Food Sampling's Effectiveness in Inducing Immediate Purchase in Chinese Supermarkets

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Food Sampling's Effectiveness in Inducing Immediate Purchase in Chinese Supermarkets

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Background

- Supermarket revolution in China
  Supermarket outperforms traditional country-market in food retailing
- Emergence of food sampling promotions
  Sampling is partly recognized in Chinese supermarkets
  Why?
  Supermarket managers and suppliers are skeptical about sampling's effectiveness
- Sampling-related behavior remains a narrow and under-researched area

Objective

Identify the mechanism of how sampling exhibits effectiveness in inducing immediate purchase in the Chinese supermarket context.

Methods

Intervention experiment

In order to account for consumer heterogeneity, food sampling activities were conducted in both boutique and community supermarkets in Nanjing, China. Each brand selected two stores.

Three food categories that have relatively higher engagement of sampling promotions were targeted: fruit (Red pitaya), low temperature yogurt (Emmi) and normal temperature yogurt (Ambrosial).

Intercepted survey

Investigators screened consumers that walked past the booth where complimentary samples are provided.

After sampling and/or purchase decisions had been made, every tenth consumer was intercepted with a survey collecting demographics, attitudinal information of sampling (7-point Likert), etc.

Sample size is 1138, comprising 741 samplers and 397 non-samplers, which yields a relative low sampling interest.

Empirical model (Logit model)

$$Purchase\ decision = \alpha + \beta_1 Demographics + \beta_2 Predetermined\ purchase\ plan + \beta_3 Price\ perception + \beta_4 Product\ liking + \beta_5 Sampling\ behavior + \beta_6 Food\ category + \beta_7 Shopping\ frequency$$

Results

1. Predetermined purchase plan

Consumer segment	Non-purchaser	Purchaser	Total
Non-sampler	318	79	397
Sampler	551	190	741
Without a predetermined purchase plan	655	144	799
With a predetermined purchase plan	214	125	339

Samplers are more likely to purchase.

*However, is this because of the **predetermined purchase plan** in mind?*

Independent variable	PPP[a]=0	PPP=1	Combined model
Age	0.0180	0.0292	0.0201
Household income	0.0090		
Susceptible family member		-0.4012	-0.2348
Price perception before sampling	0.4431	0.2599	0.3722
Sampling behavior	**0.4972**		**0.3570**
Imported yogurt	-0.4446		-0.3768
Product liking before sampling	0.0860		
Predetermined purchase plan	N/A[b]	N/A	0.9366
Constant	-4.4406	-1.7211	-3.6214

Note: Dependent variable is the practical purchase decision (0/1) observed by investigator throughout the study. Only robust significant coefficients (p<0.1) are listed due to the limited space of the poster. [a] Predetermined purchase plan. [b] Variable not available in the model.

For consumers who don't expect to buy the product, taking a food sample acts as a significant contributor to their practical purchase decision. However, sampling has no significant impact on final food choice if the product is initially presented on the shopping list.

2. Price sensitivity

Sampler[a]	Segment	PPC=0	Segment	PPC>0	Segment
PPC[c]>0	**268(36.17%)**	PPBS[b]>4	150(35.05%)	**PPBS<4**	**126(47.01%)**
PPC=0	428(57.76%)	**PPBS=4**	**194(45.33%)**	PPBS=4	100(37.31%)
PPC<0	45(6.07%)	PPBS<4	84(35.05%)	PPBS>4	42(15.67%)

Note: [a] For samplers, price perception **after** taking a sample (PPAS, 1= Extremely unreasonable; 4= Indifferent; 7= Extremely reasonable) was also measured. [b] Price perception **before** taking a sample. [c] PPC=PPAS – PPBS

Independent variable	PPBS<4	PPBS=4	PPBS>4	Combined model
Age		0.027	0.025	0.0201
Susceptible family member				-0.2348
Price perception before sampling	N/A[a]	N/A	N/A	0.3722
Sampling behavior	**1.4541**	**0.4026**		**0.3570**
Red pitaya	-1.1242			
Imported yogurt			-0.6665	-0.3768
Product liking before sampling	0.2426			
Predetermined purchase plan	0.9287	1.1219	0.7407	0.9366
Constant	-3.1898	-2.1312	-2.1537	-3.6214

Note: [a] Variable not available in the model.

Sampling has the power to shape price perception to be more reasonable, especially for those who originally perceive the price to be unreasonable (**PPC>0 and PPBS<4**). Price-tolerant consumers have a consistent price perception (**PPC=0 and PPBS=4**). Sampling is **not** a significant driver to consumers who are not price sensitive (**PPBS>4**).

3. Product liking

	Count(Frequency)	Mean of PLBS[a]
CPL[b]>0	269(36.3%)	3.8550
CPL=0	303(40.89%)	5.2343
CPL<0	169(22.81%)	5.8462
Total	741	4.8731

Note: Product liking was measured twice before and after taking a sample (1= I don't like it very much; 4= Indifferent; 7= I like it very much). [a] PLBS= Product liking before sampling. [b] CPL=PLAS (Product liking after sampling) – PLBS

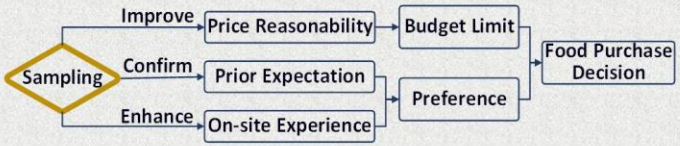
Independent variable	PLBS>4	PLBS =4	PLBS <4	Combined model
Age	0.0243			0.0201
Low education attainment	-0.8811	1.2558		
Household income		0.0193	-0.0197	
Susceptible family member	-0.2484			-0.2348
Price perception before sampling	0.3368	0.4949	0.4622	0.3722
Sampling behavior			**1.2002**	**0.3570**
Red pitaya			0.1387	
Imported yogurt				-0.3768
Predetermined purchase plan	0.6227	1.5676	1.4862	0.9366
Product liking before sampling	N/A[a]	N/A	N/A	Not significant
Constant	-2.6902	-5.4962	-4.3920	-3.6214

Note: [a] Variable not available in the model.

Original higher expectation tends to incur a decrease in product liking after a sampling experience.

Sampling only improves the purchase probability significantly for consumers who represent a low level of initial product liking.

Conclusion



Given the decrease in price sensitivity (increase in price reasonability) and increase in product liking brought by a friendly "free bite" addressed above, food sampling in the Chinese supermarket is demonstrated to be a prominent promotional tool to improve product image and induce purchase. It is worth being encouraged and supported to a wide application, especially in a post-food safety era.

Please feel free to email at chenlij@Missouri.edu if you have any questions.