

# Targeted Food Surveillance on Ready-to-eat Confections

Civic and Municipal Affairs Bureau

Food Safety Centre

May 2016



# Targeted Food Surveillance

- **Objective:** The Centre proactively identifies potential risks of the targeted food items and assesses the safety of food items commonly consumed in Macao in order to safeguard food safety.



# Targeted Food Surveillance

- The Centre conducts relevant analysis based on the types of foods. Priority will be given to the popular food items.

Factors

Risk Level

Social Concern

Eating Habits

Food Incidents



# Surveillance on Ready-to-eat Confections

- There are a wide range of ready-to-eat confections in the market, including cakes, candies, etc., and this food group is very popular with the public;
- Food additives such as preservatives and food colours may be added to extend shelf life and enhance appearance of ready-to-eat confections;
- In addition, ready-to-eat confections can be consumed directly without heating, if not handled properly in the food processes such as purchasing, preparation and storage, may increase the risk of pathogen contamination;
- In order to collect information on the food safety situation of the ready-to-eat confections, Food Safety Center of IACM carried out a targeted food surveillance.



# Market Surveillance

## Popularity

Ready-to-eat confections in the market, covers candies and cakes, etc. under various brand.

## Country or Region of Origin

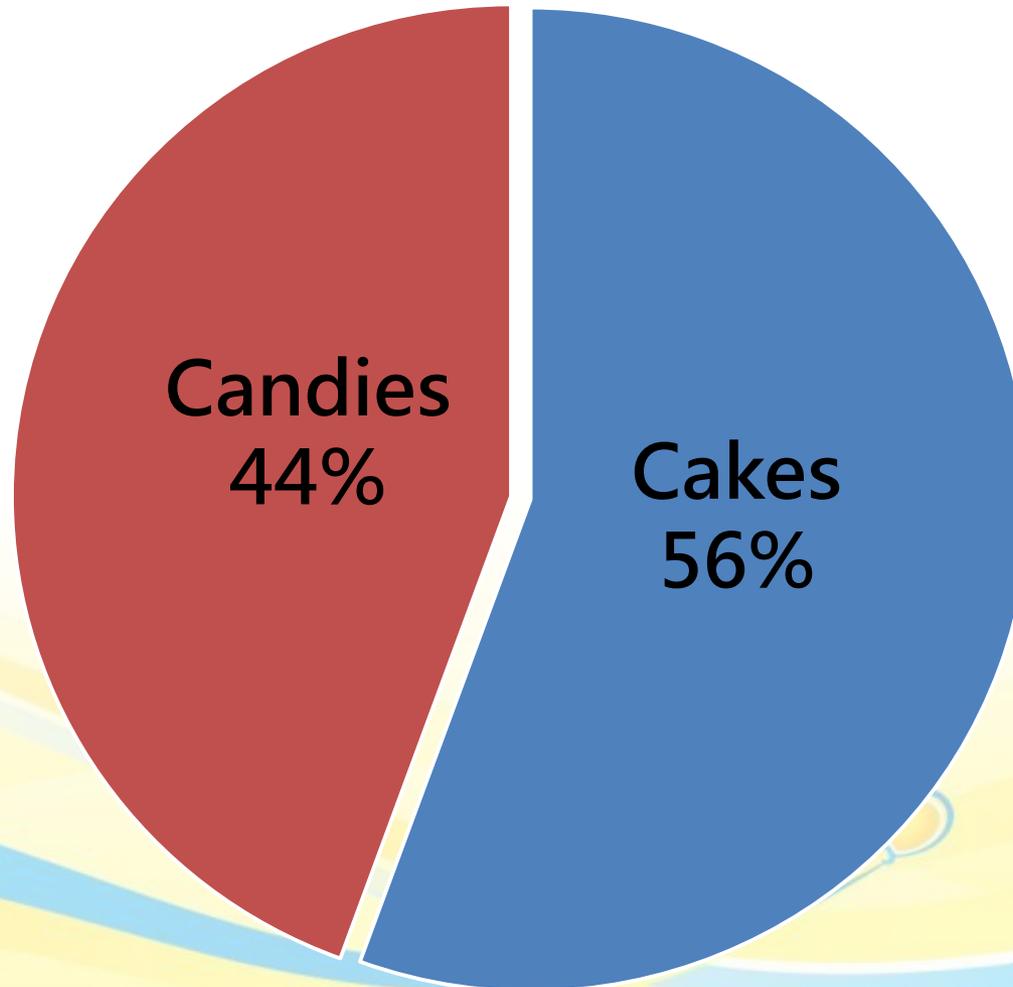
Candies: US, Thailand, Germany, Indonesia, Australia, Malaysia, Mainland China, Taiwan and Hong Kong, etc.  
Cakes: Macao

## Location

Supermarket, department store, bakery, coffee shop and dessert shop, etc.

# Types of Samples

- Collected a total of 90 samples of ready-to-eat confections, which include:



# Test Parameters

## ■ Test Parameters- Pathogen

*Salmonella* spp., *Staphylococcus aureus*, *Bacillus cereus* and *Listeria monocytogenes*, in total of 4 tests.

## ■ Test Parameters- Food Additive

Preservative: Benzoic acid and Sorbic acid, in total of 2 tests;

Food Colour : Brilliant blue, Indigotine, Tartrazine, Sunset yellow, Ponceau, Allura red, Azorubine, Erythrosine, Amarante, in total of 9 tests.



# Samples (Candies) Information (Partial)

Sample	Packaging Condition	Origin	Test Parameters- Food Colours	Test Result
Pineapple Flavour Gummy	Pre-packaged	Mainland China	Tartrazine, Sunset yellow	Satisfactory
Peanut Chocolate Candy	Pre-packaged	Mainland China	Ponceau, Allura red, Azorubine, Tartrazine, Sunset yellow, Brilliant blue, Indigotine	Satisfactory
Mixed Fruit Flavour Chocolate Candy	Pre-packaged	Mainland China	Ponceau, Allura red, Azorubine, Tartrazine, Sunset yellow, Brilliant blue, Indigotine	Satisfactory
Blackcurrant Flavour Candy	Pre-packaged	Hong Kong	Brilliant blue, Amaranth	Satisfactory
Mixed Fruit Flavour Gummy	Pre-packaged	Malaysia	Allura red, Tartrazine, Sunset yellow, Brilliant blue	Satisfactory
Mint Parfait Thin	Pre-packaged	US	Tartrazine, Brilliant blue	Satisfactory
Mint Flavour Gummy	Loose	Germany	Tartrazine, Sunset yellow, Brilliant blue	Satisfactory
Gummy	Loose	Germany	Tartrazine, Sunset yellow, Brilliant blue	Satisfactory
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# Samples (Cakes) Information (Partial)

Sample	Packaging Condition	Origin	Test Parameters	Test Result
Serradura Cake	Loose	Bakery	Pathogen <sup>1</sup> , Preservative <sup>2</sup>	Satisfactory
Chestnut Cake	Loose	Bakery	Pathogen <sup>1</sup> , Preservative <sup>2</sup>	Satisfactory
Black Forest Cake	Loose	Bakery	Pathogen <sup>1</sup> , Preservative <sup>2</sup>	Satisfactory
Matcha Mousse	Loose	Bakery	Pathogen <sup>1</sup> , Preservative <sup>2</sup> , Food Colour (Tartrazine, Sunset yellow, Brilliant blue )	Satisfactory
Green Tea Red Beans Cake Roll	Loose	Dessert Shop	Pathogen <sup>1</sup> , Preservative <sup>2</sup>	Satisfactory
Strawberry Cake	Loose	Dessert Shop	Pathogen <sup>1</sup> , Preservative <sup>2</sup> , Food Colour (Ponceau, Brilliant blue, Allura red, Erythrosine, Azorubine, Amarante)	Satisfactory
Green Tea Tiramisu	Loose	Coffee Shop	Pathogen <sup>1</sup> , Preservative <sup>2</sup> , Food Colour (Tartrazine, Sunset yellow, Brilliant blue )	Satisfactory
Strawberry Charlotte	Loose	Coffee Shop	Pathogen <sup>1</sup> , Preservative <sup>2</sup> , Food Colour (Ponceau, Allura red, Erythrosine, Amarante)	Satisfactory
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<sup>1</sup>Pathogen: *Salmonella* spp., *Staphylococcus aureus*, *Bacillus cereus* and *Listeria monocytogenes*

<sup>2</sup>Preservative: Benzoic acid and Sorbic acid

# Test Results

- All the samples were satisfactory. The overall **satisfactory rate was 100%**;
- Although the results were satisfactory, but IACM reminded the public to maintain a balanced diet, as ready-to-eat confections contain high sugar content , therefore public should avoid excessive consumption.

## Reference:

- Pathogen: Macao 《Microbiological Guidelines for Ready-to-eat Food》 (GL 009 CSA 2015)
- Food Additive: CODEX STAN 192-1995 《Codex General Standard For Food Additives》 , China GB 2760-2014 《 Hygienic Standards For Uses of Food Additives 》 , Hong Kong 《 Colouring Matter in Food Regulations 》 and 《 Preservatives in Food Regulation 》

# Advice To The Public

When purchasing ready-to-eat confections, you should:

- Purchase from approved and reliable sources;
- Pay attention to the hygiene conditions of the shops, as well as the storage condition and temperature of the ready-to-eat confections, store them properly and consume as soon as possible after purchase;
- For pre-packaged ready-to-eat confections, check the package if it is intact and pay attention to the expiry date;
- It is difficult to verify whether the online food trading meets the food safety standards in various food processes, such as storage and transportation, the public should pay special attention to the nature of food and potential risks when purchasing food online;
- Do not purchase or eat any food if there is any doubt about its safety or quality , or the products have gone mouldy or discoloured.

# Advice To The Trade

- The trade should purchase food products from reputable suppliers, meet the hygiene and safety requirements in various food processes such as transportation and storage, store and display the food properly ;
- The trade should keep all the purchase and sales records for product tracing by the competent government authorities whenever necessary ;
- Do not sell any food if there is any doubt about its safety or quality .



## 保存食品紀錄指引

### 目的：

根據《食品安全法》，食品生產經營者有義務在指定期間內保存進出貨紀錄或相關單據。本指引旨在使食品生產經營者了解保存食品紀錄的要件及如何妥善進行相關的保存工作，以便一旦發生食品事故時能讓政府權限部門的進行及時有效的食品溯源及跟進工作，共同攜手保障本國的食品安全。

### 適用範圍：

- 適用於所有擬供人食用的食品。根據《食品安全法》，「食品」指任何供人食用的經處理或未經處理的物質，包括飲料及香口膠類產品，以及在生產、配製及處理食品過程中所使用的所有成分。
- 本指引旨在為食品生產經營者提供原則性的保留食品紀錄建議，但受現行其他指引規範者，則可沿用既有的規定。

### 保存紀錄的內容：

為有效追查食品的來源和流向，保存紀錄的內容應清晰並涵蓋以下資料：

1. 食品的日期(獲取食品的日期；以批發方式供應食品的日期)；
2. 食品的來源資料(公司或個人的名稱、地址及電話)；
3. 食品的數量；
4. 食品的描述(應為特徵性描述，讓人可清楚辨識，如食品名稱、批號及產地來源等)。

### 食品生產經營者一般須備存的紀錄

	進口紀錄	獲取紀錄	供應紀錄
食品進口商	√		√
食品分銷商		√	√
食品零售商 (直接供應給消費者)		√	
飲食業界		√	
本地食品製造商		√	√

# Released Results and Enquiries

The Centre releases food surveillance results and information through the following channels:

- Press releases;
- Food Safety Information website and Food Safety Information App.



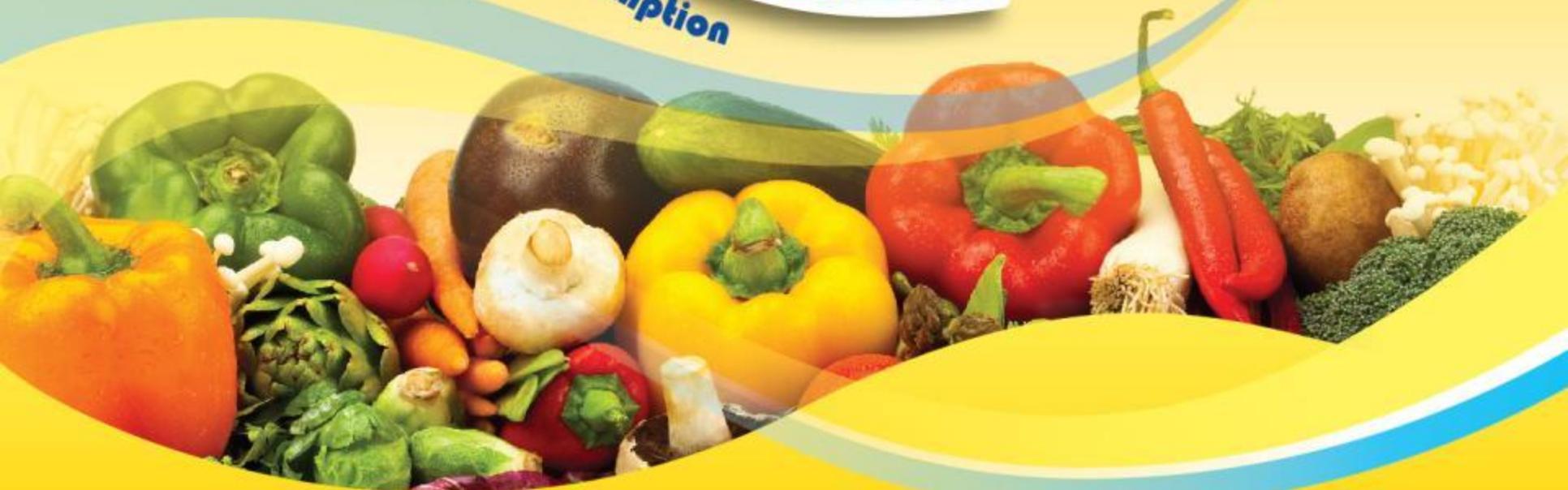


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Safe food. Safe Consumption

Alimentar-se com segurança e prazer

食品安全  
食得安心



## 2016 Targeted Food Surveillance on Ready-to-eat Confections - Satisfactory Products List

Food Safety Centre of IACM Collected a total of 90 samples of ready-to-eat confections, and conducted pathogen and food additive contents analysis of food samples.

Test Parameters- Pathogen:

- *Salmonella* spp., *Staphylococcus aureus*, *Bacillus cereus* and *Listeria monocytogenes*, in total of 4 tests.

Test Parameters- Food Additive:

- Preservative: Benzoic acid and Sorbic acid, in total of 2 tests;
- Food Colour: Brilliant blue, Indigotine, Tartrazine, Sunset yellow, Ponceau, Allura red, Azorubine, Erythrosine, Amarante, in total of 9 tests.

### Cakes

No.	Sample	Packaging Condition	The Form of Food As Sold	Location	Test Parameters
1	Mango Mousse	Loose	Refrigerating	Bakery	Pathogen, Preservative
2	Blueberry Cheesecake	Loose	Refrigerating	Bakery	Pathogen, Preservative
3	Black Forest Cake	Loose	Refrigerating	Bakery	Pathogen, Preservative
4	Pudding	Loose	Refrigerating	Bakery	Pathogen, Preservative
5	Serradura Cake	Loose	Refrigerating	Bakery	Pathogen, Preservative
6	Chestnut Cake	Loose	Refrigerating	Bakery	Pathogen, Preservative
7	Cranberry Roll	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative
8	Mango Macaron	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative
9	Strawberry Macaron	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative, Food Colour
10	Wasabi Macaron	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative, Food Colour
11	Berry Flower Macaron	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative, Food Colour
12	Mango Passion Fruit Cheesecake	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative
13	Green Tea Tart	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative
14	Mille Crepe	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative
15	Mango Neapolitan	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative
16	Raspberry Chocolate Cake	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative
17	Green Tea Tiramisu 1	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative, Food Colour
18	Raspberry and Apple Cheesecake	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative
19	Mandarin Macaron	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative
20	Strawberry Macaron	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative
21	Blueberry Macaron	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative
22	Green Tea Tiramisu 2	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative

23	Green Tea and Red Beans Roll	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative
24	Mixed Fruit Mousse Cake	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative, Food Colour
25	Mixed Fruit Cake	Loose	Refrigerating	Bakery	Pathogen, Preservative
26	Opera Cake	Loose	Refrigerating	Bakery	Pathogen, Preservative
27	Chocolate Mousse Cake	Loose	Refrigerating	Bakery	Pathogen, Preservative
28	Macha Mousse	Loose	Refrigerating	Bakery	Pathogen, Preservative, Food Colour
29	Low Fat Swiss Roll	Loose	Refrigerating	Bakery	Pathogen, Preservative
30	New York Cheesecake	Loose	Refrigerating	Bakery	Pathogen, Preservative
31	Blueberry Cheesy Bread	Loose	Refrigerating	Bakery	Pathogen, Preservative
32	Blueberry Cake	Loose	Refrigerating	Bakery	Pathogen, Preservative
33	Walnuts Macaron	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative, Food Colour
34	Strawberry Cake	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative, Food Colour
35	Black Sesame Apricot Cake	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative
36	Cranberry Opera Cake	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative
37	Blackcurrant Éclair	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative
38	Mango Cheesecake	Loose	Refrigerating	Dessert Shop	Pathogen, Preservative
39	Raspberry Lychee Rose Cake	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative
40	Cherry and Chestnut Cake	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative
41	Opera Cake	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative
42	The Autumn Legend	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative
43	Strawberry Charlotte	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative, Food Colour
44	Mixed Berry Mousse Cake	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative
45	Mango and Orange Tart	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative
46	Tiramisu	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative
47	Chocolate Lava Cakes	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative
48	Chocolate Cakes	Loose	Refrigerating	Coffee Shop	Pathogen, Preservative
49	Mixed Fruit Roll	Loose	Refrigerating	Bakery	Pathogen, Preservative
50	Pandan Roll	Loose	Refrigerating	Bakery	Pathogen, Preservative, Food Colour

## Candies

No.	Sample	Packaging Condition	Origin	Location	Test Parameters
1	Grape Flavour Gummy	Pre-packaged	Mainland China	Supermarket	Food Colour
2	Strawberry Flavour Gummy	Pre-packaged	Mainland China	Supermarket	Food Colour
3	Apple Gummy Chocolate	Pre-packaged	Mainland China	Supermarket	Food Colour
4	Pineapple Flavour Gummy	Pre-packaged	Mainland China	Supermarket	Food Colour
5	Peach Yoghurt Gummy Chocolate	Pre-packaged	Mainland China	Supermarket	Food Colour
6	Honey and Lemon Flavour Candy	Pre-packaged	Thailand	Supermarket	Food Colour
7	Milk and Durian Flavour Candy	Pre-packaged	Thailand	Supermarket	Food Colour
8	Fresh Milk Melon Candy	Pre-packaged	Hong Kong	Supermarket	Food Colour
9	Lucky Candy	Pre-packaged	Mainland China	Supermarket	Food Colour
10	Lucky Jelly Candy	Pre-packaged	Mainland China	Supermarket	Food Colour
11	Mixed Fruit Chewy Candy	Pre-packaged	Malaysia	Supermarket	Food Colour
12	Blackcurrant Flavour Candy	Pre-packaged	Hong Kong	Supermarket	Food Colour
13	Orange Flavour Chews	Pre-packaged	Taiwan	Supermarket	Food Colour
14	Raspberry Flavour Chews	Pre-packaged	Thailand	Supermarket	Food Colour
15	Aquarium Shape Gummy	Pre-packaged	Indonesia	Supermarket	Food Colour
16	Fruit Cocktail Shape Gummy	Pre-packaged	Indonesia	Supermarket	Food Colour
17	Blueberry Flavour Gummy	Pre-packaged	Mainland China	Supermarket	Food Colour
18	Mint Parfait Thins	Pre-packaged	US	Supermarket	Food Colour
19	Green Apple Flavour Candy	Pre-packaged	Mainland China	Supermarket	Food Colour
20	Blueberry Flavour	Pre-packaged	Mainland China	Supermarket	Food Colour

	Candy				
21	Mango Flavour Gummy	Pre-packaged	Malaysia	Supermarket	Food Colour
22	Green Apple Flavour Mint	Pre-packaged	Australia	Supermarket	Food Colour
23	Gummy	Loose	Germany	Supermarket	Food Colour
24	Soft Sweet	Loose	Germany	Supermarket	Food Colour
25	Mango Soft Sweet	Loose	Germany	Supermarket	Food Colour
26	Mint Flavour Gummy	Loose	Germany	Supermarket	Food Colour
27	Mixed Fruit Flavour Gummy	Loose	Germany	Supermarket	Food Colour
28	Sours Gummy	Loose	Germany	Supermarket	Food Colour
29	Mushroom Shape Gummy	Loose	Germany	Supermarket	Food Colour
30	Fruit Flavour Sweet 1	Pre-packaged	Mainland China	Supermarket	Food Colour
31	Fruit Flavour Sweet 2	Pre-packaged	Mainland China	Supermarket	Food Colour
32	Fruit Flavour Sweet 3	Pre-packaged	Mainland China	Supermarket	Food Colour
33	Peanut Chocolate Candy 1	Pre-packaged	Mainland China	Supermarket	Food Colour
34	Peanut Chocolate Candy 2	Pre-packaged	Mainland China	Supermarket	Food Colour
35	Peanut Chocolate Candy 3	Pre-packaged	Mainland China	Supermarket	Food Colour
36	Crispy Chocolate Candy 1	Pre-packaged	Australia	Department Store	Food Colour
37	Crispy Chocolate Candy 2	Pre-packaged	Australia	Department Store	Food Colour
38	Milk Chocolate Candy 1	Pre-packaged	Mainland China	Supermarket	Food Colour
39	Milk Chocolate Candy 2	Pre-packaged	Mainland China	Supermarket	Food Colour
40	Milk Chocolate Candy 3	Pre-packaged	Mainland China	Supermarket	Food Colour