	

Table 6 (continued)

	Summary of focus groups' responses on taste, texture, and colour			
Criteria	Group 1	Group 2	Group 3	Group 4
		are oily and different from its original form.	while roasting it over flame might have slightly bitter taste; lime juice may produce bubbles after a few hours.	but lot of chillies; spiciness is deterrent for Westerners; some dislike the product from Terengganu and Kelantan because it has a sweet taste.
Texture	Sambal belacan should be neither too thick nor too watery, just at the right liquid consistency to be dipped with ulam; don't use water but fresh lime juice; using stone mortar and pestle makes it more palatable; many prefer it without chilli seeds; should have a nappè (French term for a creamy compound to cover certain foods), consistency; Ready-to-use should conserve original characteristics. Unfavourable characteristics include the dislike of product if it is thin and watery; no evident seeds; excluding the seeds makes it less spicy.	Pounded using stone mortar and pestle is desirable; should be a thick and chunky condiment; chilli particles should be visible; has to be thoroughly pounded to achieve a smooth paste. Unfavourable characteristics include the dislike of the product using a blender because it will make it very watery.	Like texture when pounded using stone mortar and pestle which produce better-tasting; it is a muscletiring process; thick paste with visible chunks of its ingredients; must have smooth texture like a paste; for some texture is not important as long as it is sambal belacan. Unfavourable characteristics include the use of blender which will not crush the seeds; some are disturbed to eat chilli seeds; consuming watery sambal belacan is like sipping chilli juice.	Thick sambal belacan is suitable with rice and thin for dipping; must have viscous consistency; tastes better if thick; should be very fine and smooth; should present some rough particles as well as juices from the chillies. Unfavourable characteristics include the watery produc prepared using blender; preferably without seeds.

Table 6 (continued)

	Summary of focus groups' responses on taste, texture, and colour				
Criteria	Group 1	Group 2	Group 3	Group 4	
Colour	'Eyes eat first'; colour is important as it receives attention and eye appeal; colour is determined by the shrimp species and other ingredients such as tomatoes and red onions; the many combinations of colours derived from the various ingredients such as red or green chillies. Unfavourable characteristics include substantial amount of carcinogenic pinkish tint added to belacan by some manufacturers	Red sambal belacan are more attractive; the red colour derived from the red chillies and tomatoes; the colour of the belacan influences the final colour. Unfavourable characteristics include the unappealing appearance of certain sambal belacan offered at restaurants.	Colour does not matter; should be as red as clay; red and green chillies gives an acceptable colour. Unfavourable characteristics include the mixing of dark brown and black belacan. Unfavourable characteristics include the oxidation of colour; if exposed to air; the surface will turn pale, and ferment. Using green chillies reduces the shelf life.	There are varieties of colour; the most influential ingredient is belacan; it should be very red, using a lot of big red chillies; some people prefer green chillies; it must be either red or green but not both; come prefer it colourful with lots of additional ingredients. Unfavourable characteristics include the Rhodamine B content, a cancer causing colouring agent sometimes used by manufacturers as a preservative.	

Table 6 (continued)

	Summary of focus gr	oups' responses on	taste, texture, and	colour
Criteria	Group 1	Group 2	Group 3	Group 4
Aroma	Strong pungent odour is indicative of quality and good flavour; less odour but fishy taste would be more acceptable. Belacan has to be roasted because eating uncooked food is regarded in Islam as makruh. Unfavourable characteristics include the unpleasant smell; not suitable to be served in a meeting room; problems taking it overseas; attending functions should be avoided after consuming it; keep away from other food items; avoid touching it when purchasing it in bulk; I have received negative connotations in our society.	Malaysians can endure the smell of sambal belacan; roasting adds aroma; its smell is Malaysian foods' signature aroma; the aroma reminds of balik kampung; refrain from using smell as aroma; ingredients such as mango and lime peel give nice fruity fragrance and help eliminate body odour after consumption. Unfavourable characteristics include the smell which causes frustration when it remains on fingers after eating. When cooking in apartment complex, neighbours complain about the smell of roasted belacan; it should not be served to guests who are not familiar with the product, especially at home parties.	Roasting belacan over the gas flame brings out the smell; the irony is that it is smelly but it tastes nice. Unfavourable characteristics include the smell disliked by younger generations; forces people to use fork and spoon to eat it; makes husband stay away from the wife after she is dealing with it; not suitable as a souvenir; it is usually associated with something of low quality, stinky and dirty.	Can hardly explain the love of the smell of roasted belacan; strong odour of belacan indicates good flavour. Unfavourable characteristics include sneezing when smelling the stringent hot aroma of sambal belacan; undoubtfully this hot and smelly condiment may never be accepted by Westerners.

#### CONCLUSIONS

The data obtained from the of four focus group sessions suggest that *sambal belacan* is defined in terms of its ingredients, techniques and sensory characteristics. The findings suggest that *sambal belacan* is a type of spicy Malaysian condiment which consists of chillies, fermented shrimp paste and a small amount of salt. As for the chillies used in making *sambal belacan*, they have to be fresh (raw) ripe chillies, which can be either the long or short type of chillies, or a combination of both. The chillies would then have to be mixed with roasted fermented shrimp paste which has a savoury taste and a small amount of salt.

Various ingredients may be added to improve the taste of *sambal belacan* based on individually preferred taste and flavour; but the most popular is lime juice, which gives a slightly acidic taste to the *sambal belacan*. The basic method of preparing *sambal belacan* is by using a mortar and pestle to pound, producing a thick texture with slight rough particles and moisture. Although using electric blender or food processor are choices for those seeking convenience, it may slightly alter the taste and texture.

This preliminary qualitative study provides the consumer with a comprehensive perspective about the elaborated definition of *sambal belacan*. With a clearly defined term it is hoped that present and future consumers will value *sambal belacan* as a true national ingredient with a rich historical and cultural heritage. Research studies are catalysts for the revival of history in general, especially when the subject matter is materialistic in nature and can be consumed. An ingredient of cultural richness such as *sambal belacan* can be introduced into the food supply chain by producers, retailers, and marketers and eventually become known by all consumers, including consumers in the international market, as one of Malaysia's cultural food identity.

This is also an important result to be considered by restaurateurs, academicians as well as local food producers and food exporters when introducing or defining this Malaysian traditional food to the public. As a starting point for a broader study, this research identified important attributes which can be researched further in qualitative and quantitative studies aiming at the acceptance and role of *sambal belacan* as a Malaysian cultural and food heritage. This information will be a useful determinant of factors of consumption of this condiment. Furthermore, identification of the factors of consumption will lead to ideas for new product development in this area and to explore the potential consumers' demand for new or modified variations of *sambal belacan*. In addition, restaurateurs should promote *sambal belacan* to foreign visitors and tourists and educate them about this gastronomic heritage; regardless of the many negative attributes identified in the study.

The findings of this study can be used as a basis to conduct additional research focusing on Malaysia's *sambal belacan* and on its cultural food heritage. New product development ideas of *sambal belacan* are recommended to be further researched as it is crucial to explore consumer demand for new variants of *sambal belacan* to sustain, improvise and market *sambal belacan* as Malaysia's traditional food product throughout the world.

## IMPLICATIONS AND LIMITATIONS

In this paper, the researchers endeavoured to explain the true definition of a Malaysian *sambal belacan* as a distinctive national condiment. Specifically, the authors wanted to draw attention to a condiment which is produced and consumed by most Malaysians, but which has not been given due recognition. Thus, it is hoped that once the term is defined and explained, it will raise awareness and appreciation of a product commonly consumed but rarely praised for its cultural, historical, and commercial values. The study did not intend to investigate the true origin and development of this important Malaysian product; instead it sought to explain its true definition as a basic to potentially establish its norms in terms of production standardization for future development.

This preliminary information also serves to stimulate the interest of entrepreneurs who may be attracted by potential market development. Despite the fact that the product may have an unpleasant odour considered offensive to some, its future development and recognition may be derived from its taste, tradition, and cultural food heritage, which will also determine the success of a possible large scale production. All stakeholders in the supply chain can benefit from this preliminary study on *sambal belacan*; in particular fisheries, seafood producers, retailers and hospitality managers. The ultimate task to raise consumer awareness, however, will rest with the marketers who influence consumers' shopping and consumption behaviour, especially if a product is culture-related.

The purpose of this study was to gain a broad understanding of *sambal belacan* in general and about its true definition including ingredients and familiarity with *sambal belacan*. However, in order to narrow the investigation and keep it focused on the core of the topic, this preliminary qualitative study only addressed selected questions to four focus groups consisting of up to a maximum of 10 participants each. The less than diverse demographics of the focus group participants created some limitation. Therefore, the results of this preliminary study are limited to the focus group participants' characteristics and cannot be generalized to the total population. A mixed method research design with a qualitative and quantitative survey with a randomly selected large sample that may include a more diverse population would most likely produce different results. In addition face-to-face structured interviews with experts in the field will make the study more robust and produce additional qualitative results which can be triangulated with other results.

## References

- Adnan, N. A. (1984). Belacan Kaedah Penyediaan dan Kawalan. *Teknologi Makanan,* 3(1), 5-8.
- Bessière, J. (1998). Local development and heritage: Traditional food and cuisine as tourist attractions in rural areas. *Sociologia Ruralis*, *38*(1), 21-34.
- Boyne, S., & Hall, D. (2004). Place promotion through food and tourism: Rural branding and the role of websites. *Place Branding*, *I*(1), 80-92.

- Camillo, A., Kim, W. G., Ryan, B., & Moreo, P. (2005). *Trend Forecasting Model of Ethnic Cuisine in America, Using the Italian Cuisine as an Example.* PhD, University of Michigan, Michigan. (Archive 3211646)
- Cayot, N. (2007). Sensory Quality of Traditional Foods. Food Chemistry, 102, 445–453.
- De Roest, K., & Menghi, A. (2000). Reconsidering 'Traditional' Food: The Case of Permigiano Reggiano Cheese. *Sociologia Ruralis*, 40(4), 439-451.
- Gibbs, A. (1997). Focus groups. *Social Research Update*, (19). Retrieved from http://www.soc.surrey.ac.uk/sru/SRU19.html.
- Guerrero, L., D., G. M., Xicola, J., Verbeke, W., Vanhonacker, F., & Biemans, S. K. (2009). Consumer-driven definition of traditional food products and innovation in traditional foods A qualitative cross-cultural study. *Appetite*, *52*, 345-354.
- Hutton, W. (2005). Authentic Recipes from Malaysia. Singapore: Periplus Editions.
- Inskeep, E. (1991). *Tourism Planning: An Integrated and Sustainable Development Approach*. New York: John Wiley & Sons Inc.
- Krueger, R., & Casey, M. (2000). Focus Groups: A Practical Guide for Applied Research (3rd ed.). Newbury Park, CA: Sage
- Krueger, R. A. (1994). Focus Groups: A Practical Guide for Applied Research (2nd edition). California:: Sage Publications Inc.
- Lam, L. C. (1989). Traditional Malay Foods: A Review. Kyoto: Research Institute for Food Science, Kyoto University
- (Reprinted from: Bulletin of the Research Institute for Food Science).
- Lewis, M. (1995). Focus group interviews in qualitative research: A review of the literature. *Action Research Electronic Reader*. Retrieved from http://www.scu.edu.au/schools/gcm/ar/arr/arow/rlewis.html.
- Lopez, X. A., & Martin, B. G. (2006). Tourism and Quality Agro-Food Products: An Opportunity for The Spanish Countryside. *Tijdschrift voor Economische en Sociale Geografie*, 97(2), 166–177.
- Marczak, M., & Sewell, M. (1998). Using focus groups for evaluation. *Cybernet Evaluation*. Retrieved from http://ag.arizona.edu/fcr/fs/cyfar/focus.html.
- Oseland, J. (2006). Cradle of Flavor: Home Cooking from the Spice Islands of Indonesia, Malaysia, and Singapore. New York: W. W. Norton & Company Inc.

- Passmore, J. (1991). *The Letts Companion to Asian Food and Cooking*. London: Charles Letts & Co. Ltd.
- Trichopoulou, A., Soukara, S., & Vasilopoulou, E. (2007). Traditional Foods: A Science and Society Perspective. *Trends in Food Science & Technology, 18*, 420–427.
- Wolff, B., Knodel, J., & Sittitrai, W. (Eds.). (1993). Focus groups and surveys as complementary research methods (In D. Morgan ed.). Newbury Park, CA: Sage.

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