



IFU's Overview: Unveiling Initiatives and Vital Facts Shaping the Fruit and Vegetable Juice Industry

ICBC 2023

Tatiana Campos, Executive Director

The image features a vibrant orange background with several slices of fresh orange arranged in a pattern. A semi-transparent orange horizontal band is centered across the image, containing the text "Getting to Know Us" in a white, bold, sans-serif font.

Getting to Know Us



Behind the Name IFU



International Fruit and Vegetable Juice Association (IFU)

Founded in 1949 in Paris, France.

Mission: Serve as the global voice of the fruit and vegetable juice industry, championing the production and consumption of juices and related products worldwide.



Today 200+ members in 80 countries



Member types: Associations | Corporate | Supporters | University





Executive Committee



Kees Cools
President



Demir Sarman
Vice President



Klaus Heitlinger
Treasurer



Dirk Lansbergen
Past President



Wouter Lox
Western Europe



Maxim Novikov
CIS



Diane Nury
North America



Slim Othmani
Africa



Tatiana Campos
South America



Staff



Tatiana Campos
Executive Director



Aintzane Esturo
Technical Director



Maria Schlaffer
Marketing Director



Dominique Vasseur
Membership Support Manager



IFU: The Worldwide Voice of the Juice Industry

IFU is the registered NGO representing the juice industry at CODEX.

Legacy:

- Developed 76 Chemical and Microbiological Methods and 20 Recommendations recognized worldwide.

Impact on CODEX Standard for fruit juices and nectars (CXS 247-2005):

- Total Provisions: 74
- IFU Methods recommended: 45 (+60%)



Food and Agriculture
Organization of the
United Nations



Main Pillars

IFU PRODUCT PILLARS

1 SCIENCE

2 STANDARDS

3 SUSTAINABILITY

4 MARKETS

IFU VALUE PROPOSITION

INFLUENCE

INDUSTRY BEST PRACTICE

INSIGHTS

INNOVATION

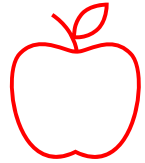
INFORMATION



Initiatives and Facts Shaping the Fruit and Vegetable Juice Industry



Worldwide dynamics impacting the juice industry



Nutrition:

Nutritional profiling / Sugar Tax and Claims



Labelling:

Front of Pack Nutrition Labelling, Allergen Labelling,



Pesticide:

New MRLs, revocation of old pesticides and introductions of new ones.



Control of Food Fraud.



Additives:

What additives are approved in Juices, Nectars and Juice based beverages.



Contaminants:

Review of levels of Lead and Cadmium in juices. Patulin.



Hygiene:

HACCP, standard of water used in food processing, allergen controls.



Methods of Analysis:

Review of Codex methods approved



IFU Commissions and WGs

IFU members' specialist groups voluntarily review relevant topics, staying updated with the latest in their field.

They contribute to the formation of IFU opinions or statements and develop Methods of Analysis and Reports.

All members can join these Commissions and Working Groups.





Legislation Commission



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Our Primary Project:

Review of the current standard for fruit juices and nectars (Standard 247, 2005) and develop a new international standard for vegetable juices.

- I. Seek support to establish a CODEX task force.
- II. Citrus taxonomy & Vegetable Juice WGs.
- III. Formulate the proposal for definition of sugar/energy reduced juice.

Other topics recently discussed:

- EU Proposal to Amend Fruit Juice Directive (sugar-reduced juices included).
- Amendment of General Standard for Fruit Juices and Nectars - Grape Juice Brix.
- FDA's Closer to Zero initiative.
- Opinion about Dimethyl Dicarbonate in fruit juices and nectars.
- Proposed Draft East African Standard for Tomato Products.
- South African Draft Regulations relating to the labelling and advertising of Foodstuffs.
- EWGs - CCFL Sustainability claims and Management of Unsupported Pesticides (CCPR).

CODEX ALIMENTARIUS
INTERNATIONAL FOOD STANDARDS



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World Health
Organization

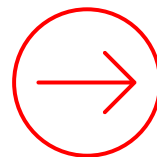


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CODEX STAN 247

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Botanical Name	FRUIT'S COMMON NAME	Minimum Brix Level for Reconstituted Fruit Juices and Reconstituted Purée	Minimum Juice and/or Purée Content (% v/v) for Fruit Nectars
<i>Citrus limon</i> (L.) Burm. f. <i>Citrus limonum</i> Rissa	Lemon	8.0 ¹⁷	According to the legislation of the importing country
<i>Citrus paradisi</i> Macfad	Grapefruit	10.0 ¹⁷	50.0
<i>Citrus paradisi</i> , <i>Citrus grandis</i>	Sweetie grapefruit	10.0	50.0
<i>Citrus reticulata</i> Blanca	Mandarine/ Tangerine	11.8 ¹⁷	50.0
<i>Citrus sinensis</i> (L.)	Orange	11.8 – 11.2 ¹⁷ and consistent with the application of national legislation of the importing country but not lower than 11.2. It is recognized that in different countries, the Brix level may naturally differ from this range of values. In cases where the Brix level is consistently lower than this range of values, reconstituted juice of lower Brix from these countries introduced into international trade will be acceptable, provided it meets the authenticity methodology listed in the General Standard for Fruit Juices and Nectars and the level will not be below 10°Brix.	50.0



Change to Sweet Orange Group

***Sensory Working Group for Citrus Evaluation (10 members):**

This group will be responsible for developing a protocol to evaluate the "new" hybrids and determine if they possess the appearance, aroma, and taste qualities accepted as characteristic of orange juice.



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Fruit washing and sanitation (2022)

In development:

- Thermo-valorisation.
- Influence of temperature and density in mixing.
- Pectin valorisation.

IFU University

- Citrus extraction processes.
- Inactivation kinetics.
- Pasteurization: thermal, HPP, ohmic, PEF...
- Packaging, quality and nutrition.



Other Projects:

EU financed HiStabJuice project
HISTABJUICE





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Examples of IFU methods for citrus juices:

- IFU 45 (2005): Det. Essential oils
- IFU 46 (2005) Det. of Pectinesterase
- IFU 58 (2005): Det. of Hesperidine
- IFU 59 (2005): Total carotenoids
- IFU 60 (2005); Det. of centrifugeable pulp
- IFU 70 (2005): Cell content of pulp in juices
- IFU 83 (2017): Colour measurement in blood oranges

CHEMICAL METHOD OF ANALYSIS No.17a 2022

ENGLISH

Determination of the ascorbic acid content of juices, purées and nectars by HPLC

17a (2022) Nov

CHEMICAL METHOD OF ANALYSIS No.17c 2023

ENGLISH

Determination of the ascorbic acid content of juices, purées and nectars using an enzymatic procedure.

17c (2023) Jun

RECOMMENDATION No.18 2023

ENGLISH

Review of approaches that may be used to analyse for pulpwash and second extracts of citrus fruit.

R18 (2023) Sep

New Developments:

- I. NMR det. for specific parameters
- II. Cyanide analysis
- III. Formol index measurements (automated systems)

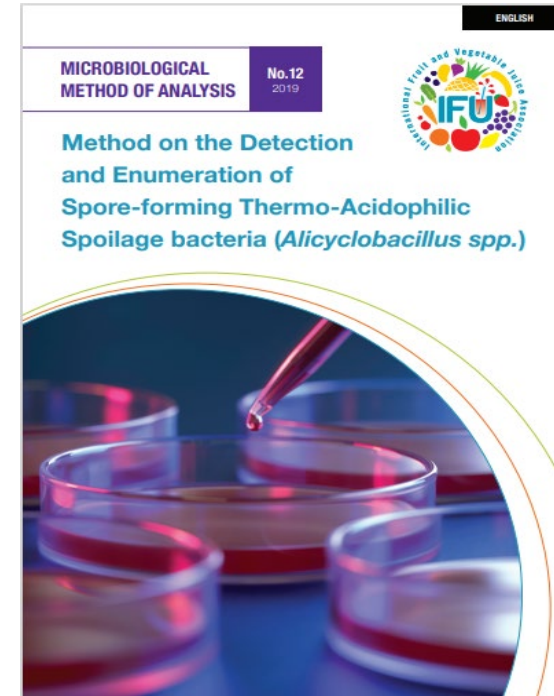
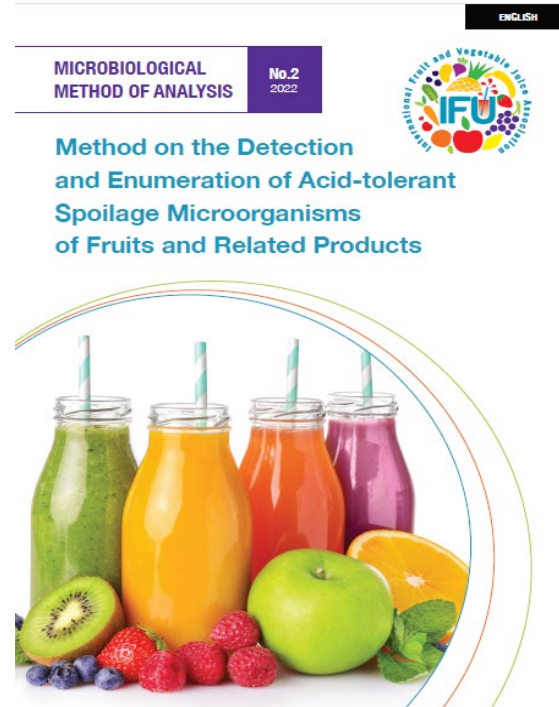




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New developments:

- MM 13: Det & Enum of Acid-tolerant Clostridia.
- MM14 Det of Heat Resistant Mould spores. Reduce analysis time.
- MM15 Det of Yeasts & Moulds (microscopy).
- Recommendations: Stability test for juices and drinks and Sterilization parameters
- List of reference strains



ISO/TC 34

ISO/TC 34/SC 9
Microbiology

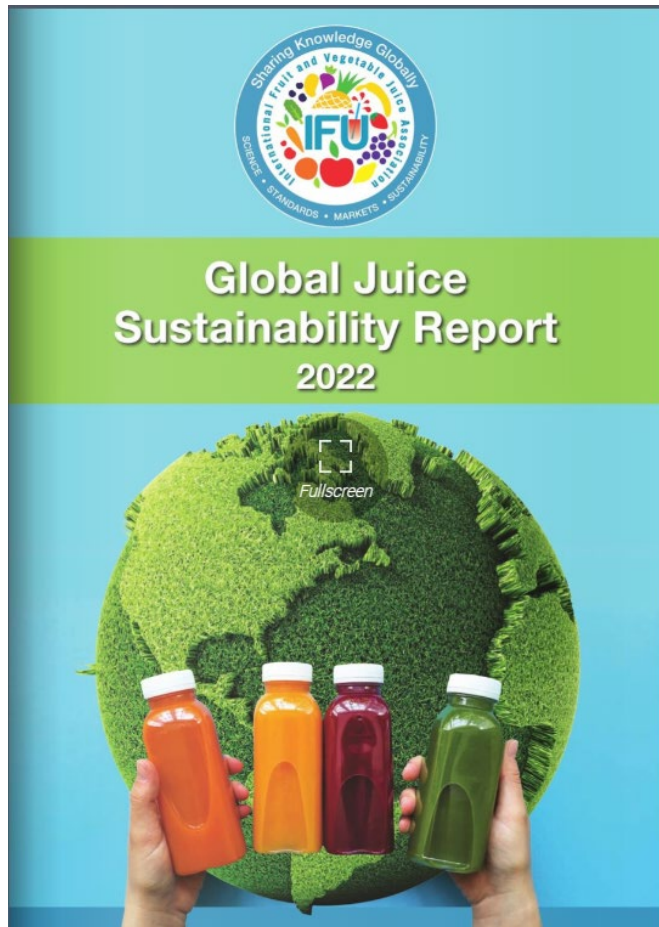
Liaison type A fully implemented. IFU experts in 13 Working Groups



Sustainability Working Group



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Reports from citrus producers from:

- Nigeria
- Argentina
- Brazil
- Australia

Juice Environment Deep Dive (JEDD) Talks

- Biodiversity (28/03)
- Food loss and waste (18/10) and Water (15/11)

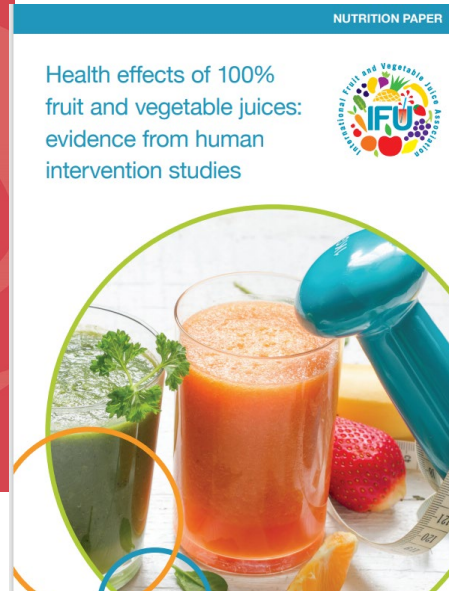
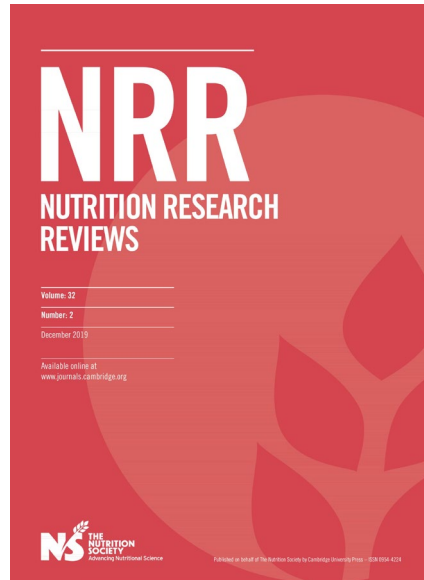


- Towards circularity in food packaging
- Seeking Sustainability to reduce the environmental impact
- How to Engage your Shoppers with your Innovations in Sustainability

Nutrition Working Group



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Other activities:

- Follow-up the dietary recommendations in US and Canada
- IFU Comments to WHO Guideline on carbohydrate intake
- Recommendation on dietary fibres analysis in Fruit juices

JUICE	Anthropometry	Body composition	Blood pressure	Vascular function	Lipid profile	Glucose homeostasis	Inflammation	Oxidative stress	Cognitive function	Exercise performance	Gut microbiota	Bone metabolism	UTI & bacterial inf.	Uric acid
Orange (blonde)														
Orange (blood or red)														
ORANGE (blonde and red-blood)														
Grapefruit														
Mandarin														
Lemon														

Juice probably has positive effect

Juice could have positive effect

Juice probably has no effect or it is unclear

Juice could have negative effect

Juice probably has negative effect



The background of the slide is a close-up, top-down view of numerous thin slices of lemons. The slices are arranged in a somewhat overlapping pattern, filling the entire frame. The color is a vibrant yellow, with some green visible on the outer edges of the slices. The texture of the lemon pulp and the white pith is clearly visible.

Sharing knowledge globally: Events, IFU University and Reports



Across Borders: IFU's International Gatherings



Roadshow IFU-SGF Brazil



Juice Conference Cape Town, South Africa



Roadshow IFU-SGF Mexico



Roadshow IFU-SGF Argentina



IFU Technical Workshop Austria

Only in the first semester of 2023, IFU organized events and technical seminars in Mexico, Austria, Brazil, Argentina, and South Africa, gathering more than 600 people from the global juice industry.



Upcoming IFU Events



Juice Summit 4-5 October 2023



IFU Webinars with Bryant Christie inc
Pesticides MRLs – 26th Oct



Roadshow 2023: Bogotá – 28th Nov /
Lima 1st Dec.



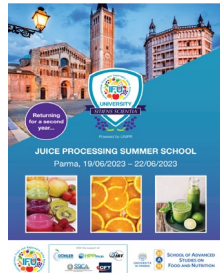
Technical Workshop in Germany
March 2024



Upcoming IFU Events



IFU Juice Conference
Bengaluru, India- 27th-30th May 2024
(date TBC)



Parma University TBD 2024



Roadshow 2024: Southeast Asia
(TBC).



IFU University – The Mission

Returning for a second year...

IFU UNIVERSITY
SITIENS SCIENTIA
Powered by UNIPR

JUICE PROCESSING SUMMER SCHOOL
Parma, 19/06/2023 – 22/06/2023

To bring valuable knowledge from IFU, University and Industry professionals to the juice Community, supplying a complete overview of the science behind high quality juice processing.



SCHOOL OF ADVANCED STUDIES ON FOOD AND NUTRITION



Keeping Members Informed on Global Juice Matters



In 2023, IFU members received 96 communications regarding crops, legislations, science, and regulatory aspects related to the global juice industry.

The background of the image is a solid, vibrant orange color. Scattered across this background are several thin, circular slices of oranges, showing their internal segments and white pith. A semi-transparent horizontal band of a slightly darker orange color runs across the middle of the image, serving as a backdrop for the text.

Thank you

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