

## Study on the Food Fear of the Youth

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**Abstract:** This study takes the youth as the research object, uses the way of questionnaire to understand the food fear of college students, and then analyzes the choice of food fear of youth and the causes of food fear, so as to provide reference for catering enterprises. The results show that the youth are mainly afraid of snakes, allergic food, eels, catfish and other slimy food, hairy tofu and insects. They are more cautious in the choice of new food, transgenic tomato and bright steamed bread, which may be caused by the uncertainty of unfamiliar with these food. The risk of food, the appearance of food and the addition of food in food.

### 1. Introduction

In the rapid development of the catering industry, people's dietary quality of diet is increasing, thereby increasing the needs of food types. A wide range of foods gradually appear in the consumer market, and the emergence of all kinds of foods undoubtedly provide variety of options for consumers, however, genetically modified foods and foods containing food additives, strange new foods, some special sensory features and foods with dangerous foods may cause consumers to have a perceived risk, thus trigger fear.

In the study of food fear, the young population is prone to food fear than other age groups. This article understands the basic situation of young people's fear attitudes in questionnaires, and tries to analyze the cause of food fear. . By exploring young people analyzing fear food, I hope to help the needs of catering companies to understand the needs of young groups, and maximize unnecessary food waste.

### 2. Literature Review

With the continuous development of science and technology, genetically modified foods and food additives have gradually appeared in everyone's lives. Zhang L., Wang J. & Zhang J.N.,(2006) conducted a survey of genetically modified foods among Jiangsu residents. Statistics show that people are generally afraid of genetically modified foods; Han Q.(2011)found out about genetically modified foods in an interview, whether it is a catering company, Consumers still have lingering fears about genetically modified foods. Regarding the safety of food additives,Wu L.H., Zhong Y.Q., &Shan L.J.,(2013) conducted random surveys of residents in Suzhou City, Jiang su Province, and analyzed public behavior and attitudes, indicating that the public will pay more attention to food while doubting the safety of food additives. Information related to additives, once a food additive safety incident breaks out, the public will have a strong sense of fear. Wang Y.H., Lu J., &Zuo W.C.,(2019) believe that due to lack of correct understanding of food additives, some consumers have exaggerated the risks under the premise of legal use of food additives, causing food

safety fears.

Rozin (1990) regards food fear as a defense system against potential dangers, avoiding the intake of all uncertain and unfamiliar food. Yang X.Y.,(2019) put forwards that, after reading the material, the subjects needed to evaluate each regionally specific food, and the subjects had lower evaluations of unfamiliar meat and foreign foods. Fallon, A. E., & Rozin, R. (1983) suggests understanding the acceptance and rejection of familiar and unfamiliar foods, two dimensions are set, the first dimension is danger; the second dimension, disgust, includes accepting or rejecting food, because it is true or Imaginary sensory characteristics (ie taste, smell, texture, or appearance) that are considered bad taste and have the ability to contaminate other foods. Martins Y. &Pliner P.,(2006) asked participants to read a set of scenes describing potentially nauseous foods. Participants rated the food's perception of nausea and rated the food according to various attributes related to the theoretical nausea concept. The rating is performed to show that the animal and its products contain many of the offensive structural characteristics identified in this study.

Agras S.,Sylvester D., & Oliveau D.,(1969) used a sampling method to conduct a study on snake fear among New Englanders. The data showed that 38% of women and 12% of men had a strong fear of snakes; similarly, in my country's Yunnan minority areas There are also situations where people fear snakes. Danger is a kind of rejection mainly caused by expected harmful consequences. In addition to animal fear, other foods that make humans fear are more personalized, such as allergic foods (Rozin P.,&Fallon A. E.,1987;Tuorila H. et al.,1994;Olák J. et al.,2019).

Through the research of the above literature, it is shown that five aspects of food characteristics, dangerous foods, new foods, genetically modified foods and food additives will cause people to fear them. Therefore, this research focuses on food characteristics, dangerous foods, new foods, and genetically modified foods. As well as the five aspects of food additives, food research and investigation on young people.

### 3. Methods

Firstly, according to the previous research, a basic list of measurement items are determined (see table 1), based on Frank Robert A'FAS(food attitude scale).All the items of the questionnaire are measured by a 5-point Likert scale from“strongly dislike (=1)”to“strongly like (=5)”.The survey is conducted from November 9th to 25th ,2020. 340 questionnaire were collected.

**Table 1.** Fear food category table

Fear food		Specific food
Novelty food		Novelty food
Genetically modified food		Genetically modified tomato
Food additives		Very brightly colored steamed buns
Dangerous food		Snake
		Allergic food
Food characteristics	Taste	Plant foods with special flavors such as garlic and shallots
		Animal foods with special flavors such as lamb and rabbit meat
		Smelly mandarin fish, stinky tofu
	Texture	Mucous foods such as rice field eel and catfish
	Appearance	Insects, hairy tofu

### 4. Results

#### 4.1. Attitude Towards New Food

According to the results in Table 2, this shows that young people are more optimistic about new foods.

**Table 2.** Attitude towards new food

Food category	React	Number	%
Novelty food	Strongly like	62	18.24
	Like	100	29.41
	Uncertainty	123	36.18
	Dislike	51	15
	Strongly dislike	4	1.18

#### 4.2. Attitudes Towards Foods with Food Additives (Brightly Colored Steamed Buns)

According to the results in Table 3, the vast majority of young consumer groups still have certain doubts about food additives.

**Table 3.** Attitude towards foods with food additives

Food category	React	Number	%
Brightly colored steamed buns	Strongly like	39	11.47
	Like	68	20
	Uncertainty	120	35.29
	Dislike	78	22.94
	Strongly dislike	35	10.29

#### 4.3. Attitudes Towards Genetically Modified Food (Genetically Modified Tomatoes)

According to the results in Table 4, young people's attitudes towards genetically modified foods (genetically modified tomatoes) are still relatively positive.

**Table 4.** Attitudes towards genetically modified foods (transgenic tomatoes)

Food category	React	Number	%
Transgenic tomatoes	Strongly like	53	15.59
	Like	97	28.53
	Uncertainty	126	37.06
	Dislike	46	13.53
	Strongly dislike	18	5.29

#### 4.4. Attitudes Towards Dangerous Food

According to Table 5, nearly half of young people expressed a "strongly dislike"(59.12%) attitude towards snakes in dangerous foods.

**Table 5.** Attitudes towards snake

Food category	React	Number	%
Snake	Strongly like	10	2.94
	Like	23	6.76
	Uncertainty	62	18.24
	Dislike	44	12.94
	Strongly dislike	201	59.12

Among the 340 young people who participated in the questionnaire survey, 295 people (86.76%) did not have allergic foods, 45 (13.24%) had allergic foods, and 14 of them (31.11%) had allergic foods versus allergic food choices. The attitude expressed "strongly dislike". What is strange is that 14 people (31.11%) who also have allergic foods "like" their allergic foods, and the number of people who choose "dislike" and "uncertain" are respectively 6 people (13.33%) and 8 people (17.78%), while the number of people who chose "strongly like" was 3 people (6.67%).

**Table 6.** Attitudes towards allergic food

Allergic	Number	%	attitude		
			React	Number	%
Allergic	45	13.24	Strongly like	3	6.67
			Like	14	31.11
			Uncertainty	8	17.78
			Dislike	6	13.33
			Strongly Dislike	14	31.11
Not allergic	295	86.76		0	0

According to table 6, most allergic foods are seafood, alcoholic food, high-protein foods (egg and milk).

#### 4.5. Attitudes Towards Foods with Food Properties

According to the results in Table 7, the young people's attitudes towards the three types of foods are "strongly dislike": 93 people (27.3%) who have mucus foods such as rice eel and catfish, 108 people (31.7%) of edamame (31.7%), and 162 people who have insects. (47.6%); the same attitude towards the two kinds of foods is "uncertain": 84 people (24.7%) of animal foods with special flavors of lamb and rabbit meat, and 99 people (29.1%) of stinky tofu. There are 105 people (30.8%) who expressed "strongly like" plant foods with special flavors such as garlic and spring onions.

**Table 7.** Attitudes towards foods with food properties

	Food category	Attitudes									
		Strongly like		Like		Uncertain		Dislike		Strongly dislike	
		Number	%	Number	%	Number	%	Number	%	Number	%
Flavor	Garlic, onion	105	30.8	103	30.2	61	17.9	41	12.0	30	8.8
	Mutton, rabbit	69	20.2	79	23.2	84	24.7	55	16.1	53	15.5
	Stinky tofu	36	10.5	60	17.6	99	29.1	58	17.0	87	25.5
Texture	Eel, catfish	45	13.2	53	15.5	89	26.1	60	17.6	93	27.3
Appearance	Hairy tofu	23	6.7	52	15.2	89	26.1	68	20	108	31.7
	Insect	15	4.41	23	6.76	87	25.5	53	15.5	162	47.6

## 5. Discussion and Implication

Different types of food will make young people make different choices. Generally speaking, young people have big differences in the choice of food that represents fear. The vast majority of young people "strongly dislike" mucus-containing foods such as snakes, insects, edamame, rice eel, etc., and perceive high risks; they are more cautious in choosing new foods, genetically modified tomatoes, and bright-colored steamed buns (neutral); garlic plants with special flavors such as green onions are very acceptable. Therefore, catering companies should carefully choose foods that young people think are "strongly dislike" and cautious.

Catering companies should add an introduction to the dishes in the menu to avoid unnecessary

food waste for consumers. Catering companies should add an introduction to the dishes on the menu, introducing the raw materials used in the dishes (the source of the raw materials, ingredients, etc.) and cooking methods, so that customers can reduce unnecessary food waste.

## References

- [1] Agras S., Sylvester D. and Oliveau D.(1969) .The epidemiology of common fears and phobia. *Comprehensive Psychiatry*,10(2):178-184.
- [2]Fallon, A. E. and Rozin, R. (1983). The psychological bases of food rejections in humans. *Ecology of Food and Nutrition*, 13, 15–26.
- [3]Han Q. (2011).Consumers do not need to fear genetically modified food.China Sanitation Standard Management,2(01):29-30.
- [4]Martins Y.and Pliner P.(2006)."Ugh! That's disgusting!": Identification of the characteristics of foods underlying rejections based on disgust.*Appetite*,46(1):78-89.
- [5]Olák J.,Rádlová S.,Janovcová M.,Flegr J.,Landová E.and Frynta D.(2019). Scary and nasty beasts: Self-reported fear and disgust of common phobic animals. *British journal of psychology* (London, England : 1953),2019.
- [6]Rozin (1990). Acquisition of stable food preferences. *Nutrition reviews*,48(2):812-820.
- [7]Rozin P. and Fallon A. E.(1987).A perspective on disgust.*Psychological Review*,94(1):90-99.
- [8]Tuorila H.,Meiselman H.L.,Bell R.,Cardello A.V. and Johnson W.(1994).Role of sensory and cognitive information in the enhancement of certainty and liking for novel and familiar foods.*Appetite*,23(3):67-78.
- [9]Wang Y.H., Lu J. and Zuo W.C.(2019).Research on consumers' perception of food additives risks from the perspective of generalized virtual economy——taking Wuxi city as an example.*Generalized Virtual Economy Research*,10(02):19-24.
- [10]Wu L.H., Zhong Y.Q. and Shan L.J.(2013).Analysis on the influencing factors of public food additives.*China's Rural Economy*,05:45-57.
- [11]Yang X.Y.(2019). Research on the influence of perceptual cues on unfamiliar food choices.Yunnan Normal University.
- [12]Zhang L.,Wang J. and Zhang J.N. (2006).Analysis and countermeasures of fear of genetically modified food. *Journal of Dialectics of Nature*,28(166),57-61.