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**The Influence of Brand Information on
Chocolate Preferences of Chinese Consumers**

Di Mo and Johan Swinnen
LICOS, K.U. Leuven

Linxiu Zhang
Center for Chinese Agricultural Policy, Institute for Geographical Sciences and
Natural Resources Research, Chinese Academy of Sciences

Scott Rozelle
Center for Food, Security and the Environment
Stanford Center for International Development
Stanford University

Abstract

This study investigates the influence of brand information on consumer preferences by conducting an experiment testing whether the preferences of Chinese consumers towards four chocolate brands change when they are informed about the brands from the case when they are blind about the brands. The results suggest that brand information does influence Chinese consumers' preferences for chocolate. More specifically, we show that Chinese consumers have higher preferences for the imported brands (Imported Milk Chocolate and Imported Truffle) than the domestic brand (Chinese Domestic Milk Chocolate) or the foreign brand which is produced in China (Foreign Branded Milk Chocolate/Produced in China) when they are informed about the brands.

The Influence of Brand Information on Chocolate Preferences of Chinese Consumers

Introduction

The literature provides clear evidence that information about food products may shape the tasting experience of consumers (Deliza and MacFie, 1996).

Experiments have shown that hedonic and analytic sensory judgments can be influenced by information about a food product and/or its production. For instance, information about the origins of the flour from which a bread was made—organic versus non-organic—was found to change the preferences for bread (Kihlberg et al., 2005). Consumer preferences toward a beer were found to be influenced by information about its manufacturing technology (Caporale and Monteleone, 2004).

Among the various information cues which are used to characterize a product, brands (or brand names) have frequently been found to influence consumer choice (Allison and Uhl, 1964; Aaker, 1992; Keller, 1993; de Chernatony and McDonald, 1998). Research in the field of consumer neuroscience indicates that brand preferences recruit specific parts of the brains of potential buyers when they are making choices among different brands (Shiv et al., 2005; Kenning and Plassmann, 2008; Lee, Broderick and Chamberlain, 2007). Studies suggest that the ability of a brand name to influence a consumer is likely due to the signaling function of the brand name which triggers a variety of associations, such as prior experiences with the brand and quality inferences (Erdem and Swait, 1998). Brands also can reflect various values and images that companies have tried to build through marketing and advertising strategies (Deliza and MacFie, 1996).

In developing and transitional economies, brands of new products that have arrived inside their borders from developed countries can be powerful sources of information; in particular, foreign brands are often associated with authenticity and

high quality. When a product enters a new market where consumers have minimal prior experience with the type of product before its arrival, it is often difficult or impossible for consumers to make initial judgments about a product's legitimacy or quality (Carpenter and Nakamoto, 1989). In this case, foreign products lay claim to country-of-origin effects which may induce consumers to identify authenticity with foreign brands (Zhang, 1996). Indeed, Wong and Ahuvia (1998) found that many foreign products shape the expectations and desires for consumption of genuine products among consumers in East Asia.

Beyond authenticity, the information cues of foreign products also in some cases are associated with social and symbolic values. These values have been linked with concepts such as sophistication, modernity, novelty and Western civilization (Zhou and Hui, 2003). Consumption of foreign products often becomes part of the path that individuals take towards a contemporary lifestyle. As the brand associated values are widely accepted, consumers prefer to buy foreign brands as it also enhances their self-image as being cosmopolitan and modern (Friedman, 1990).

Despite the benefits that foreign products have in terms of shaping consumer preferences, there are challenges to their promotion in all countries, including China. One of the most well-known challenges is consumer patriotism. Pro-nationalist consumer preferences have been identified to influence consumer choices between the domestic brands and foreign brands (Han, 1988; Rawwas et al. 1996; Klein et al. 1998). Patriotism plays a significant role in consumer decision making especially when products are not necessities and when consumers perceive that the domestic industry is threatened by imported products (Sharma, Shimp, and Shin 1995; Shimp and Sharma, 1987). Facing patriotism, protectionism and other challenges from local firms, multinational enterprises are sometimes forced to/choose

to cooperate with local firms instead of developing an independent brand (Arnold and Quelch, 1998).

Foreign companies, of course, recognize the partisanship of consumers in the domestic markets and often take measures to offset consumer patriotism. For example, many foreign companies have sought ways to compete with domestic brands by localization (Batra 1997). In developing the marketing strategies, local standards (for example, advertising content and packaging) are sometimes employed when foreign companies launch the production of certain products inside China (Yin, 1999). Food products and restaurants are often adapted to cope with the taste preferences of the local population (Lozada, 2000; Watson, 2000). Belk (2000) has shown that McDonald's make conscious efforts to adapt the menu to local culinary types. They also choose facades and decor that reflects local sources of pride.

Although there are many studies that have shown that product information can influence preferences, few of them seek to provide an answer to the question of how different aspects of branding can affect the preferences of consumers towards a product. Those that do (e.g. DeLong et al., 2004; Chao, Wührer and Werani, 2005) typically rely on case studies or focus group analysis. Experimental studies on brand information mostly simply compare consumer preferences of knowing and not knowing the brand of product (McClure et al. 2004; Wansink et al., 2000). To our knowledge, in the economics literature there are few studies, based on experiments, that make comparisons among various brands and explore how different information that is associated with different brands can have an impact on the preferences of consumers.

The current study aims to test how different types of information that are associated with different brands affect the tastes and preferences of consumers in the

context of a developing country. In order to achieve the goal, we have two specific objectives. First, we test if the preferences towards each brand change when consumers are informed about the brands (*non-blind condition*) from the case when consumers are blind about the brands (*blind condition*). Second, we explore if the change in the condition (from non-blind to blind) also affects the pair-wise rankings of brands.

To meet the goals and objectives of our study, we designed an experiment where participants were randomly subjected to one of the two conditions—either a blind or non-blind condition. Under both conditions, each participant was asked to sample a particular product and provide a ranking of their preference for the product the best tasting to the worst tasting. We analyzed whether there are differences in the rankings under the two conditions (i.e., when the participants knew the brand of the product that they were tasting—or the blind condition; or when the participants did not know the brand—the non-blind condition) as a way to examine the impact of the information of the brands on consumer preferences.

While our study is ambitious, it has certain limitations. First, we base our study on a relatively small sample of 234 participants that we included in our experiment. Second, we restrict our study to one city in a developing country. Due to the short history of chocolate in China, imported brands have not entered many cities. Therefore, the study location is chosen in a city where all these chocolate brands could be found in the local market and where all the different companies have tried to build these brands. Third and finally, in this study we will examine the case of a particular product—in this case, chocolate—in a particular country—in this case China. Due to the nature of the product and context of the country, the reader must exercise caution in trying to exert external validity for other products in other

countries. Despite this limitation, we believe (and argue in the next section) that we can learn a lot about how different brands affect the tastes and preferences of consumers by studying the case of chocolate in China.

The rest of the paper is organized as follows. Section two seeks to explain our choice of product and country (or Why Chocolate? Why China?). The section also introduces a more complete history of chocolate in China. Section three explains the experimental design. Section four includes the results and discusses the findings. The final section concludes.

Why Chocolate? Why China

The study of chocolate in China is an interesting topic to study for a number of reasons. First, consumers are known to be able to be influenced by both sets of information cues. On the one hand, consumers in China have been found to have strong preferences for foreign brands (Sin, Ho and So, 2000) as the products from overseas (or those produced by overseas companies within China) often are perceived to be of higher quality (Li, Fu and Murray, 1997). Perceived social and symbolic values have also been documented to increase the purchase of foreign products by Chinese consumers (Li, Li and Kambele, 2012).

On the other hand, consumer patriotism is thought to be an effective force. For example, a Chinese food company, Wahaha Group uses advertising slogans, such as “Please Drink Chinese Cola—Our Own,” to launch its drink product—Future Cola. The automobile producer Chery sets its enterprise goal as “Producing Chinese Indigenous Cars,” in part, as a way to attract domestic buyers. Clearly, these firms believe that the patriotism of Chinese consumers can help increase their sales. Moreover, firms know that the rising nationalism that is part of the fabric of China is

a potentially powerful marketing tool.

Second, chocolate has a number of characteristics that potentially make it a good case study. Chocolate is a relatively new food product to the consumers in China. Thirty years ago, almost no person in China had ever tasted chocolate. However, chocolate consumption grew rapidly over the past two decades. In recent years the average annual growth rate was over 10%. Most of the chocolate (around 80%) is produced by foreign companies, either in China or imported. Foreign brands entered in the 1980s. In 2008 the largest chocolate producer in China, Mars, had a market share of around 40% (Wang, 2008). Domestic players have been growing, although their market share is still relatively small. The largest domestic competitor, COFCO, holds a market share of around 10%.

Finally, the China case may provide interesting result due to the variety of associations that the foreign or imported brands may trigger among Chinese consumers. All of the forces (positive and negative associated with foreign brands), no doubt, were being (and are continued to be) considered by chocolate firms when they launched their efforts to promote their products in China (Allen, 2010). Different levels of authenticity, quality, social values and patriotism that consumers associate with different brands (more generally) may jointly insert an impact on their preferences. For example, imported brands may be linked with a higher level of quality or authenticity than foreign brands that are produced locally. As a result, these factors may make it possible to detect the different impacts of brands on consumer preferences.

Chocolate in China

Before China's economic reforms in 1970s and 1980s, almost no one in China (under the age of 40) had tasted chocolate (Allen, 2010). Chocolate was a new

and exotic food to most Chinese (Wood and Grosvenor, 1997). Over the millenniums, the Chinese had developed a wide range of cuisines and snacks. But, they traditionally preferred salty snacks. Restaurants commonly served fruit as dessert. There was little history with sweets of almost any kind.

Partly due to these facts, when Ferrero, one of the world's largest chocolate firms, arrived in China in 1984, it chose not to target the traditional consumer market. Instead, it decided to focus on gift-giving. The firm designed packaging and advertising that catered to China's gift-giving culture (Allen, 2010). It succeeded. Today the Ferrero brand can be found throughout China.

As the economy grew, the growth rate of China's chocolate market has also grown. From 1996 to 2005, per capita consumption of cocoa grew at about 6% per year (ICCO, 2007). In 2003 38% of urban residents either purchased and/or consumed chocolate. This means that there were more than 26 million chocolate consumers (or as the chocolate industry likes to call them—emerging chocolate fans) in the urban areas (China Daily, 2004). The growth rate of China's chocolate market has accelerated between 2005 and 2010 by 10% to 15% per year (Buffy, 2011). This growth rate is high internationally, more than five times the growth rate of the global chocolate market (which grew 2% to 3% per year during the 2000s).

Importantly, however, although there are many fresh and enthusiastic chocolate fans, on an international scale they are dainty eaters indeed. On a per capita basis China's sweet eaters still consume a relatively small amount of chocolate (Scott-Thomas, 2011). China's per capita chocolate consumption is only 100 grams per year in 2010. This level is only 1% of that of Europe, which is around 10 kilograms (Buffy, 2011). China's consumers are small chocolate consumers even compared to other countries in East Asia, such as Japan and South Korea—who

average about 2 kilograms per capita—Shanghai Daily, 2008).

Because of the low levels of per capita consumption, the market potential in China is estimated to be huge. Experts believe China someday could consume to 7 billion USD per year (China Daily, 2004). Such potential, of course, in part accounts for the fact that the top 20 world chocolate producers have all entered the China market (Scott-Thomas, 2011). Domestic producers have also emerged. It is estimated that China has already around 250 chocolate companies with an annual production capacity of chocolate of 150,000 tons (Buffy, 2011).

Creating a brand in the Chinese chocolate market. In the pursuit of China's potential chocolate bonanza, foreign companies have tried many different strategies. Foreign chocolate companies, like other foreign companies in other sectors, have tried to build strong brands as a way (undoubtedly) to create an image of a company that produces authentic chocolate. The advertising and marketing strategies of many foreign chocolate firms have tried to build brand images symbolizing wealth and good fortune (Ferrero), luxurious self-indulgence (Mars) and cute and whimsical (Hershey). Most of these companies have been open about their foreign roots.

Some of these foreign chocolate brands have also tried to localize their taste and adapt to Chinese culture (Wood and Grosvenor, 1997). For instance, Mars, Hershey, Cadbury and Nestlé set up factories in China. They adapted their chocolate recipes as they began to believe that “creamy” and “nutty” are the favored tastes of China's nascent chocolate fans. Following the path breaking strategy of Ferrero in the 1980s, chocolate companies have continued to push their product as a way to give unique gifts, using this as a cultural gateway. In doing so, foreign chocolate makers devote much in advertising and packaging in their efforts to promote chocolate as a gift that symbolizes love and friendship (Allen, 2010). Many of the earliest chocolate

brands, that used this strategy in the 1980s and 1990s, still dominate China's market despite the large number of local firms that emerged later.

During the past decade, global firms have sought to penetrate China's market in a different way: by directly exporting their chocolate products to China. During this time a large number of imported brands have entered China. Chocolate imports grew from \$17.7 million in 1999 to nearly \$50 million in 2003 (Asia Times, 2005). If they so desire, consumers in China now have access to more than 70 foreign chocolate brands in supermarkets in the nation's large urban cities (Chocolate News, 2009). Consumers can purchase some of the world's most prestigious and popular brands. They can buy truffles from Belgium. They can purchase Cote d'Or milk chocolate. Imported brands have mostly been promoted as luxury food and are marketed to the top end of the China's consumer market (Asia Times, 2005).

Importers are not alone in the battle for the hearts and wallets of China chocolate lovers. Local competitors have also joined the battle. Around 20 percent of China's chocolate market is thought to be provided by domestic firms (Shanghai Daily, 2008). They, like their foreign competitors, have launched (or state that they have launched) efforts to establish their brands among Chinese consumers. These brands often emphasize Chinese culture and tradition in advertising to invoke the patriotism of consumers (World Executive, 2004). It is believed that the growth of the market share of domestic brand can be partly attributed to Chinese consumers' support for domestic industries. However, partly due to their less-developed technology (and less sophisticated marketing strategies), and partly due to the shorter history of production inside China, at least so far, domestic firms have been less competitive than the foreign ones in winning the China market (Allen, 2010). As a result, brands of domestic firms are mostly still underdeveloped. Advertising budgets

are low. Surveys indicate that consumers believe that domestic firms use inferior ingredients (Buffy, 2011). In part (perhaps) because of this perception, Chinese chocolate firms (e.g., LeConte, a branded chocolate of COFCO, China's largest food company) price their product at only 75 to 80 percent of the prices of their foreign competitors.

Although these chocolate brands have been battling it out in the Chinese chocolate market for decades, there has been no research that rigorously studies China's chocolate market. There are many questions that remained unanswered. How does branding affect consumer preferences? Are the types of chocolate that consumers like consistent with the types of chocolate they think they like? Does knowing the brand of chocolate (domestic or foreign) affect the preferences of the consumer? Does it matter if the chocolate is produced inside China or imported? To provide answers to such questions, in the next two sections we describe our research approach and findings.

Experimental Approach

In our experiment, participants were randomly assigned to one of two conditions (Figure 1). In the blind condition, they tasted a series of chocolate samples without any information about the brands. In the non-blind condition, they were told the brands of the chocolate samples before they tasted them. A total of 234 participants were recruited and randomly assigned to one of the two assignment arms (more about how this was done below).

Sample chocolates

We used chocolate samples that were one of four "different types" of chocolate: Chinese Domestic Milk Chocolate, Foreign-Branded Milk

Chocolate/Produced in China, Imported Milk Chocolate and Imported Truffles (one of the most sophisticated and expensive types of chocolate). These brands differ by the location of the producer's home firm (foreign or domestic), production location (foreign or domestic) and type (milk chocolate or truffle).

In order to implement the study design, three brands of milk chocolate and one brand of truffle were chosen from a supermarket in Beijing to represent the four different types of chocolates. They were selected from among the best selling brands (according to interviews with the manager of the supermarket). In particular, we chose LeConte chocolate, produced by COFCO, to represent Chinese Domestic Milk Chocolate. We chose Dove Chocolate, produced by Mars, to represent Foreign Branded Milk Chocolate/Produced in China. We chose Belgian Cote d'Or to represent Imported Milk Chocolate. Finally, we chose Belgian Truffles to represent Imported Truffles.

The three brands of milk chocolate all are known to have similar basic ingredients. According to the packaging, each type of milk chocolate contains cocoa powder, cocoa butter, sugar and milk. However, the packaging also demonstrates that the ingredients vary slightly in amount. For example, the Chinese Domestic Milk Chocolate has a minimum of 25% cocoa butter. In contrast, the Foreign-Branded Milk Chocolate/Produced in China has a minimum of 17% cocoa butter. The Imported Milk Chocolate has a minimum of 18% cocoa butter.

As real chocolate fans know, of course, the ingredients of Imported Truffles differ from those of milk chocolate. Specifically, because truffles contain more cream than milk chocolate, and they are dusted in cocoa powder, they have a different texture and are softer. Because of this, the taste is more exotic to Chinese consumers (as stated by many of the participants in the interviews after the experiment).

In implementing our study, we conducted two experiments that differ in the brands of chocolate that were tasted by the participants. In Experiment 1, we included only the three milk chocolate brands: the Chinese Domestic Milk Chocolate, the Foreign-Branded Milk Chocolate/Produced in China and the Imported Milk Chocolate. In Experiment 2, we used the three milk chocolates and added the Imported Truffles.

Procedure

Participants were recruited in two different venues. One venue was chosen to be in a university (Renmin University). The other venue was a park (Olympic Forest Park) in Beijing. Participants were approached at random and asked to participate in a short survey involving a chocolate tasting program. In the experiments, participants were seated in separate areas, and there was no interaction among them. After being seated, participants were then randomly chosen to be in the blind group or the non-blind group. Statistical tests show that there are no significant differences between the means of the blind and the non-blind groups.

After being selected, the participants received either information about the chocolate brands (non-blind condition) or no information at all about the chocolate brands (the blind condition). In the blind condition, participants were not told about the chocolate brands that they tasted (or any other information). In the non-blind condition, before the tasting they were shown the chocolate brands and instructed about the nature of the chocolate—where it was made (inside China or outside of China); the country of firm that produced the chocolate (was it imported or not); and what type of chocolate it is (milk chocolate or truffles). The chocolate samples were served on a white paper plate with the chocolates covered so that the participants could not see the chocolate samples. On the plate for the non-blind group, there were

stickers on the edge indicating the chocolate brands. Specifically, the stickers read: “LeConte (Domestic Brand),” “Dove (Foreign Branded/Produced in China),” “Cote d’Or (Imported from Belgium)” and “Truffle (Imported from Belgium).” The participants were instructed to read the stickers before tasting and were also shown the order of brands they were about to taste.

After setting up the taste test, the tasting and ranking began. The participants tasted sample chocolates and provided a ranking of the chocolates. They ranked the chocolates from the best tasting to the worst tasting. In both conditions (blind and non-blind), participants were instructed to close their eyes to avoid the distractions from tasting. In the blind condition, the participants tasted the sample chocolates without knowing the brands. In the non-blind condition, the participants knew the exact brands before they began the tasting. Participants then told the enumerators the ranking of the chocolates, from the best tasting to the worst tasting.

Results

Experiment 1

According to our data, the analysis shows that the preference for chocolate is influenced by the information that is provided to the tasting participants. First, the preference of non-blind participants for Chinese Domestic Milk Chocolate was lower (that is, when participants received information about the chocolate brands) in Experiment 1 (Figure 2). In other words, participants in the non-blind group were 5% less likely to rank the Chinese Domestic Milk Chocolate as the best tasting chocolate than the blind group. Participants were 15% less likely to rank the Chinese Domestic Milk Chocolate as the best or second best tasting chocolate in the non-blind condition. In other words, the non-blind participants were 15% more likely to rank the tastings

of the Chinese Domestic Milk Chocolate as the chocolate that they favored the least. The differences were significant, $t(164) = -2.05$, $p = 0.04$ (Table 1, row 1).

The preference for Foreign Branded Milk Chocolate/Produced in China showed a different pattern than the case of Chinese Domestic Milk Chocolate. Specifically, the preferences are similar across the blind and non-blind conditions in Experiment 1 (Figure 3). Participants were 2% more likely to rank the Foreign Brand Milk Chocolate/Produced in China as the best tasting chocolate. At the same time participants were 4% less likely to rank the Foreign Brand Milk Chocolate/Produced in China as the worst tasting chocolate in the non-blind condition than in the blind condition. However, no significant difference was observed, $t(164)=0.63$, $p=0.53$ (Table 1, row 2).

Interestingly, the Imported Milk Chocolate was ranked higher by participants that were in the non-blind condition than those in the blind condition (Figure 4). When participants received information about the brands (non-blind), they were 4% more likely to rank the Imported Milk Chocolate as the best tasting chocolate and 12% less likely to rank it as the worst tasting chocolate. Statistical tests show that the Imported Milk Chocolate was 12% more likely to be ranked as the best or second best tasting chocolate by the non-blind participants, $t(164)=1.66$, $p=0.10$ (Table 1, row 3).

Experiment 2

Perhaps most tellingly, participants demonstrated higher preference for the Imported Truffle when they were informed about the brands in experiment 2 (Figure 5). The Imported Truffle was 14% more likely to be ranked as the best tasting chocolate and 14% less likely to be ranked as the worst tasting chocolate in the non-blind condition. The statistical test also shows that non-blind participants were 29% more likely to rank Imported Truffle as the best or the second best tasting

chocolate among the four brands of chocolate than the blind participants, $t(70)=2.49$, $p=0.02$ (Table 1, row 4).

Discussion

In order to identify the source of change in preference, we compared the rankings of brands in pairs between the blind participants and non-blind participants. In doing so, we examined whether the brand information changed the probability that one brand of chocolate was ranked higher than another brand. We compared four pairs of chocolate brands: Chinese Domestic Milk Chocolate and Foreign Branded Milk Chocolate/Produced in China; Chinese Domestic Milk Chocolate and Imported Milk Chocolate; Foreign Branded Milk Chocolate/Produced and Imported Milk Chocolate; and Imported Milk Chocolate and Imported Truffles (Table 2). We tested if the condition (blind or non-blind) changed the relative rankings of brands in these pairs to learn how the differences in the brand information between two brands may have affected consumer rankings.

The results of our analysis demonstrated a higher preference of Chinese consumers toward imported brands. Pair-wise comparisons of these brands confirmed this result. Table 2 shows that the Imported Milk Chocolate was more likely to be preferred in the non-blind condition over both the Chinese Domestic Milk Chocolate and the Foreign Branded Milk Chocolate/Produced in China by 11% (columns 2-3). The higher preference for the imported brands in the non-blind condition is consistent with an interpretation that Chinese consumers associate imported brands with authenticity, high quality and social and symbolic values.

Interestingly, the biggest effect was for Truffles. Truffles are a special type of chocolate. Many Chinese consumers are not used to them. As a result, when moving from blind (the condition in which most participants did not prefer Truffles) to the

non-blind condition (in which the participants were told this was an imported Truffle), participant preference for Truffles increased from 0.29 to 0.57 in Experiment 2 (Table 1). This is the largest shift that was observed. Between the imported brands, Truffles were also more preferred by 28% over Milk Chocolate when participants received the brand information (Table 2, column 4). As a more exotic and unknown type of chocolate, it seems likely that the signaling effects of Truffles (all types of associations with imported brands) were strong for Chinese consumers than other types of chocolate.

Conclusion

Our results suggest that brand information does influence Chinese consumers' preferences for chocolate. More specifically, we show that Chinese consumers have higher preferences for the imported brands (Imported Milk Chocolate and Imported Truffle) than the domestic brand (Chinese Domestic Milk Chocolate) or the foreign brand which is produced in China (Foreign Branded Milk Chocolate/Produced in China) when they are informed about the brands. The reason for the higher preference for the imported brands is likely to be the image of authenticity, high quality or the social and symbolic value that Chinese consumers associate with the brands.

In general, then, these results suggest that the information that is associated with the brands (or brand names) does influence consumer preference. Our results are also consistent with studies on how consumers in new markets perceive new products on which they do not have much experience before. In developing and transitional economies, brands of new products can carry powerful messages and can be important sources of information. In particular, foreign brands are often associated

with authenticity and high quality, social and symbolic values. The signaling effect of such information can be even stronger when consumers are less experienced with the product (as in the case of Truffles). Possibly due to the successful strategies of foreign companies as they take measures to offset consumer patriotism, we do not find that the brand information boosted consumer preference for domestic brands over the foreign brands.

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Table 1. Comparison of rankings of Chinese Domestic Milk Chocolate; Foreign Branded Milk Chocolate/Produced in China; Imported Milk Chocolate; and Imported Truffle in the blind and non-blind conditions.

	Non-blind		Blind		Difference		
	Mean	SD	Mean	SD	Mean	T	P-value
	[1]	[2]	[3]	[4]	[5]	[6]	[7]
[1] Chinese Domestic Milk Chocolate (1=being ranked as the best or second best tasting chocolate; 0=otherwise)	0.45	0.50	0.60	0.49	-0.16	-2.05	0.04
[2] Foreign Branded Milk Chocolate/Produced in China (1=being ranked as the best or second best tasting chocolate; 0=otherwise)	0.78	0.41	0.74	0.44	0.04	0.63	0.53
[3] Imported Milk Chocolate (1=being ranked as the best or second best tasting chocolate; 0=otherwise)	0.77	0.42	0.65	0.48	0.12	1.66	0.10
[4] Imported Truffle (1=being ranked as the best or second best tasting chocolate; 0=otherwise)	0.57	0.08	0.29	0.08	0.29	2.49	0.02

Table 2, Marginal effects of brand information from Logit estimations of participant rankings of Chinese Domestic Milk Chocolate; Foreign Branded Milk Chocolate/Produced in China; and Imported Milk Chocolate in Experiment 1; and Imported Truffles in Experiment 2.

	Participants have higher preference for Foreign Branded Milk Chocolate/Produced in China than Chinese Domestic Milk Chocolate (1=yes; 0=no)	Participants have higher preference for Imported Milk Chocolate than Chinese Domestic Milk Chocolate (1=yes; 0=no)	Participants have higher preference for Imported Milk Chocolate than Foreign Branded Milk Chocolate/Produced in China (1=yes; 0=no)	Participants have higher preference for Imported Truffles than Imported Milk Chocolate (1=yes; 0=no)
	(1)	(2)	(3)	(4)
[1] Condition (1=non-blind condition;0=blind condition)	0.08 (0.06)	0.11* (0.06)	0.11* (0.07)	0.28** (0.13)
[2] Control variables ^a	Yes	Yes	Yes	Yes
[3] Observations ^b	234	234	234	70

* Significant at 10%, ** significant at 5%, ***significant at 1%. Robust standard errors in parentheses.

^a Control variables contain all the variables that are listed in Table 1, dummies indicating whether the participants are tested in Experiment 1 or Experiment 2, dummies indicating the recruitment locations, dummies indicating whether the tasting order is randomized; and dummies indicating in which order each chocolate is tasted by the experiment participants.

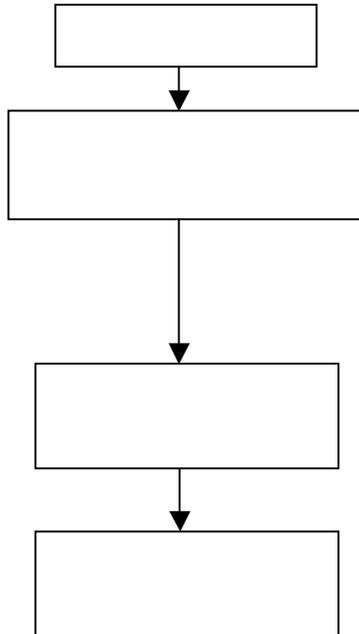
^b In columns 1-3, we pool all 234 observations of Experiment 1 and Experiment 2. In columns 4, we use 70 observations of the Experiment 2 because only Experiment 2 included the Imported Truffle.

Rank the chocolate
Short survey
Information about the
chocolate brands
samples

Rank the chocolate
Short survey
Taste the chocolate
samples

Figure 1. Illustration of the two experimental conditions which differ in whether the participants received information about the brands of chocolate (and the characteristics of the different types of chocolate).

Non-blind Condition



Blind Condition

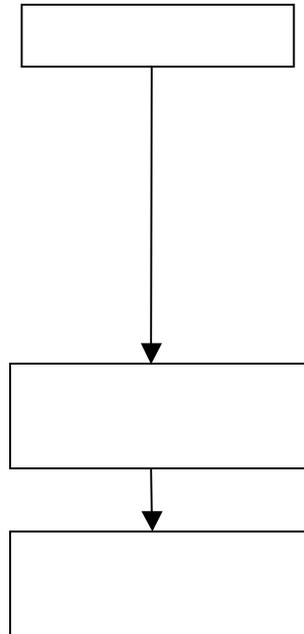


Figure 2. Percentage of participants that ranked Chinese Domestic Milk Chocolate as the best tasting or the worst tasting chocolate among the three brands in the blind and non-blind conditions in Experiment 1.

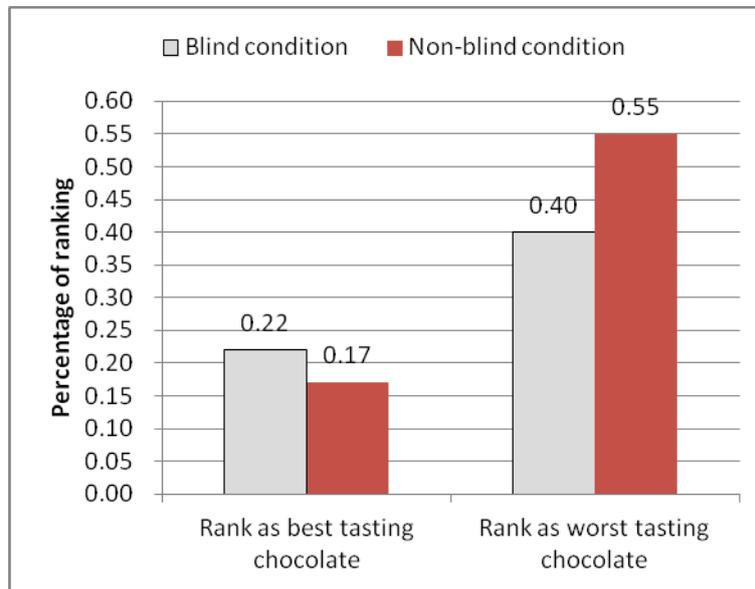


Figure 3. Percentage of participants that ranked Foreign Branded Milk Chocolate/Produced in China as the best tasting or the worst tasting chocolate among the three brands in the blind and non-blind conditions in Experiment 1.

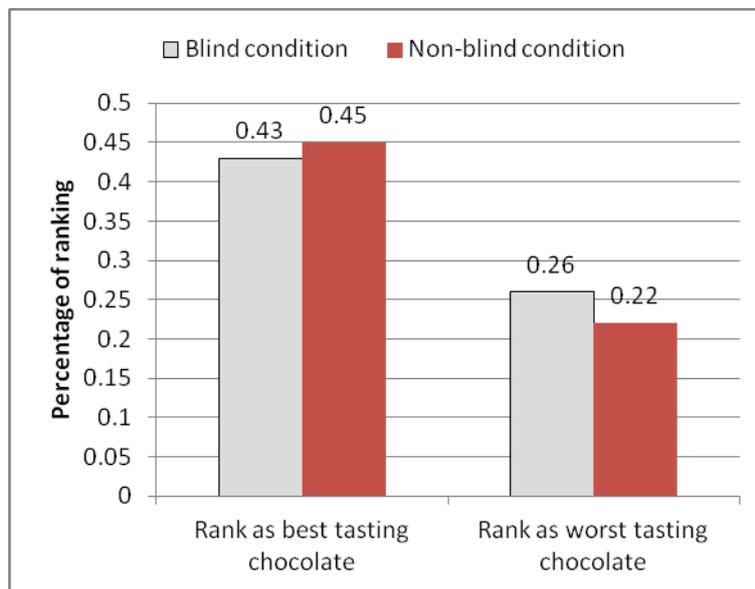


Figure 4. Percentage of participants that ranked Imported Milk Chocolate as the best tasting or the worst tasting chocolate among the three brands in the blind and non-blind conditions in Experiment 1.

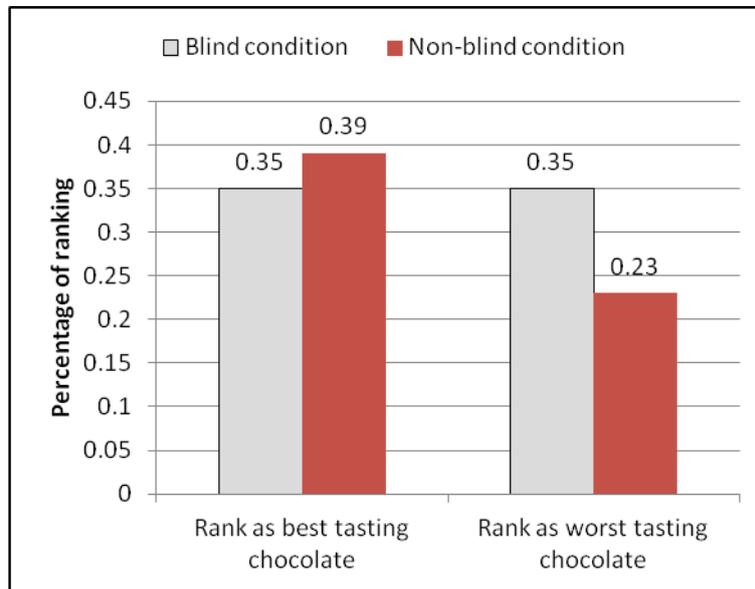


Figure 5. Percentage of participants that ranked Imported Truffles as the best tasting or the worst tasting chocolate among the four brands in the blind and non-blind conditions in Experiment 2.



Appendix 1. Comparison of participant characteristics in the blind and non-blind conditions.

	Non-blind		Blind		Difference	
	(118 obs.)		(116 obs.)		Mean	P-value
	Mean	SD	Mean	SD		
	[1]	[2]	[3]	[4]	[5]	[6]
[1] Age (number of years)	24.14	5.27	24.53	5.32	-0.40	0.56
[2] Participant's monthly expenditure is higher than the median (1=yes;0=no)	0.40	0.49	0.40	0.49	0.00	0.98
[3] Participant's monthly expenditure on snack is higher than the median (1=yes;0=no)	0.31	0.46	0.32	0.47	-0.01	0.82
[4] Participant's choice of chocolate is influenced by price (1=yes; 0=no)	0.47	0.50	0.44	0.50	0.03	0.59