

Conference Paper

An Assessment of Chinese Consumers' Preference on RTE Foods from Thailand

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Abstract

The research aims to assess the preferences of Chinese consumers on Ready to Eat (RTE) foods from Thailand through sensory evaluation analysis. Focus group interview was conducted with a group of Chinese consumers living in Thailand to understand the insights of food consumption behaviors. Chinese consumers' opinion toward Thai RTE foods and favorable types of foods were investigated. In order to obtain a better understanding of Chinese consumers' preference on Thai RTE foods, three Thai and two Chinese foods were benchmarked as samples for the target panels. Sensory evaluation was tested over five items of RTE product with Chinese panels living in three major cities including Beijing, Shanghai and Guangzhou. All panels indicated their overall preferences; however Tom Yum Kung obtained the least acceptance among five products. Just About Right scale composed of sweet, sour, salty, spicy and oiliness was assessed and it was found that different located area of testing panels have shown the significantly different preferences. Beijing panels preferred noodle-based foods like Spaghetti and Pad Thai, while Shanghai and Guangzhou panels favored of rice dishes such as Green Curry and Yellow Curry with Rice. It can be concluded that the adjusted product taste to satisfy Chinese consumers' preferences was necessary for export product strategy of Thai RTE foods.

Keywords: Consumer Preference; RTE foods; China; Sensory Test; Product Strategy

INTRODUCTION

People's Republic of China (PRC) is the world's most populous country of over 1.38 billion with the growth of disposable income about 10% per year [3]. Apart from Beijing which is the capital city, Shanghai and Guangzhou are major trading cities locating along the coastal east area. The changing into modern lifestyle and increased middle income class brings about opportunities for Ready-To-Eat (RTE) meals market in China. In 2015, frozen food industry in China have generated revenue about 2.4 trillion yuan and 8.4% of growth from 2014 [6, 12]. Presently, not only the Chinese market for

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ready meals continues to grow, but Chinese consumers also concern for their health and consider products with freshness and nutritional value. Young Chinese generations prefer frozen and chilled foods than dried and canned foods.

Frozen and microwave reheated meals becomes popular among the hustling-lifestyle consumers with speedy and convenience needs.

The food export from Thailand accounts for THB 1.025 trillion in 2014, or a growth of 13% relatively to the previous year. Export market for RTE meals values THB 0.44 trillion with shared of 3.33% of the world ready meals market [5]. Since Thai RTE foods have a potential to expand in the world marketing including China, the information about the Chinese consumer's taste preferences is required for Thai entrepreneurs and exporters.

The objective of this research is to assess the preferences of Chinese consumers toward RTE food products originated from Thailand and benchmarking with the domestic product. Preliminary, the focus group interview is conducted with a group of target Chinese consumers in Thailand. In addition, sensory evaluation is analyzed among Chinese consumers living in the target cities including Beijing, Shanghai and Guangzhou. The results will become a guideline of consumer research for Thai manufacturer and exporter to understand the Chinese preferences and modify the taste for product development of RTE food products exporting to Chinese market.

LITERATURE REVIEW

Ready-to-Eat (RTE) product, particularly frozen and microwave reheated foods have shown a potential to become continuously growing in the world market [3]. Urbanization leads to urban lifestyle such as a nuclear family, urgent in daily life and limited time for home activities [2], as a result consumers have less chance for cooking at home and require convenience for their daily meals [7]. The study of Veeck and Veeck [13] investigated consumption of Chinese and purchasing patterns in China found that Chinese consumers are divided into convenience shopper, frequent shopper, and traditional shopper. The increased consumptions of convenience foods in China, especially RTE meals or pre-packaged products tend to be the effect of convenience shopper preferences. The increased demand for RTE meals has been correlated with a higher frequency of eating out and changing Chinese consumer lifestyle [9, 14]. The busy lifestyles of Chinese consumers in big cities have an effect on Chinese purchasing decision [16]. Extensive studies found two factors that influence buying RTE food products, which are rising income and saving time. The increased trend of prosperous as well as

busy consumers in China have caused consuming more and more meals away from home [1]. This study confirms that household expenditure on foods outside home is subject to both income and time constraints. Similarly, the research by Dong and Hu [4] indicted that a rapid growth in urbanization has changed the Chinese consumption pattern and motivated food-away-from-home. Therefore, convenience and time constraint are the principle factors determining food choice [8]. Knight et al. [10] stated that Chinese consumers are aware of food safety and have less trust of food manufacturing systems within China, as a result the imported food products are rapidly expanded and receiving a higher reputation than locally produced food products. Consumer purchasing decisions of product may be more complex with several factors. Canadian Ministry of Agriculture (2010) report that overall Chinese consumers required more varieties of product, particularly processed and ready to eat foods and prefer smaller portion sizes because of convenience. High income consumers are willing to pay for high quality of food product and all consumers have extensive brand loyalty. Veeck and Veeck [13] concluded that Chinese consumers usually are aware of new product and willing to pay for new taste of food product. Olsen et al. [11] studied about the factors affecting food consumption in Norway and found that total preferences including physical evidence, smell, texture and taste are significant for decision on food consumptions. The study of Wright et al. [15] revealed the influence of culture on food taste preferences and found a fragmentation of food taste preferences based on culture and this should be alert for marketing research opportunities.

MATERIAL AND METHODS

This exploratory research was taken place in 2013 in which Chinese consumers became as unit of analysis. At the first step, focus group interview was conducted with a group of target Chinese consumers in Thailand. The preliminary data was collected from the discussion including consumer backgrounds, lifestyles, attitudes on RTE foods as well as consumption behaviors and preferences on food products. The panels were female, 18-24 years old, coming from Canton, Beijing, Shanghai and Yunnan. Preliminary sensory test was conducted with 11 food products mainly rice and noodle, and seeking for consumer's attitude and acceptance. The second step was the sensory evaluation with Chinese consumers living in China. The target group was selected by purposive sampling with 20-60 years old respondents. Sensory test on RTE foods was measured by preference test and triangle test, with target group from each city. Preference test measured overall preference with interval scale 1 to 9 (1=extremely dislike and

9=extremely like). Triangle test measured just- about-right for saltiness, sweetness, spiciness, sourness and oiliness with scale 1 to 5 (1=much too weak 2=little too weak 3=just right 4=little too strong and 5=much too strong). Five testing products were Tom Yum Kung, Pad Thai and Green Curry with Rice from Thailand, as well as Spaghetti and Yellow Curry with Rice from China. Data was analyzed by descriptive analysis and Friedman test to examine the mean difference of the scores.

RESULTS AND DISCUSSION

According to the first step, the conclusion from focus group discussion indicated that all Chinese consumers from different cities had similar attitudes toward the RTE foods. They usually eat noodles and congee at breakfast, and foods with rice at lunch and dinner. They concerned that RTE was frozen meals and not as fresh as home cooking. They were also aware of healthy and balanced nutrition meals according to the concept of Ying-Yang foods. However, RTE foods were perceived as convenience for urban consumers since they were available at any supermarkets and convenience stores. One major finding was the panels have not obtained brand loyalty and they would be able to switch to other brands because of favored product and promotion strategy. After the sensory test with 11 frozen foods, mainly rice and noodle from Thailand and international foods, the panels provided their opinions on total preferences. The results indicated that respondents were likely to accept rice frozen product over than noodle frozen product. Respondents from Beijing provided higher acceptance score for frozen foods than respondents from Shanghai and Guangzhou. However, the preliminary result from focus group discussion with Chinese consumers in Thailand was not sufficient to conclude the attitude toward Thai RTE foods. A significant remark was that consumers without experience with frozen foods and perceived that frozen food was not fresh would be able to alter their attitudes. They would accept that frozen foods possessed similar freshness to home cooking foods if they had a chance to taste the product.

In the second step, the sensory evaluation was conducted in 3 major cities of China. The sensory test of 62 respondents in Beijing, 72 respondents in Shanghai, and 70 respondents in Guangzhou were completed and used for the analysis. Two sensory evaluations were implemented including overall preference test and triangle test. Regarding the preference test, the overall preference scores were presented by mean average and standard deviation (Table 1). In addition, the mean preference scores among five products in each city were testing the significance of differences. The

TABLE 1: Overall Preference Test (Mean+SD.)

	City		
	Beijing	Shanghai	Guangzhou
Tom Yum Kung	6.48+2.49a	5.60+2.11a	5.55+2.04a
Pad Thai	7.39+1.68a	6.07+1.94a	6.69+1.89b
Green Curry with Rice	6.61+2.11a	6.33+1.95a	6.81+2.09b
Yellow Curry with Rice	7.48+1.77a	7.24+1.87b	6.64+2.18b
Spa- ghetti	7.15+1.62a	6.29+2.27a	6.10+2.08ab

Remark: Means in the same column followed by different letters (a, b) are significantly different ($p \leq 0.05$).

result indicated that panels in Beijing did not show significantly different preferences among five products. Panels in Shanghai most favored Yellow curry with rice significantly. Panels in Guangzhou showed significantly least preference on Tom Yum Kung. According to overall preferences, Thai frozen product that delivered most favorable among the panels was Pad Thai, while Chinese frozen food was Yellow curry with rice. These two products obtained the same level of preference. It can be concluded that different region of testing panels indicated the different favorable RTE foods. For example, Beijing panels preferred noodle based dish like Pad Thai and Spaghetti. For Shanghai and Guangzhou panels, they preferred rice dishes such as Green curry and Yellow curry with rice.

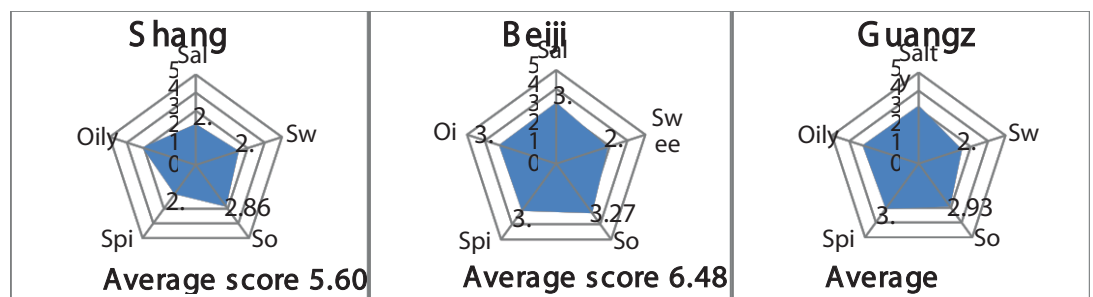


Figure 1: Tom Yum Kung.

Regarding the triangle test, Just About Right Scales was assessed with sweet, sour, salty, spicy and oiliness over 5 frozen products. The scores for each dimension were calculated as average preference scores. The assessment was presented in Figure 1 to 5 for Tom Yum Kung, Pad Thai, Green curry with rice, Yellow curry with rice and Spaghetti, respectively. Overall, all panels in three cities accepted for all product tastes

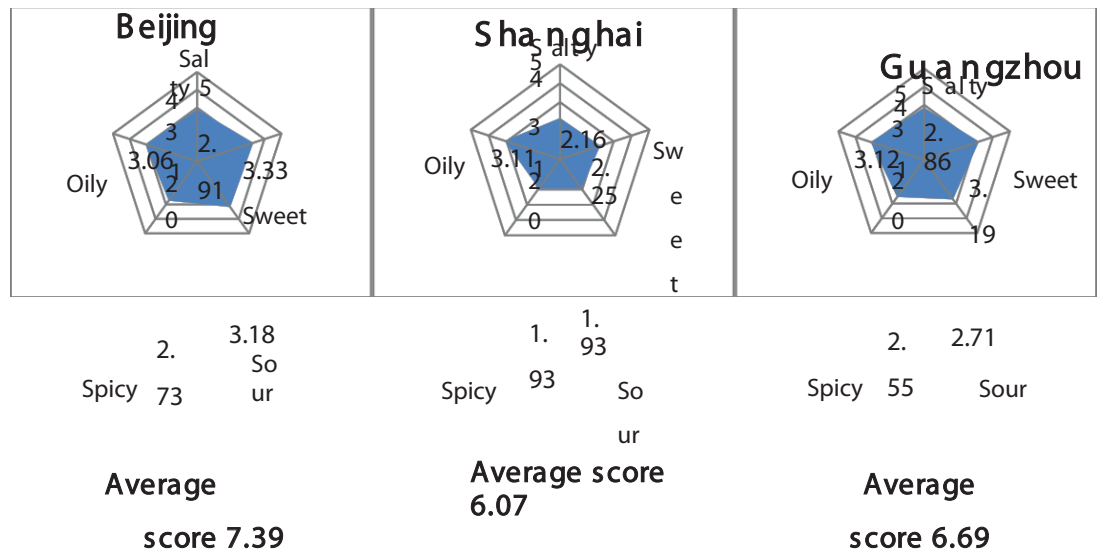


Figure 2: Pad Thai.

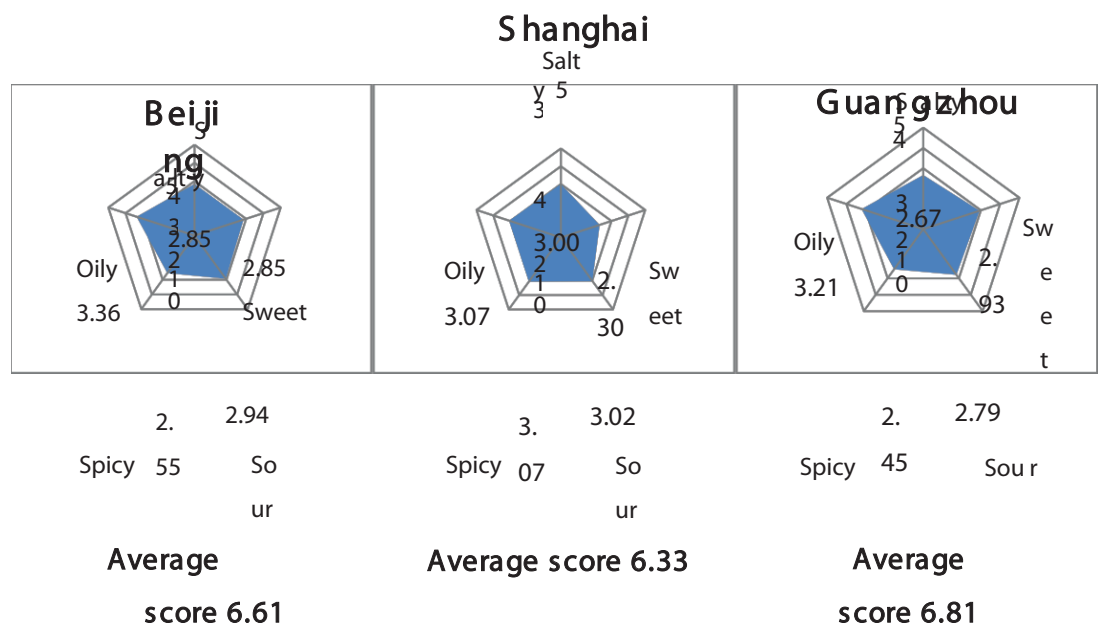


Figure 3: Green Curry with Rice.

but Tom Yum Kung obtained the least favor. Only Shanghai panels mentioned too little sweet in all RTE testing samples. The details were:

1. Tom Yum Kung: about right for Beijing; too little sweet, salty, spicy for Shanghai; too little sweet for Guangzhou.
2. Pad Thai: too strong sweet for Beijing; too little salty, sweet, sour and spicy for Shanghai; too little sour and spicy for Guangzhou.

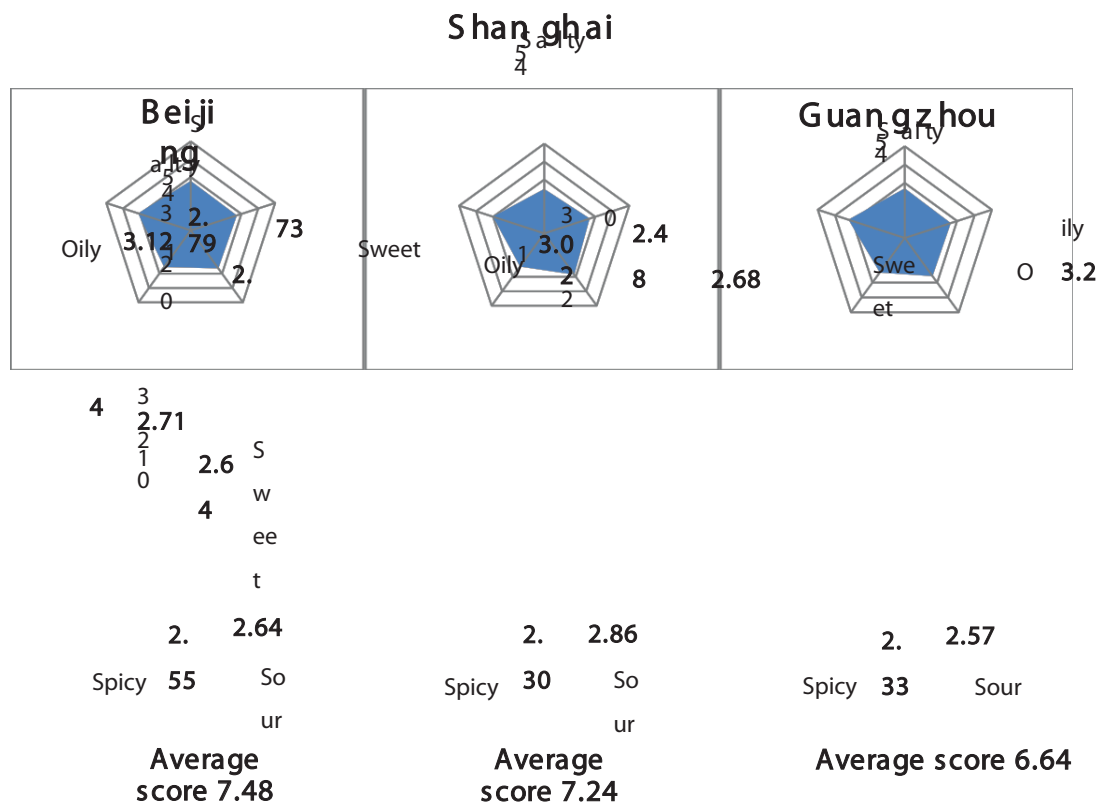


Figure 4: Yellow Curry with Rice.

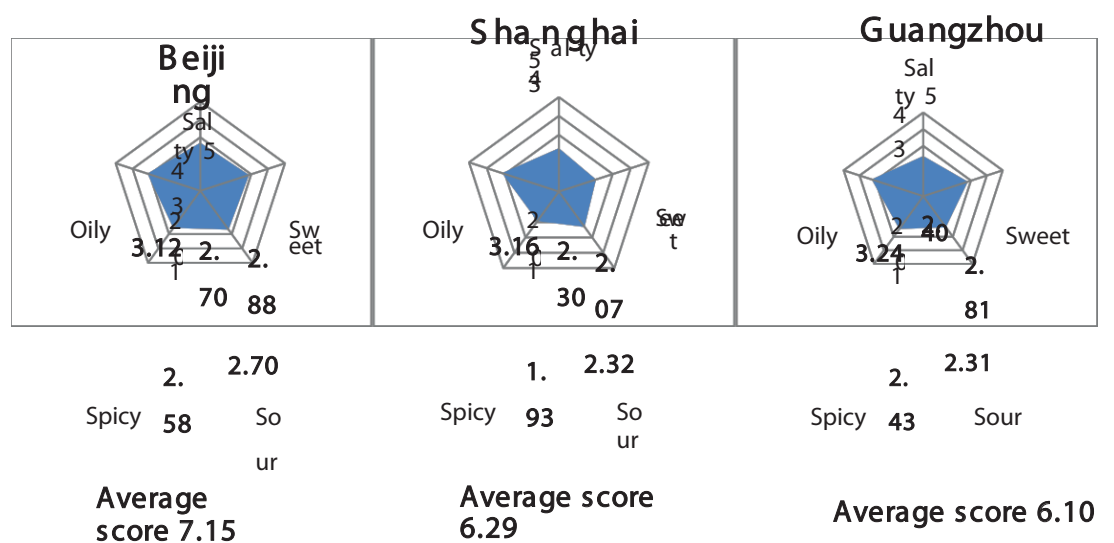


Figure 5: Spaghetti.

3. Green Curry with Rice: too little sweet for Beijing; too little sweet for Shanghai; too little salty and spicy but too strong oily for Guangzhou.

4. Yellow Curry with Rice: too little sweet and sour for Beijing; too little sweet, salty and spicy for Shanghai; too little sweet, sour, spicy and too strong oily for Guangzhou.
5. Spaghetti: too little spicy for Beijing; too little all dimensions exclude oily for Shanghai; too little spicy, salty, sour for Guangzhou.

CONCLUSION

Regarding the focus group discussion and sensory testing over five RTE products, it can be concluded that different regions of panels including Beijing, Shanghai and Guangzhou have indicated the different taste preferences on RTE foods. All panels moderately accepted the product tastes so that the taste of Thai RTE foods should be slightly adjusted. Since target Chinese consumers presented their positive attitudes toward Thai RTE food product if they have exposures to food taste. There was an opportunity for RTE producers in Thailand to expand their products to Chinese market. However, consumers without experience with frozen foods and perceived that frozen food was not fresh would be able to alter their attitudes. Thai entrepreneurs need to execute marketing mix strategy to influence Chinese consumers' decision making process. Frozen food product should provide perceived value of quality, and indicate the freshness and nutrition on label. The attractive packaging and convenience would become a major concern for persuasion. In addition, communication strategy, the most critical factor, must be developed to approach non-experienced consumers in order to create awareness. To penetrate this market, product trial is the most effective promotional strategy, adding by discount and premium offering during introductory stage. Trade events organized by private or government sector are considered to become one of channel to communicate the product. Finally, since Chinese market reveals a high percentage growth for e-commerce, online retail is becoming more popular channel. Thai exporters should educate Chinese consumers by providing the information through any media including website and social network to obtain a broader acceptance and diffusion of frozen food product among Chinese shoppers.

It can be concluded that this study would become a preliminary assessment as guideline for entrepreneur to further conduct the research and development to modify product taste to satisfy Chinese consumers' preferences. Moreover, the further market penetration strategy can be formulated to create awareness and acceptance of RTE foods from Thailand.

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