



Session: Bioeconomy to Nutrieconomy: Promoting Food as Medicine

Regulation Path to Include Chinese Medicines in the Dual-Use Food and Medicine Catalog

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4th Sep, 2025





Ancient Chronology of Herbal Medicines

- Egyptian medicine 5,000-6,000 Y
 Ebers papyrus (>700 Rx) 1500 BC
- Chinese medicine 5,000 Y
 Shennong Herbal Pharmacology 2800 BC
- Ayurvedic system 1000 BC
- Hippocrates (Hippocratic Oath) 460-355 BC
- Galen 130-200 AD
- United States Pharmacopeia 1820 AD



Ebers papyrus
2

Shennong Herbal Pharmacology

First Chinese medical book
100-200 AD
365 Drugs (Herbs: 252)



Shennong

Maeisan (An herbal powder)

An anesthetic in surgery
An herbal powder composed several herbs
<208 AD



Huatuo

Ben Cao Gang Mu

(Compendium of Materia Medica)
1,590 AD
Herbs: 1,892
Prescriptions: 11,096

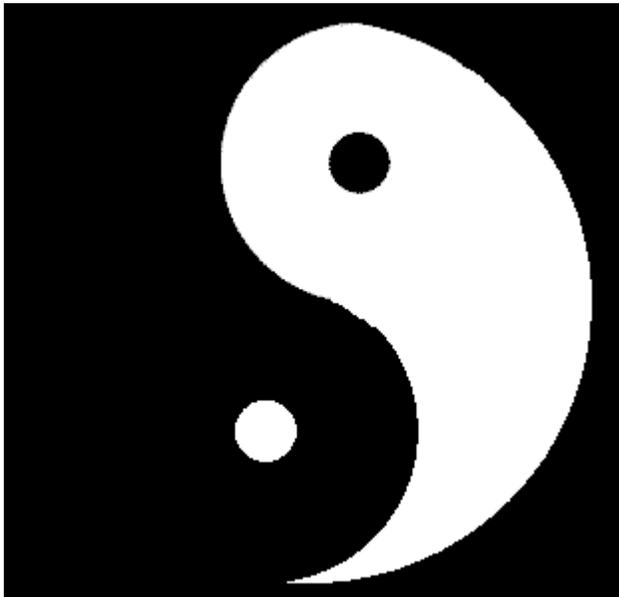


Li Shi Zhen



What Do Chinese Herbal Medicines Do?

- Treatment
- Prevention
- The philosophy: Yin-Yang, 5 elements, Qi, etc.





Commonly Used Chinese Herbal Medicines

>300 herbs are commonly used against various diseases



Ginseng
Nourishing
stimulants



Goujizi (Wolf berry)
Nutrient Antioxidant



Danggui
(*Angelica sinensis*)
Female hormonal
regulator



Huangqi
(*Astragalus*)
Immune system
booster



Gancao (Licorice)
Irritable bowel
syndrome



Ginger
Cough,
Inflammation



Dansheng (Salvia)
Cardiovascular
Diseases



Chaihu
(*Bupleurum chinense*)
Detoxification



For those that
serve as both
food and as
medicine, we call
them as “**Food-
Drug Dual-Use**”
substances.

Hong Kong Herbal Cooling Tea (涼茶)

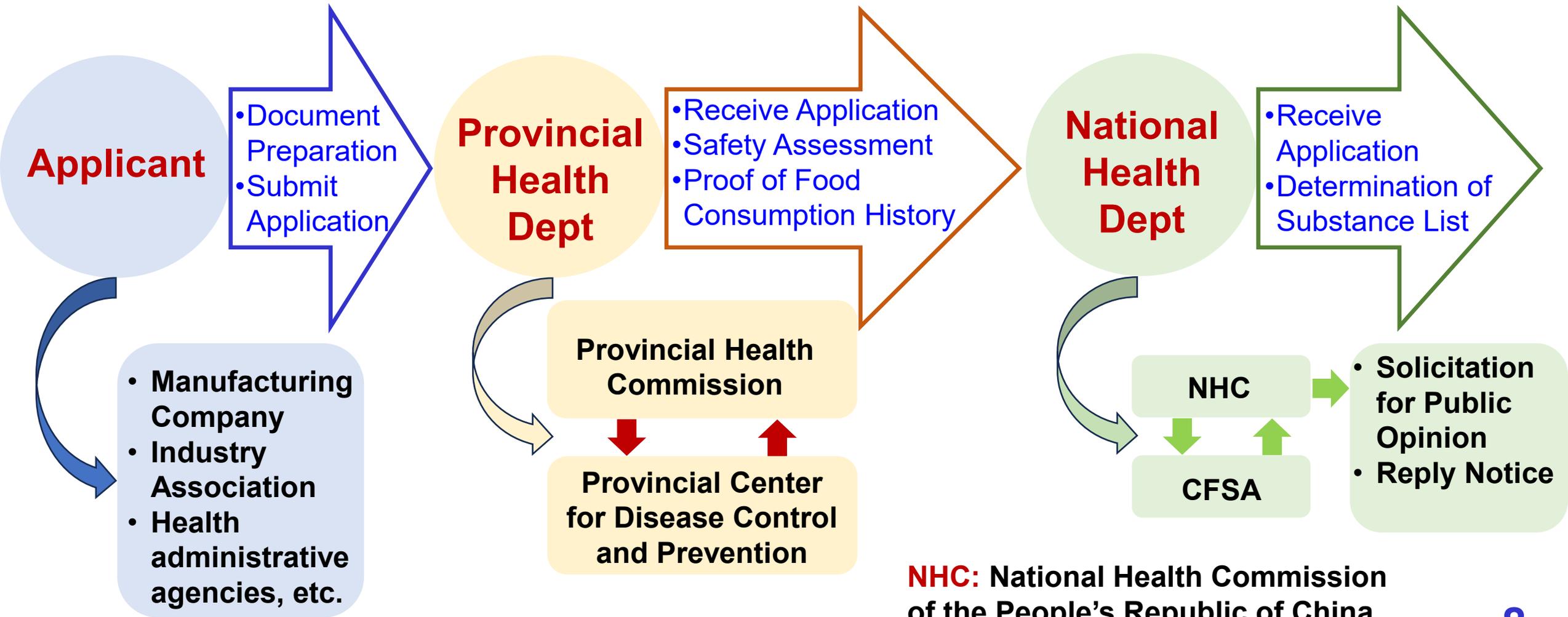


<https://www.cigna.com.hk/en/smarthealth/>

106 Chinese Medicines Listed in “Dual-Use Food and Medicine Catalog” Approved in Mainland China (as of August 31, 2025)

Announcement	Dual-Use Food and Medicine Substances
2002-03-11 (1 st Batch)	<p>87种：丁香、八角茴香、刀豆、小茴香、小蓟、山药、山楂、马齿苋、乌梢蛇、乌梅、木瓜、火麻仁、代代花、玉竹、甘草、白芷、白果、白扁豆、白扁豆花、龙眼肉（桂圆）、决明子、百合、肉豆蔻、肉桂、余甘子、佛手、杏仁（甜、苦）、沙棘、牡蛎、芡实、花椒、赤小豆、阿胶、鸡内金、麦芽、昆布、枣（大枣、酸枣、黑枣）、罗汉果、郁李仁、金银花、青果、鱼腥草、姜（生姜、干姜）、枳椇子、枸杞子、栀子、砂仁、胖大海、茯苓、香橼、香薷、桃仁、桑叶、桑椹、桔红、桔梗、益智仁、荷叶、莱菔子、莲子、高良姜、淡竹叶、淡豆豉、菊花、菊苣、黄芥子、黄精、紫苏、紫苏籽、葛根、黑芝麻、黑胡椒、槐米、槐花、蒲公英、蜂蜜、榧子、酸枣仁、鲜白茅根、鲜芦根、蝮蛇、橘皮、薄荷、薏苡仁、薤白、覆盆子、藿香。 87 kinds: cloves, star anise, sword beans, cumin, thistle, yam, hawthorn, purslane, black snake, black plum, papaya, hemp seed, daidai flower, polygonatum, licorice, angelica, ginkgo, white lentils, white lentil flowers, longan meat (longan), cassia seed, lily, nutmeg, cinnamon, emblica fruit, bergamot, almonds (sweet and bitter), sea buckthorn, oyster, gorgon fruit, Sichuan pepper, red bean, donkey-hide gelatin, chicken gizzard lining, malt, kelp, jujube (jujube, sour jujube, black jujube), monk fruit, plum kernel, honeysuckle, green fruit, Houttuynia cordata, ginger (fresh ginger, dried ginger), Hovenia dulcis, gojizi (wolfberry), gardenia, Amomum villosum, Sterculia lychnophora, Poria, citron, Elsholtzia ciliata, peach kernel, mulberry leaf, mulberry fruit, tangerine peel, Platycodon grandiflorum, Alpinia oxyphylla, lotus leaf, radish seed, lotus seed, galangal, bamboo leaf, tempeh, chrysanthemum, chicory, yellow mustard seed, Polygonatum sibiricum, Perilla frutescens, Perilla seed, Pueraria root, black sesame, black pepper, Sophora japonica rice, Sophora japonica flower, dandelion, honey, Torreya grandiflora, Ziziphus jujuba kernel, fresh Imperata cylindrica root, fresh Phragmites australis, pit viper, tangerine peel, mint, Job's tears seed, Allium macrostemon, raspberry, Patchouli.</p>
2020-01-06 (2 nd Batch)	<p>6种：当归、山柰、西红花、草果、姜黄、荜茇 6 types: Angelica sinensis, Kaempferia galanga, Saffron, Amomum villosum, Turmeric, Piper longum</p>
2023-11-17 (3 rd Batch)	<p>9种：党参、肉苁蓉（荒漠）、铁皮石斛、西洋参、黄芪、灵芝、山茱萸、天麻、杜仲叶 9 types: Codonopsis pilosula, Cistanche deserticola (desert), Dendrobium candidum, American ginseng, Astragalus, Ganoderma lucidum, Cornus officinalis, Gastrodia elata, Eucommia ulmoides leaves</p>
2024-08-26 (4 th Batch)	<p>4种：地黄、麦冬、天冬、化橘红 4 types: Rehmannia root, Ophiopogon japonicus, Asparagus cochinchinensis, and Citrus aurantium</p>

The Path to Inclusion in the Dual-Use Food and Medicine Catalog



NHC: National Health Commission of the People's Republic of China
CFSA: China National Center for Food Safety Risk Assessment

Principles for Inclusion in the Dual-Use Food and Medicine Substances

On November 10, 2021, NHC issued the "Regulations on the Management of the Catalogue of Substances that are Traditionally Consumed as Both Food and TCM" (Guo Wei Food [2021] No. 36) to relevant local authorities. This document clearly defines the scope of "substances that are both foods and traditional Chinese medicines" ("food and medicinal substances"), prioritizes food safety, and implements a two-level safety evaluation system for "food and medicinal substances" at both the local and national levels. It also specifies that the NHC, in conjunction with the State Administration for Market Regulation, will formulate and publish a catalogue of "food and medicinal substances" and implement dynamic management of the catalogue.

Substances included in the "food and medicinal substance" catalogue must meet the certain requirements.

Principles for Inclusion in the Dual-Use Food and Medicine Substances

Inclusions:

- Traditionally consumed as food
- Included in the Chinese Pharmacopoeia
- No food safety issues identified in safety assessments
- Comply with relevant laws and regulations on the protection of traditional Chinese medicine resources, wildlife protection, and ecological conservation

Exclusions:

- Not traditionally consumed as food or not in line with traditional dietary requirements
- Scientific evidence indicates harm to humans or evidence of adverse reactions
- Protected wild animal and plant species listed in the "National List of Key Protected Wild Animals" and "National List of Key Protected Wild Plants"
- Violation of national laws and regulations
- Other circumstances that should not be included

Inclusion Criteria	Exclusion Criteria
✓ Has traditional food consumption history	✗ No traditional food history or violates dietary norms
✓ Listed in P.R.C <i>Pharmacopoeia</i>	✗ Scientific evidence of harm/adverse reactions
✓ No safety risks (via assessments)	✗ Included in national key protected wildlife/plant lists
✓ Complies with TCM/ wildlife/ecological protection laws	✗ Violates national laws
	✗ Other unqualified cases

Application Documents Needed for Inclusion in the Dual-Use Food and Medicine Substances

Expanded Requirements and Documentation Key Points for Food and Drug Substances

- Basic Information (Chinese name, Latin name, variety identification, edible parts, etc.)
- **Certification of Traditional Use** (emphasizing historical data on human use, requiring consumer surveys to provide evidence)
- Information on Processing and Consumption Methods (requiring consumer surveys to provide evidence)
- **Safety Assessment Documents**, including:
 - **Component Analysis Report** - Monitoring results and testing methods for major components and potentially harmful components (representativeness of different regions should be emphasized)
 - Hygienic Inspection Report - Testing results and methods for contaminants and microorganisms for three representative sample batches
 - **Toxicological Evaluation Report** - At least including acute oral toxicity testing and three genetic toxicity tests Tests, 90-day oral toxicity tests, and teratogenicity tests are required. Species listed as non-toxic and without contraindications (including those not suitable for prolonged consumption) in two or more ancient herbal remedies are exempt from this requirement
 - Risk assessment report for the main pharmacological ingredients
- **Quality standards and relevant implementation standards**
- Other information helpful for the assessment (provide valuable reference literature)

Summary

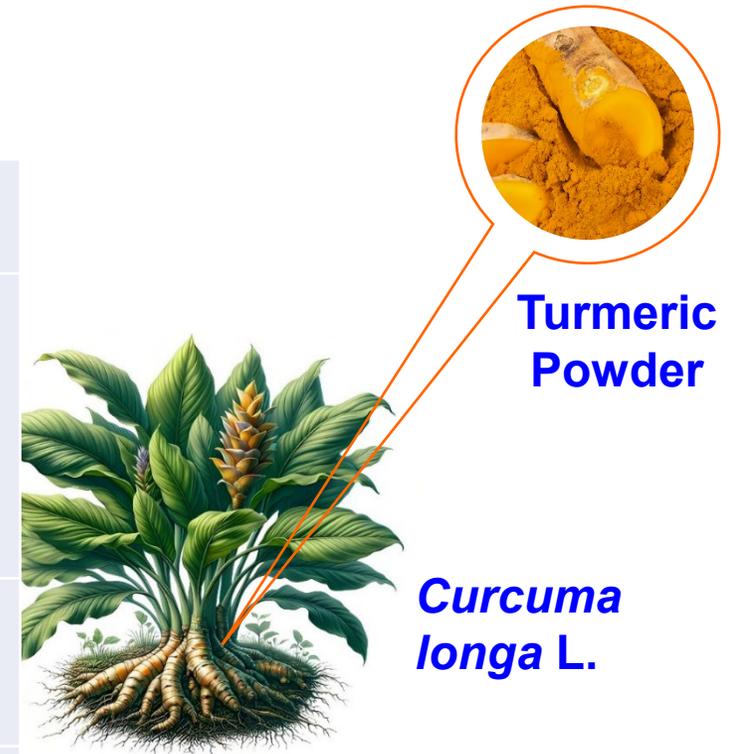
- Chinese medicine and food share the same origin, like plants, animals, and minerals
- Substances used solely for medical purposes are called medicines
- Substances used solely for dietary purposes are called foods
- Those used for both medical and dietary purposes are known as dual-purpose medicines and foods, such as red beans, walnuts, pumpkin seeds, and honey
 - They are consumed as foods, therefore generally safe for long-term use
 - Their accumulative effects can provide significant health benefits, offering both therapeutic and preventive actions

Case 1

Turmeric Powder

2020, 2nd Batch in the List

Dimension	Key Information
Traditional & Dietary Role	<ul style="list-style-type: none"> - Used in Chinese cuisine (e.g., curry, braised dishes) for flavoring & coloring for centuries - TCM application: Relieves dampness, activates blood circulation
Regulatory Inclusion	<ul style="list-style-type: none"> - Long-term safe consumption - Compliance with Pharmacopoeia of PRC (2020 edition)
Scientific Evidence	<ul style="list-style-type: none"> - Modern studies: Antioxidant & anti-inflammatory effects - Safety: No acute toxicity ($LD_{50} > 2000$ mg/kg)
Global Relevance	<ul style="list-style-type: none"> - China's export: 15% growth in turmeric-based food/health products to Southeast Asia (2023-2024)



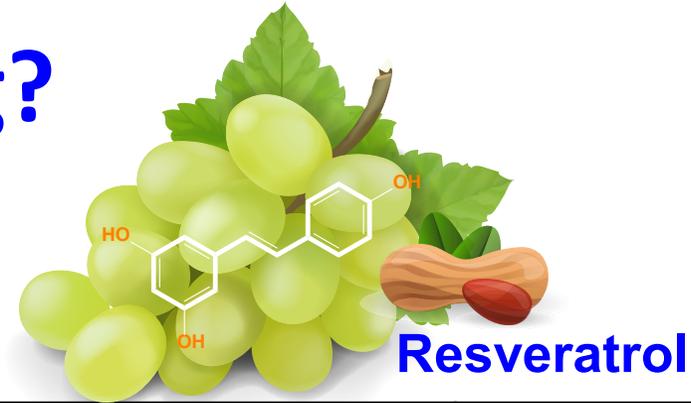
Turmeric Powder

Curcuma longa L.

Native to the Indian and Southeast Asia

Case 2

Can Resveratrol be Included in the Dual-Use Food and Medicine Substance Catalog?



Regulatory Target	Existing Rules Coverage	Key Difference
Traditional Chinese medicinal materials	✓ Covered by <i>Food-Medicine Dual-Use Catalog</i>	Relies on “historically dietary use + Pharmacopoeia standards”
Pure Pharmaceutical Compounds	✗ No specialized regulation for inclusion	Lacks “traditional food history”; safety/efficacy evaluation differs from Chinese medicinal materials

Resveratrol as a dietary supplement?

- USA: ✓
- Hong Kong: ✓
- Mainland China: ✗

Case 3

Skin Brightening Products Developed from *Dendrobium candidum*, 3rd Batch in the List in 2023



铁皮石斛

Dendrobium candidum



Dendrobium Ingredient Skin Products?

- Hong Kong: ✓
- Mainland China: ✗

We have developed skin whitening and skin protection products based on the active ingredients identified in *Dendrobium* Chinese Medicinal plants. On August 21, 2025, one of the active compounds was officially recorded as a new cosmetic ingredient with the NMPA (国妆原备字20250102) This achievement marks the first successful new cosmetic ingredient registration with NMPA by a Hong Kong-based institution.

15



Thank you

Q & A

