

# CODEX ALIMENTARIUS COMMISSION



Food and Agriculture  
Organization of the  
United Nations



World Health  
Organization

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Agenda Item 9

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## JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEX COMMITTEE ON NUTRITION AND FOODS FOR SPECIAL DIETARY USES

Forty-fourth Session

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### DISCUSSION PAPER ON METHODS OF ASSESSING THE SWEETNESS OF CARBOHYDRATESOURCES IN THE STANDARD FOR FOLLOW-UP FORMULA (CXS 156-1987)

(Comments by Morocco, Panama, Thailand)

#### Morocco

##### Position nationale:

Le Maroc est en faveur de la méthode décrite sous réserve d'affiner le protocole en tenant compte des différents biais évoqués (Le nombre d'échantillons, les différentes concentrations, le ou les panels des testeurs, Calcul du degré d'incertitude...) et de la présenter au CCMAS pour validation.

#### Panama

Panama welcomes the document on methods for assessing sweetness of carbohydrate sources. We propose a comprehensive review of current methods to ensure that they are accurate and adequately reflect perceptions of sweetness in different cultures and populations.

This information will be valuable to producers and regulators, allowing them to tailor their products to consumer preferences.

Panama expresses its gratitude for the development of the document on methods for evaluating the sweetness of carbohydrate sources. We recognize the importance of establishing evidence-based policies that regulate food practices in the industry, especially for the protection and well-being of children. We value the efforts of the Electronic Working Group in finding a method that guarantees food safety and public health.

A comprehensive review of current methods used to assess sweetness, with the aim of ensuring that they are accurate and adequately reflect sweetness perceptions in different cultural and population contexts, is needed. Sensory perceptions can vary significantly between different cultures, which may influence the acceptability of complementary preparations.

Incorporating additional sensory evaluation methods to gain a more complete picture of the impact of sweetness on the acceptability and consumption of follow-up formulas is important. This will not only contribute to the development of more attractive products for consumers, but will also allow for better compliance with nutritional regulations.

The information obtained through additional studies will be valuable to both producers and regulators. This will allow products to be tailored to consumer preferences, striking a balance between product acceptance and the promotion of a healthy diet.

We support the inclusion of new digital technologies (such as electronic tongues and artificial intelligence methods) in sweetness assessment, as they can provide an innovative and accurate approach to measuring sweetness intensity in foods, improving regulatory compliance.

Spanish:

Panamá agradece el documento sobre métodos para evaluar el dulzor de las fuentes de carbohidratos. Proponemos una revisión exhaustiva de los métodos actuales para asegurar que sean precisos y reflejen adecuadamente las percepciones del dulzor en diferentes culturas y poblaciones.

Esta información será valiosa para los productores y reguladores, permitiéndoles adaptar sus productos a las preferencias del consumidor.

Panamá expresa su agradecimiento por la elaboración del documento sobre métodos para evaluar el dulzor de las fuentes de carbohidratos. Reconocemos la importancia de establecer políticas basadas en evidencias

que regulen las prácticas alimentarias en la industria, sobre todo para la protección y bienestar de los niños. Valoramos el esfuerzo del Grupo de Trabajo Electrónico en la búsqueda de un método que garantice la seguridad alimentaria y la salud pública.

Una revisión exhaustiva de los métodos actuales utilizados para evaluar el dulzor, con el objetivo de asegurar que sean precisos y reflejen adecuadamente las percepciones del dulzor en diferentes contextos culturales y poblacionales es necesario. Las percepciones sensoriales pueden variar significativamente entre distintas culturas, lo que puede influir en la aceptabilidad de los preparados complementarios.

La incorporación de métodos de evaluación sensorial adicionales para obtener una visión más completa del impacto del dulzor en la aceptabilidad y el consumo de los preparados complementarios es importante. Esto no solo contribuirá a la formación de productos más atractivos para los consumidores, sino que también permitirá un mejor cumplimiento de las regulaciones nutricionales.

La información obtenida a través de estudios adicionales será valiosa tanto para los productores como para los reguladores. Esto permitirá adaptar los productos a las preferencias del consumidor, generando un equilibrio entre la aceptación del producto y la promoción de una dieta saludable.

Apoyamos la inclusión de nuevas tecnologías digitales (como las lenguas electrónicas y métodos de inteligencia artificial) en la evaluación del dulzor, ya que pueden brindar un enfoque innovador y preciso para medir la intensidad del dulzor en alimentos, mejorando el cumplimiento de las normativas.

#### Thailand

1. In principle, we agree with the proposed method, DIN EN ISO 5495:2016 (sensory analysis), which applies comparative assessment, to measure the relative sweetness of the carbohydrate ingredient against lactose as a reference material. We recommend that the proposed method should be submitted to CCMAS for evaluation to determine its suitability for compliance testing for provision 3.1.3 c, footnote 4 in CXS 156-1987. Nevertheless, it should be considered that the sensory evaluation requires trained panelists, and the sweet perception threshold values can vary between individuals and across different countries.

2. Referring to the use novel electronic methods which apply electronic sensors (e.g. e-tongue) combining with artificial intelligence. It would be highly interesting to combine these novel digital technologies with methods quantifying the carbohydrate content in food.

The use of electronic methods with a taste sensor may be practical methods for assessing sweetness of carbohydrate sources in comparison to lactose for products based on non-milk protein. Meanwhile, sufficient additional information and researches are required for the validation of this mentioned methods.

Relevant bodies and CCMAS may consider the comparison of the mentioned method with methods of sensory analysis.