



Targeted Food Surveillance of Grain and Potato Products

Municipal Affairs Bureau

Department of Food Safety

Targeted Food Surveillance

Objective: To proactively identify the potential risks of targeted food items and monitor the safety of food items sold on the market in Macao in order to assess the safety of food products commonly consumed by residents.

Targeted Food Surveillance

The Centre conducts relevant analysis based on specific types of food. Priority is given to food items frequently consumed by the public.

Factors taken into <a>consideration

Risk Level

Social Concern

Residents' Eating Habits

Food Incidents in the Past



Grain and Potato Products

- Grains and their products are food items commonly consumed by the public. However, grains can be contaminated with mycotoxins before and after they are harvested, such as during the planting process, and when they are stored in conditions that are optimum for mould growth (e.g. warm and humid environment) before and after harvesting or processing.
- Aflatoxins are known to be genotoxic and carcinogenic, while Ochratoxin A is nephrotoxic. These mycotoxins are not easily metabolised in the human body. Excessive consumption of food contaminated with mycotoxins may affect human health to different extents.

Grain and Potato Products

- In addition, proper use of food additives helps preserve the flavour of grain and potato products and extend their shelf-life. However, improper use of food additives may put extra burden on the body or pose a risk to health.
- Therefore, the Department of Food Safety has carried out this targeted surveillance on grain and potato products to examine the levels of mycotoxins and food additives in such products in order to safeguard public health.

Market Surveillance

Coverage

Various brands of grain and potato products in the market.

Places of origin

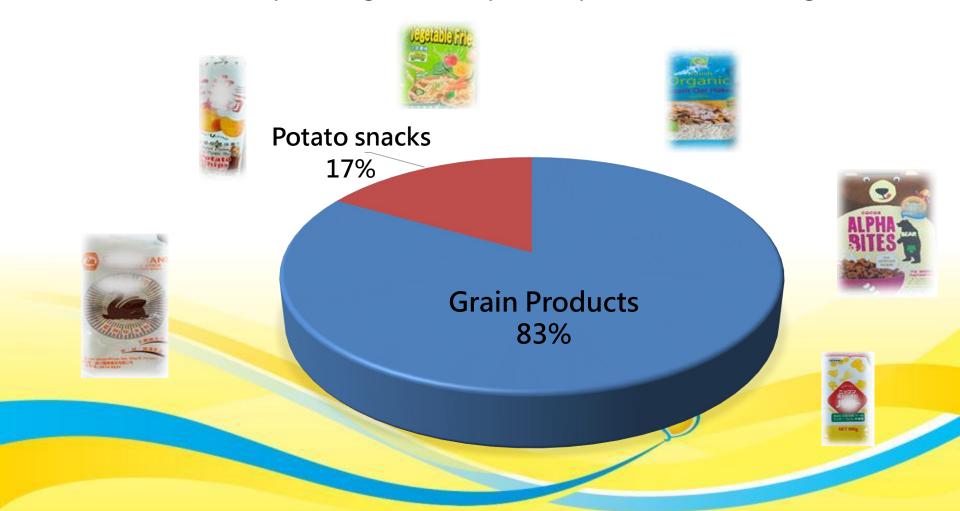
Countries and regions such as Mainland
China, Taiwan, Hong
Kong, Macao, Japan,
Korea, Thailand,
Malaysia, Singapore,
Finland, Portugal and
Canada.

Locations

Local department stores, supermarkets, etc.

Samples Tested

■A total of 60 samples of grain and potato products, including:



Test Parameters

Mycotoxins

Aflatoxin B1 and ochratoxin A, a total of 2 tests.

Food additives

Sorbic acid, benzoic acid and sulfur dioxide, a total of 3 tests.

Food Samples of Grain and Potato Products (Some examples)

Sample Name	Packaging Condition	Place of Origin	Test parameters	Test Result
Wheat flour	Packaged	Japan	Aflatoxin B1 and ochratoxin A	Satisfactory
Organic quick- cook oats	Packaged	Finland		Satisfactory
Singapore Fried Vermicelli	Packaged	Thailand		Satisfactory
Ramen	Packaged	Korea	Aflatoxin B1, ochratoxin A, sorbic acid, benzoic acid and sulfur dioxide	Satisfactory
Rice noodle	Packaged	Macao		Satisfactory
French fries	Packaged	Hong Kong	Sorbic acid, benzoic acid and sulfur dioxide	Satisfactory
Potato chips	Packaged	Malaysia		Satisfactory

Test Results

- All results were satisfactory. The overall satisfactory rate was 100%;
- Although the results were satisfactory, some of the grain and potato products are high in salt. The public is advised to maintain a balanced diet, and consume a moderate amount of grain and potato products.
- People who are sensitive to food additives such as sulfur dioxide should read the food labels carefully when purchasing food products.

Referential standards: :

Macao Regulamento Administrativo n.º 13/2016 "Limites máximos de micotoxinas em alimentos" (Maximum Limits of Mycotoxins in Food) and Regulamento Administrativo n.º 7/2019 "Normas relativas à utilização de conservantes e antioxidantes em géneros alimentícios" (Standard for Uses of Preservatives and Antioxidants in Foodstuffs).

Advice for Public

When purchasing food products:

- Purchase products from reputable shops;
- Pay attention to the expiry date and check whether the packaging is intact;
- Consume products as soon as possible after opening, or store properly according to the label instructions;
- When purchasing food online or via surrogate shoppers, it is not easy to verify whether appropriate measures have been put in place during production, storage and transport, etc. to ensure food safety. The public should avoid purchasing food online or via surrogate shoppers;
- Do not purchase or eat any food if in doubt about its quality.

Advice for Trade

- Import food products from reputable suppliers;
- Ensure each stage of food processing, such as transport and storage, is carried out in compliance with hygiene and safety requirements, e.g. storage of grain products in warm and humid environment should be avoided to reduce the risk of mycotoxin contamination;
- The trade should keep purchase and sales records or relevant invoices for source tracing by the competent government authorities whenever necessary;
- Do not buy or sell any food if its safety or quality is in doubt,
 e.g. if the food is rotten or spoiled.

Publication And Enquiries

The Department of Food Safety releases food surveillance results and precautions through the following channels:

- Press release;
- ■Food Safety Information website (<u>www.foodsafety.gov.mo</u>) and Food Safety Information App.







