



Regulations of Food Processing Aids in Mainland China


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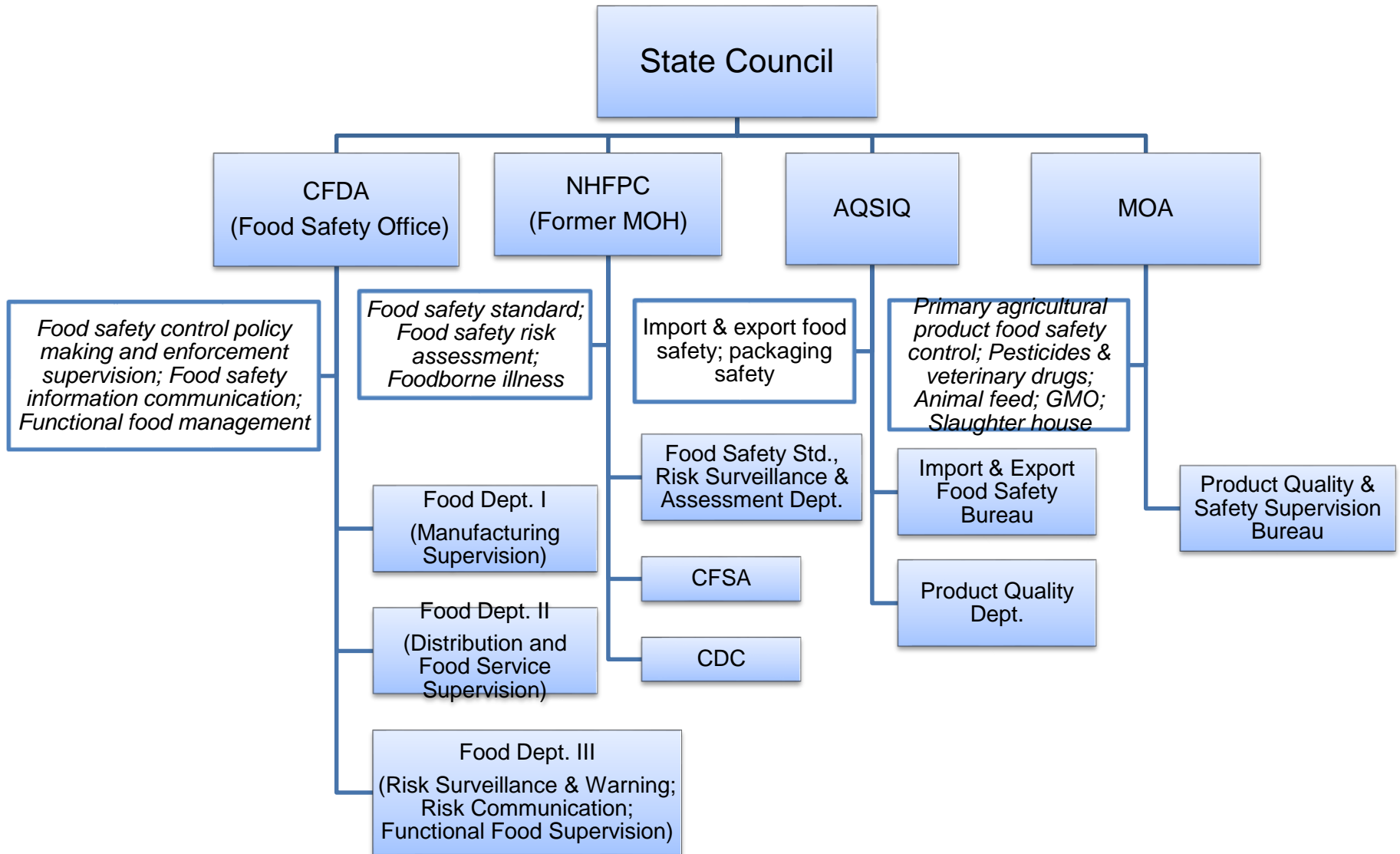
Agenda

Legislation History

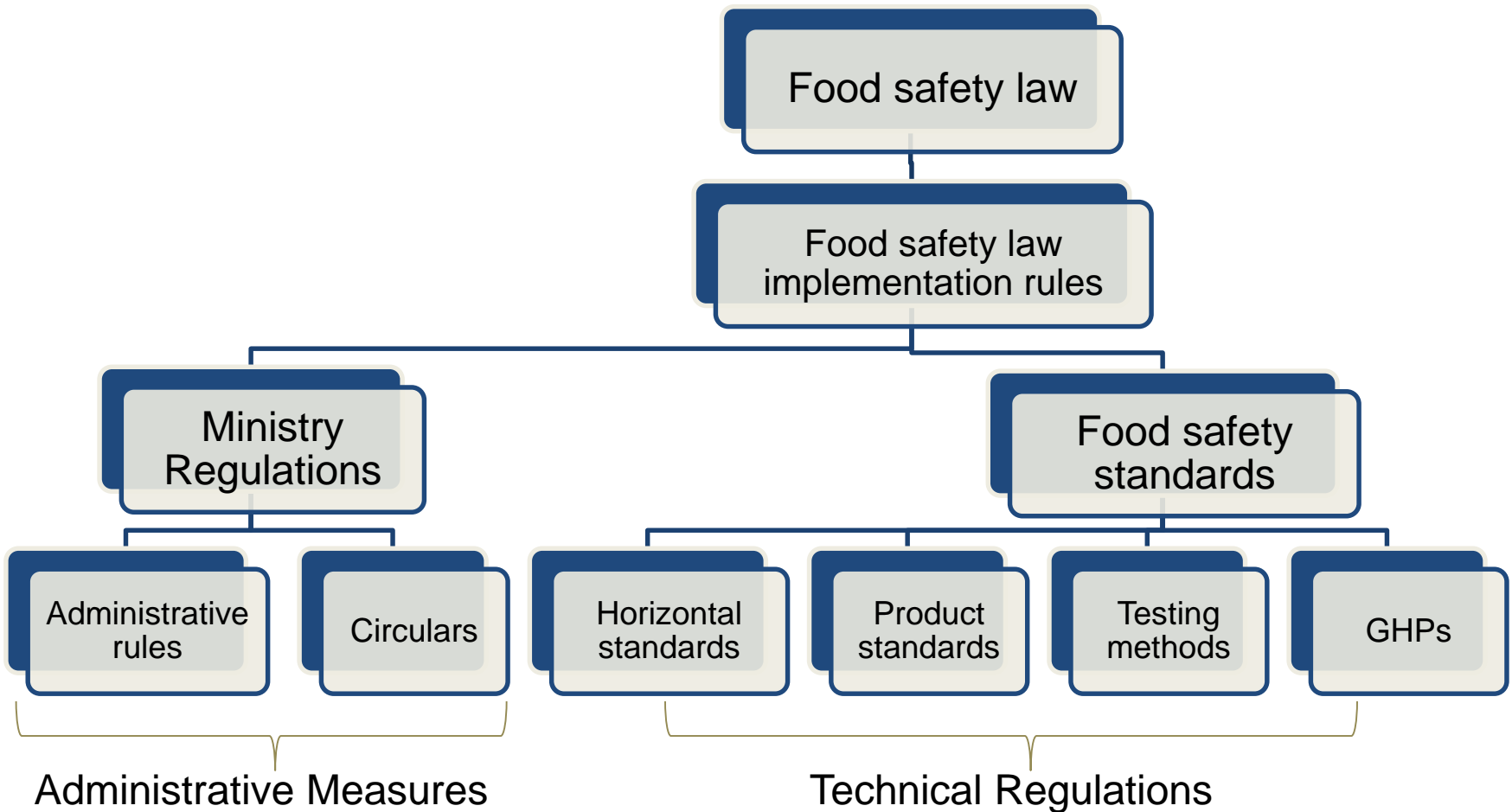
Overview of Current Regulations

Future Work

Current Food Safety Supervision System

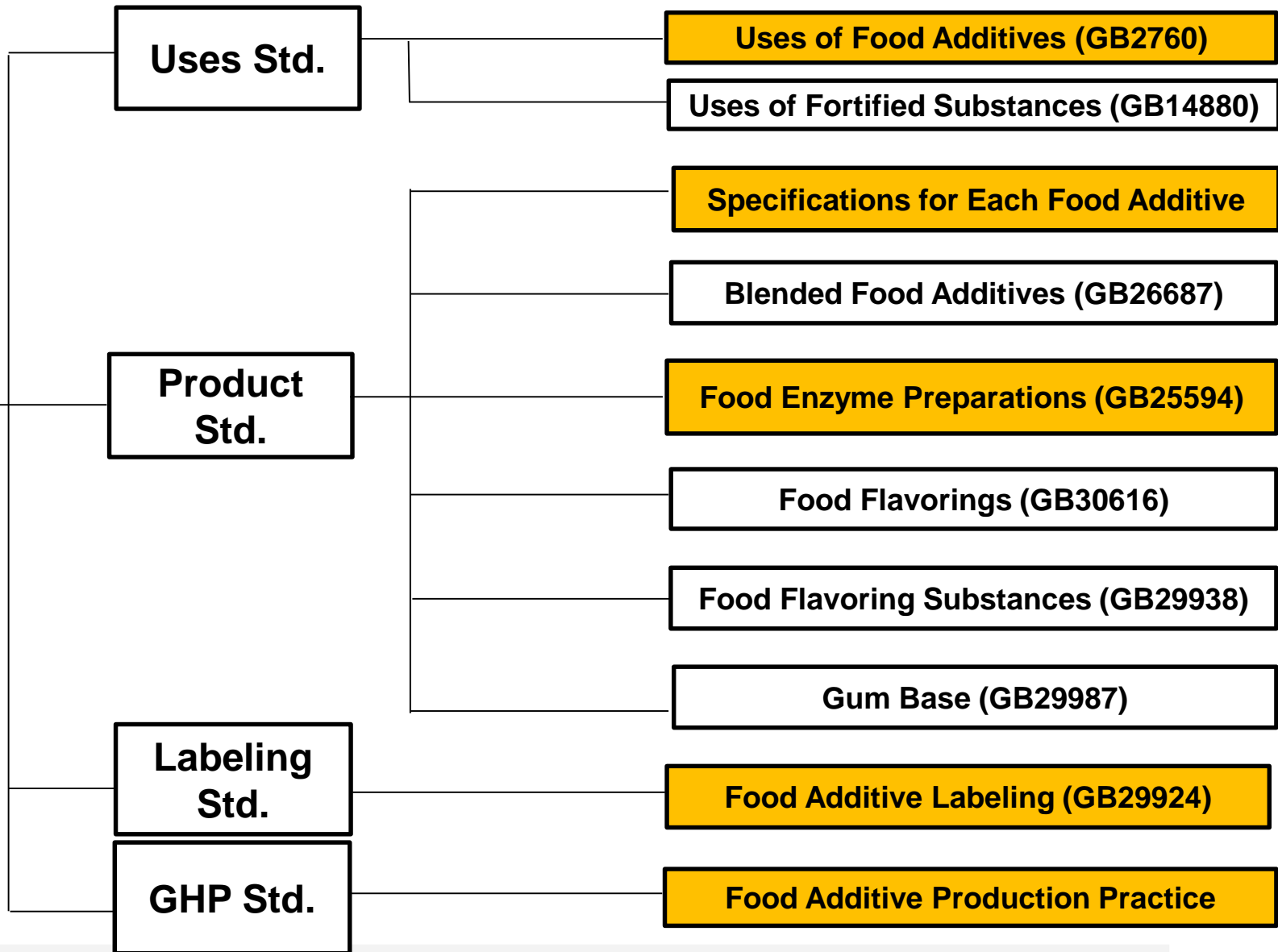


Food Safety Regulation System



Food Additive Standards

Food Additive Standards



Milestones of Food Processing Aids Legislation

- In 1986, MOH defined the food processing aid and included the provisions for uses of food processing aids in GB2760-1986 (Hygienic Standard for Uses of Food Additives).
- In 1996, MOH started to regulate the food processing aids through the positive list, developing the list of permitted food processing aids in GB2760-1996.
- In 2009, when revising the GB2760-2007, MOH conducted the food industry survey on the uses of processing aids.
- In 2011, MOH added the using scope and the maximum using level of food processing aids into the list of permitted food processing aids in GB2760-2011.

Milestones of Food Processing Aids Legislation

- The China Food Safety Law 2009 empowers MOH to develop an integrated food safety standard system. The outcomes for food processing aids are:
 - ✓ In 2009-2015, MOH developed and revised the specification standards for each food processing aid.
 - ✓ In 2013, MOH published the standard for food additive labeling.
 - ✓ In 2013, MOH started to develop the standard for food additive production practice.
 - ✓ In 2014, NHFPC (former MOH) published the updated version of the standard for uses of food additives (GB2760-2014).

Milestones of Food Processing Aids Legislation

- The China Food Safety Law 2009 requires the food additive producer to get the food additive production license before starting the production.
- The China Food Safety Law 2009 stipulates the imported food additive should be in compliance with China food safety standard and cannot be released by the Customs until the CIQ hygiene certificate is available.

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Definitions

➤ Food Additive

An artificially chemosynthetic or natural substance to be added to foods in order to improve food quality, color, fragrance and taste, and for the purpose of preservation and processing technology. Flavoring substances, gum-based substances, **processing aids for food industry use are also included in food additives.**

➤ Food Processing Aid

The various kinds of substances **to enable food processing to go smoothly, irrelative to food itself**, for example, filtration aids, clarifiers, absorbents, lubricants, mold release agents, decoloring agents, peeling agents, extraction solvents, and nutritional substances for fermentation, etc.

Principles for Uses of Food Processing Aids

- Processing aids shall be used in the course of food processing with necessity, and shall **reduce the dosage as far as possible** under the precondition of reaching the desired effect.
- The processing aid shall **be generally removed before the finalized products**, if impossible to remove it completely, **the residue quantity shall be minimized**, where the residue limit shall not have an adverse effect on health and shall not play the functional role in final products.
- The processing aid shall **meet relevant specification requirements**.

Provisions for Uses of Food Processing Aids (1)

Table C.1 List of the Processing Aids Permitted in Processing of Various Kinds of Foods, and No Restriction of the Residue Level (excluding Enzyme Preparation)

No.	English Name of the Processing Aid
1.	Ammonia
2.	Glycerine (glycerol)
3.	Acetone
4.	Propane
5.	Mono-and diglycerides of fatty acids
6.	Nitrogen
7.	Silicon dioxide
8.	Carbon dioxide
9.	Diatomaceous earth
10.	Hydrogen peroxide

Provisions for Uses of Food Processing Aids (2)

Table C.2 List of the Processing Aids that Require Clarification of the Functions and Scope of Use (excluding Enzyme preparation)

No.	English Name	Function	Scope of Use
1.	1,2-dichloroethane	Solvent for withdrawal	Coffee and tea processing
2.	1-butanol	Solvent for extraction	Fermentation
3.	Solvent No. 6	Solvent for oil impregnation, solvent for withdrawal	Fermentation and withdrawal
4.	D-mannitol	Anti-sticking agent	Candy processing
5.	<i>DL</i> -disodium malate	Nutrient for fermentation	Fermentation
6.	<i>L</i> -malic acid	Nutrient for fermentation	Fermentation
7.	<i>B</i> -cyclodextrin	Solvent for cholesterol withdrawal	Processing of pasteurized milk, sterilized milk, modified milk, fermented milk and flavored fermented milk, cream and analogues, cheese and processed cheese

Provisions for Uses of Food Processing Aids (3)

Table C.3 List of Enzyme Preparation for Foods and Their Sources

Serial No.	Enzyme	Source ^a	Donor ^b
1.	Alpha-galactosidase	<i>Aspergillus niger</i>	
2.	Alpha-amylase	<i>Bacillus licheniformis</i>	
		<i>Bacillus licheniformis</i>	<i>Bacillus licheniformis</i>
		<i>Bacillus licheniformis</i>	<i>Bacillus stearothermophilus</i>
		<i>Aspergillus niger</i>	
		<i>Bacillus amyloliquefaciens</i>	
		<i>Bacillus subtilis</i>	
		<i>Bacillus subtilis</i>	<i>Bacillus stearothermophilus</i>
		<i>Rhizopus oryzae</i>	
		<i>Aspergillus oryzae</i>	
		<i>Bacillus stearothermophilus</i>	
	Hog or bovine pancreas		

Specification Std. for Each Food Processing Aid

GB 31632—2014

Specifications include:

- Manufacturing Process
- Chemical Formula, Relative Molecular Weight
- Sensory Requirements
- Physical and Chemical Criteria
- Microbial Criteria
- Testing Methods
- Etc.

食品安全国家标准 食品添加剂 镍

1 范围

本标准适用于食品添加剂镍。食品添加剂镍分为海绵镍和负载型镍,海绵镍是以镍、铝合金粉为主要原料,经混合、研磨、活化、洗涤制得;负载型镍是以二氧化硅等为载体,以镍盐为活性中心,经洗涤、干燥、活化、成型制得。

2 化学名称、分子式和相对分子质量

2.1 化学名称

镍

2.2 分子式

Ni

2.3 相对分子质量

58.69(按 2011 年国际相对原子质量)

3 分类

食品添加剂镍根据用途的不同分为两类:海绵镍,多用于胺和多元醇的催化加氢;负载型镍,多用于食用油的催化加氢。

4 技术要求

4.1 感官要求

应符合表 1 的规定。

表 1 感官要求

项 目	要 求	
	海绵镍	负载型镍
色泽	灰黑色、黑色	黑色
状态	颗粒状	颗粒状
检验方法	取适量试样置于已有 20 mL 水的 50 mL 烧杯中,在自然光下观察色泽和状态	取适量试样置于 50 mL 烧杯中,在自然光下观察色泽和状态

New Food Processing Aid Approval

- It is NHPFC who is in charge of new food processing aid approval. However, when the application is related to new GMO, it should go to MOA first.
- New food processing aid approval includes the approval for:
 - ✓ The new food processing aid not listed in GB2760-2014; and
 - ✓ Expanding the using scope and the maximum using level of listed food processing aids.
- When the application is approved, it will be published in the form of NHFPC Circular.
- The management of new food processing aid is to be changed.

CFDA Regulation on Food Production Permit

- The regulation is applicable to food additives including food processing aids.
- The approval is based on products.
- The Permit is valid for 5 years.
- Local governments do the inspection periodically.
- Applicable food safety standards:
 - ✓ Specification standard for each food processing aid
 - ✓ Standard for food additive labeling
 - ✓ Standard for food additive production practice

Importation

- For the imported food using food processing aid during the food production outside of China, its use of food processing aid should be in compliance with GB2760-2014.
- No need to label the name of food processing aid on the food label.
- The food processing aid should be imported as food additive and the CIQ hygiene certificate is required.

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Further Work

- Further studies and industry survey needs to be done for the risk assessment of uses of food processing aids and the development of residue levels for some food processing aids when necessary.
- Develop the testing method for the residues of some food processing aids.
- Review the current list of permitted food processing aids and manage the list dynamically.
- Well manage the use of the same production line to produce food processing aids and chemical products.
- Clarify the GMO approval process for new enzyme application.
- Develop the regulation on uses of secondary food additives in food additive preparations including enzyme preparations.

Thanks

The word "Thanks" is written in a bold, purple, sans-serif font with a thick black outline. The letter 'h' is replaced by a tan-colored hand with the index and thumb fingers extended, forming an 'L' shape. Three green, jagged lines radiate from the top of the hand, suggesting motion or emphasis. The text is set against a light blue, trapezoidal background that tapers from left to right.