

**CODEX Committee on Food
Additives (CCFA) and the Codex
General Standard for Food Additives
(GSFA)**

LaShonda T. Cureton, PhD

Member of the US Delegation
Codex Committee on Food Additives

Food Additives: A Global Perspective on Safety Evaluation and Use
CODEX Committee on Food Additives-General Issues

New Delhi, India

July 19, 2018

Outline

- CCFA Terms of Reference
- What is the GSFA?
- The Structure of the GSFA
- Food Additive Requirements
- Overview of the 50th Meeting
- New Work for the 51st Meeting

CCFA Terms of Reference

- Establish or endorse acceptable maximum levels for food additives (General Standard for Food Additives (GSFA), commodity committees (Endorsement and Alignment))
- Prepare priority lists of food additives for risk assessment by the Joint FAO/WHO Expert Committee on Food Additives (JECFA)
- Assign functional classes to food additives (International Numbering System (INS))
- Recommend specifications for identity and purity for food additives for adoption by the Codex Alimentarius Commission (CAC)
- Elaborate standards for related subjects (e.g., labeling of food additives)

How does CCFA work?

- Electronic Working Groups (eWGs)
 - Inter-sessional
 - Led by Codex Member
 - Open to all Codex Members and Observers
- Physical Working Groups (pWGs)
 - Meet immediately prior to or during plenary session
 - Led by Codex Member
 - Open to all Codex Members and Observers
- Discussion Papers
 - Prepared by one or more Codex Members
 - Considered at the Plenary
- Plenary Session

CCFA

G
S
F
A

A
L
I
G
N
M
E
N
T

J
E
C
F
A

I
N
S

Four Standing eWGs

What is the GSFA?

- An international standard administered by the **Codex Alimentarius Commission** (CAC)



- The CAC is a joint venture between the Food and Agriculture Organization (FAO) and the World Health Organization (WHO)
- Mission to formulate **internationally accepted food safety standards** for protection of human health and to ensure fair trade practices

What is the GSFA?

General Principles of the GSFA: Preamble

- Protect the health of consumers:
 - Only lists food additives determined to be safe by JECFA
 - Sets criteria for verifying the compatibility of the listed ML with JECFA's ADI (considers use in all foods)
 - Provides criteria for justification of use
- Ensure fair practices in food trade:
 - Is the single authoritative reference point for food additives
 - Only lists food additives subject to an INS designation
 - Sets forth use conditions in all foods
 - Defines foods in which additives may not be used

What is the GSFA?

- Deals solely with Food Additives:

“any substance... the intentional addition of which to food for a technological purpose... may be reasonably expected to result...in it or its by-products becoming a component of or otherwise affecting the characteristics...of such foods.”

Structure of the GSFA

- **Preamble**
 - First five pages of GSFA
 - Made up of six sections describing:
 - Scope
 - Definitions
 - General principles for the use of food additives
 - Carry-over of food additives into foods
 - Food category system
 - Description of the standard

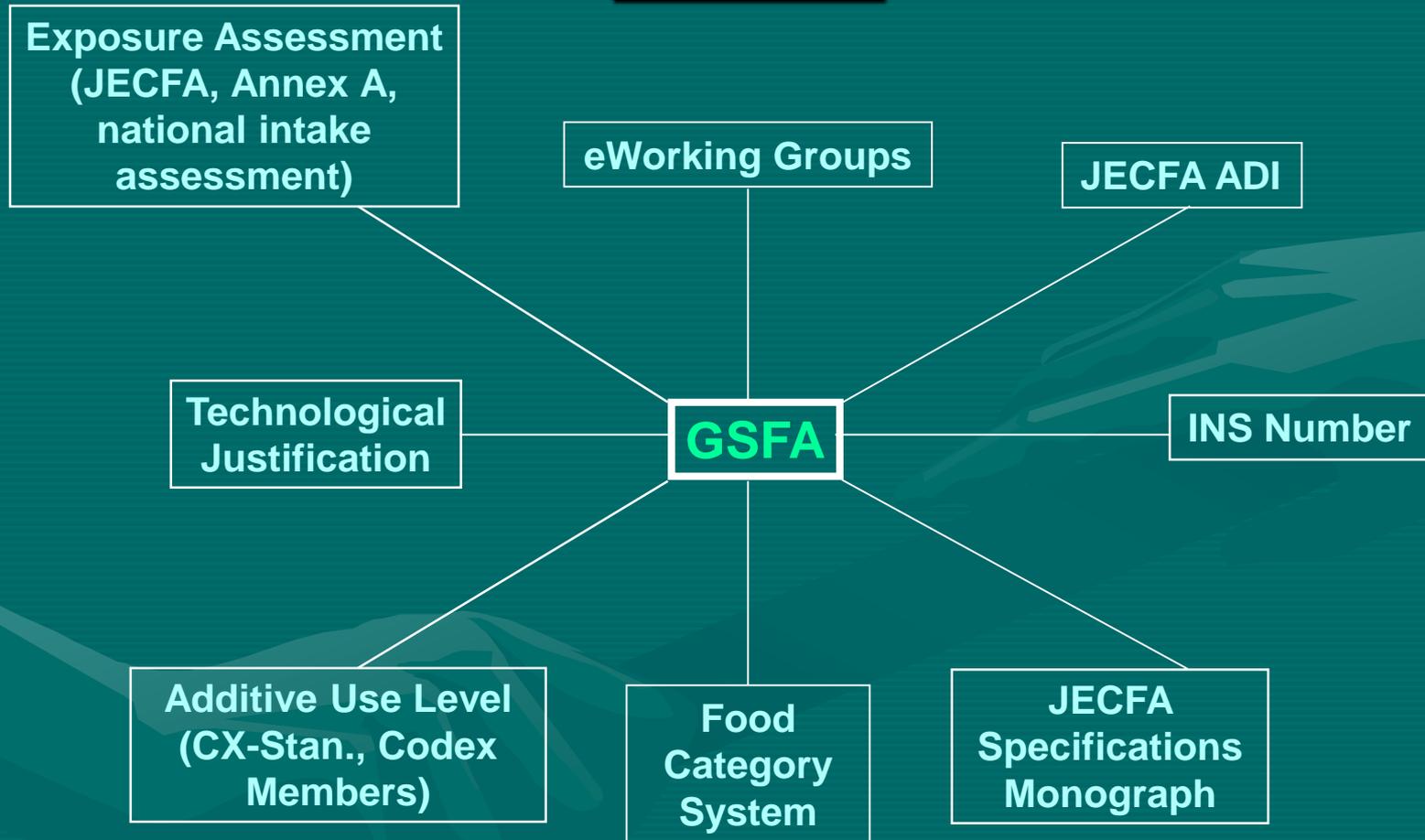
Structure of the GSFA

- **Annexes to the Preamble**
- **Annex A**
 - Guidelines for the development of maximum levels for the use of food additives with numerical acceptable daily intakes
- **Annex B**
 - Food category system
 - Hierarchical system
 - 16 main categories, total of 266 categories when including subcategories
 - Includes provisions for over 300 food additives
- **Annex C**
 - Cross reference of GSFA food category system with Codex Commodity Standards

Structure of the GSFA

- **GSFA Tables**
- **Table 1**
 - List of adopted food additive provisions sorted alphabetically by additive name
- **Table 2**
 - List of adopted food additive provisions sorted by food category (same information as in Table 1)
- **Table 3**
 - List of additives (and their functional classes) permitted for use in food in general in accordance with good manufacturing practice (GMP)
- **Annex to Table 3**
 - List of food categories (e.g. fresh fruit) which are excluded from the general conditions of Table 3

Requirements for Inclusion in the GSFA



Food Additive Requirements

- It must have an entry in the **International Numbering System (INS)**
 - Class Names and the International Numbering System for Food Additives (CAC/GL 036-1989)
 - A harmonized naming system for food additives
 - Also lists accepted technological functions
- Changes/Additions to the INS are administered by CCFA

CAC/GL 36-1989

4

SECTION 3

INTERNATIONAL NUMBERING SYSTEM FOR FOOD ADDITIVES

List in numerical order

INS No.	Name of Food Additive	Functional class	Technological purpose
100	Curcumins		
100(i)	Curcumin	Colour	<i>colour</i>
100(ii)	Turmeric	Colour	<i>colour</i>
101	Riboflavins		
101(i)	Riboflavin, synthetic	Colour	<i>colour</i>
101(ii)	Riboflavin 5'-phosphate sodium	Colour	<i>colour</i>
101(iii)	Riboflavin from <i>Bacillus subtilis</i>	Colour	<i>colour</i>
102	Tartrazine	Colour	<i>colour</i>
103	Alkanet	Colour	<i>colour</i>

Food Additive Requirements

- It must have been reviewed by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) and assigned an Acceptable Daily Intake (ADI).
 - For a new food additive to be evaluated by JECFA, it must be placed on the JECFA priority list. This list is administered by CCFA
 - Prior to reviewing the safety of a food additive, JECFA will put out a “call for data”. All interested members are invited to submit available toxicological and/or exposure data on the additive
 - JECFA meets once a year to examine the submitted data. If sufficient data is submitted, JECFA will either calculate a numerical ADI or list and ADI of “not specified”. JECFA’s review is subsequently published in a monograph (<http://www.who.int/foodsafety/chem/jecfa/publications/monographs/en/>).
 - JECFA may also publish an exposure assessment if sufficient data is provided

Food Additive Requirements

- A provision for the use of a food additive in a certain food category must be **submitted to CCFA for inclusion** in the GSFA
 - Initial provisions were taken from commodity standards developed by Commodity Committees
- Encouraged that Commodity Committees develop food additive lists consistent with the principles used in the development of the GSFA
 - CCFA coordinates with active commodity committees to achieve agreement between the GSFA and Codex standards administered by other Committees

Food Additive Requirements

- A provision for the use of a food additive in a certain food category must be **submitted to CCFA for inclusion** in the GSFA
 - New provisions can be submitted by a Codex Member state
 - Products containing the additive should be in international trade and technological justification as per the preamble should be provided
- The new provision must contain a **maximum use level** (ML - either numeric or Good Manufacturing Practice (GMP))
 - The ML should correlate to JECFA's ADI
 - Was the proposed use considered by JECFA in their exposure assessment?
 - Codex Members can submit their own exposure information

Food Additive Requirements

- A proposed provision is considered for inclusion in the GSFA by the CCFA via the **step process**:
 - Steps 1 and 2: The draft provision is prepared and entered into the GSFA as “proposed draft”
 - Step 3 – The proposed draft provision is circulated for comment by CCFA members
 - Step 4 – the comments are reviewed by CCFA
 - Step 5, 6, and 7 – provision is updated as a “draft”, circulated again for comment, and reviewed by CCFA
 - Step 8 – The provision is forwarded to the CAC for formal adoption into the GSFA

CCFA50 HIGHLIGHTS

The background is a solid teal color. In the lower half, there is a faint, semi-transparent silhouette of two hands shaking, symbolizing agreement or partnership. The hands are positioned horizontally, with the left hand on the left and the right hand on the right, meeting in the center.

Working Groups for CCFA50

(2018)

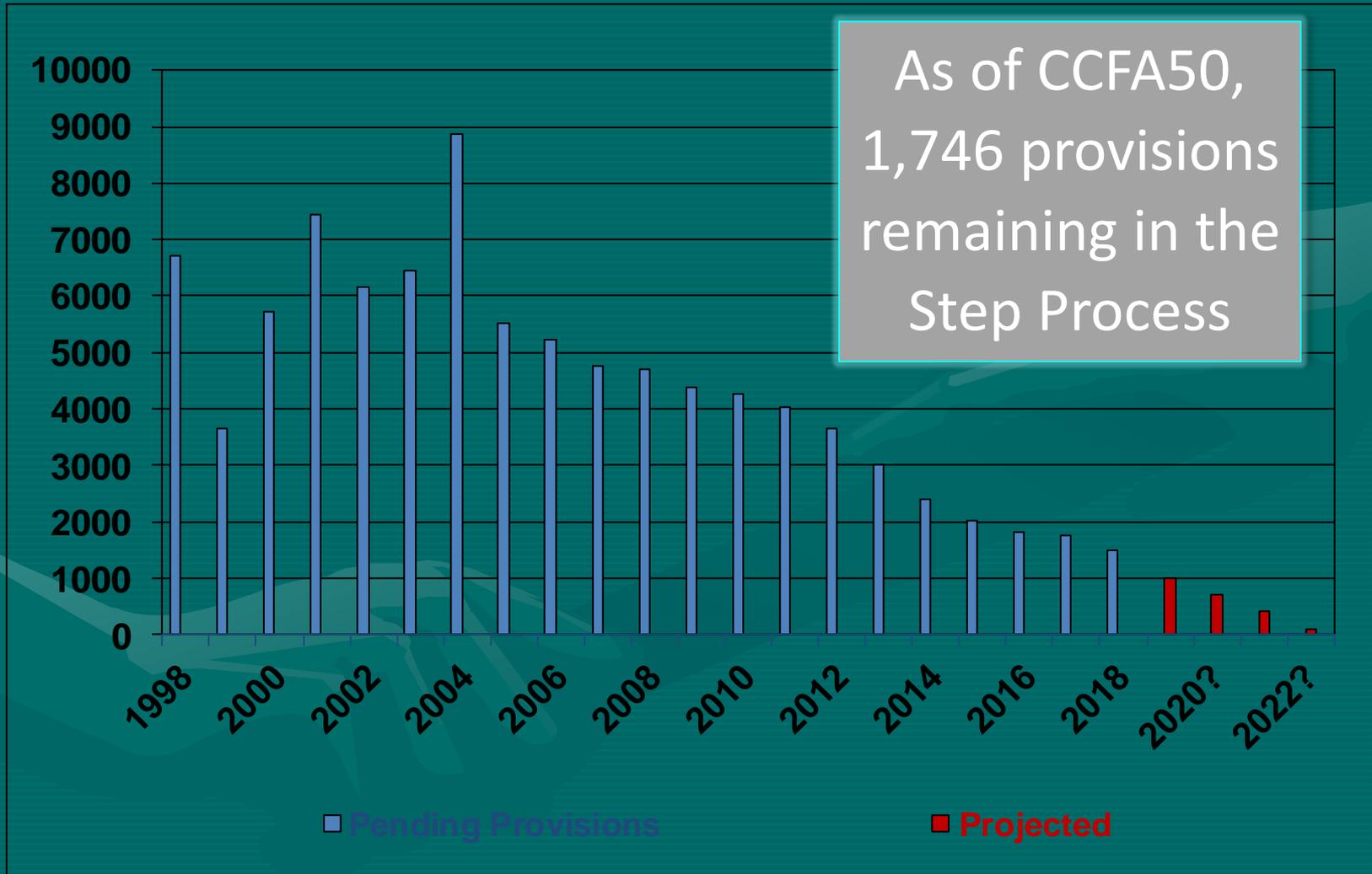
- Electronic Working Groups (eWGs)
 - GSFA (USA)
 - Endorsement/ Alignment of food additive provisions in commodity standards and the GSFA (Australia and Co-Chair USA)
 - International Numbering System (INS) (Belgium and Iran)
 - Use of Nitrates and Nitrites (EU and Netherlands)
- Physical Working Groups (pWGs)
 - GSFA (USA)
 - Endorsement/ Alignment of food additive provisions in commodity standards and the GSFA (Australia and Co-Chair USA)
 - INS (Belgium)
 - Priority List for JECFA (Canada)
- Discussion Papers
 - Use of the terms “plain” and “unprocessed” (Russian Federation)
 - Future Strategies for CCFA (Australia, Canada, China, Iran and USA)

CCFA50 Highlights - GSFA

Completed work on over 320 draft and proposed draft provisions; 183 forwarded to CAC41 for adoption

- Discontinued stabilizer provisions in FC 01.1.1 due to lack of Codex Member support
- Request to recirculate provisions with function of emulsifier or stabilizer in FC 01.1.2
- Referred for comment the use of food additives in commodity products (Codex Commodity on Spices and Culinary Herbs and Codex Commodity on Processed Fruits and Vegetables)
- Request to recirculate certain food additives in FCs 14.1.4 and 14.1.5
- Procedural change for Table 3 food additive provisions

CCFA50 Highlights - GSFA



CCFA50 Highlights - Alignment

- Completed work on alignment of 15 Commodity Standards, primarily addressing fish and shellfish, plus canned citrus fruit
 - Over 200 provisions forwarded to CAC41 for adoption
- Future Strategies
 - Japan agreed to be additional co-chair of the eWG
 - Agreed to utilize preparatory work undertaken by Codex observers
 - Endorsed partnership approach between CCFA and Commodity Committees

CCFA50 Highlights - INS

- Mono- and diglycerides of fatty acids
 - Functional class of glazing agent assigned
- Steviol glycoside:
 - Replace entry “steviol glycosides (INS 960)” with “Steviol glycosides from *Stevia rebaudiana* Bertoni (Steviol glycosides from Stevia)(INS 960a) “
 - Consequential amendments to GSFA with steviol glycosides from *Stevia rebaudiana* Bertoni (Steviol glycosides from Stevia) (INS 960a) and Rebaudioside A from multiple gene donors expressed in *Yarrowia lipolytica* (INS 960b(i))

CCFA50 Highlights - JECFA

- Twelve (12) food additives added to priority list
- Gold and silver removed from priority list
- Sodium Sorbate removed and relevant provisions revoked
- Gum Arabic- Not added as “Prebiotic” not food additive use
- Benzoates
 - Revised Note 301 to “interim maximum level until CCFA53”

CCFA50 Highlights – Other Discussions

- Nitrates and Nitrites
 - Considered issues associated with risk assessment and risk management
 - JECFA indicated current data does not support need for new risk assessment, but update to exposure assessment may be possible
 - Additional data needed to make informed decision on effective risk-management options
- Use of the terms “plain” and “unprocessed”
 - Discussion paper did not consider use of the terms within Codex but focused on national and other definitions
 - Committee divided on need for definitions and whether appropriate for CCFA to develop them
- Future Strategies for CCFA
 - Recommendations for the four (4) standing eWGs

CCFA51 NEW WORK AGENDA

Working Groups for CCFA51

(2019)

- Electronic Working Groups (eWGs)
 - GSFA (USA)
 - Endorsement/ Alignment of food additive provisions in commodity standards and the GSFA (Australia and Co-Chair USA and Japan)
 - INS (Iran and Co-Chair Belgium)
 - Use of Nitrates and Nitrites (EU and Netherlands)
- Physical Working Groups (pWGs)
 - GSFA (USA)
 - Endorsement/ Alignment of food additive provisions in commodity standards and the GSFA (Australia and Co-Chair USA and Japan)
 - INS (Iran and Co-Chair Belgium)
 - Priority List for JECFA (Canada)
- Discussion Papers
 - “Fresh,” “Plain,” “Unprocessed,” and “Untreated” (Russian Federation)
 - eWG Alternative to Note 161 (Co-Chairs EU and USA)

CCFA51 New Work - GSFA

- Draft and proposed draft provisions for:
 - Colours in the Step process in FCs 05.2, 05.3 and 05.4
 - All remaining Table 1 and 2 of the GSFA in FCs 01.0 through 16.0
 - Gum ghatti (INS 419) and tamarind seed polysaccharide (INS 437) in Table 3
 - Trisodium citrate in FC 01.1.1
 - In FC 01.1.2 with the technological function of emulsifier and stabilizer
- Request for and compile information on the:
 - Available relevant dietary exposure data and the actual use level and technological justification for food additives in FCs 14.1.4 and 14.1.5
 - Technological justification for the use of preservatives and anticaking agents for surface treatment of mozzarella with high moisture content covered by the Standard for Mozzarella (CXS 262-2006)

CCFA51 New Work - Alignment

- Alignment of Commodity Standards:
 - For which there was no active Commodity Committee:
Sugars; Natural mineral waters; Cereals, pulses and legumes,
and Vegetable proteins
 - The Ripened-cheese Commodity Standards (from Codex
Committee Milk and Milk products) with the assistance of
IDF
- The addition of a footnote to Table 3
- Proposed revisions to the adopted provisions in FCs
13.1.1, 13.1.2 and 13.1.3 for ascorbyl palmitate (INS
304) and ascorbyl stearate (INS 305)

CCFA51 New Work - INS

- Consider replies to the circular letter on additions and changes to INS
- Assign an INS number to β -Carotene-rich extract from *Dunaliella salina*

CCFA51 New Work - JECFA

Codex members and Observers wishing to submit comments at Step 3 on the proposed draft Specifications for the Identity and Purity of Food Additives

<http://www.fao.org/fao-who-codexalimentarius/resources/circular-letters/en/>

CCFA51 New Work – Other Discussions

- “Fresh,” “Plain,” “Unprocessed,” and “Untreated” (Draft by Russian Federation)
- Nitrites and Nitrates (Chaired by the EU and, Co-Chaired by the Netherlands)
- eWG Alternative to Note 161 (Co-Chaired by USA and EU)
 - To develop wording for an alternative to Note 161 relating to the use of sweeteners consistent with Section 3.2 of the Preamble to the GSFA and the Statement of Principles in the Procedural Manual to address concerns of those Codex Members requiring significant energy reduction or food with no added sugars when sweeteners were used and those Codex Members requiring flexibility in the use of sweeteners;
 - Subject to agreement on the wording of an alternative, review CXFA 15/47/13, in particular recommendations 1 to 6, in the context of pending and adopted provisions.

CCFA51 Active Involvement

- GSFA
 - First circular issued 29 June 2018
- INS
 - CL 2018/26-FA, April 2018 with deadline of **15 September 2018**, Annex 1 & 2
 - First circular issued 16 July 2018
- Alignment
 - First circular issued 6 July 2018
- eWG Alternative to Note 161
 - Invitation to participating in this eWG—Contact EU Codex Contact Point (Sante-Codex@ec.europa.eu) as well as to the Codex Contact Point of the United States (ccfa@cfsan.fda.gov) by **16 July 2018**
 - First circular to be issued 31 July

Further Information

GSFA is available at the Codex website:

<http://www.fao.org/fao-who-codexalimentarius/home/en/>

Versions of the full GSFA (including draft and adopted provisions) are made available as information documents in PDF format prior to each meeting of the CCFA:

<http://www.fao.org/fao-who-codexalimentarius/committees/committee/en/?committee=CCFA>