

CODEX ALIMENTARIUS COMMISSION



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Organization of
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World Health
Organization

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Agenda Item 6

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

Thirty-seventh Session
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PROPOSED DRAFT DEFINITION FOR BIOFORTIFICATION

Comments of Colombia, India, Kenya, Malaysia and Thailand

COLOMBIA

A continuación, se indica la posición del país frente al documento de Biofortificación, según la solicitud del comité de remitir las observaciones a las recomendaciones por escrito, de conformidad con el Procedimiento uniforme para la elaboración de normas del Codex y textos afines.

Recomendación	Posición Colombia
<p>Definiciones propuestas</p> <ol style="list-style-type: none">Biofortification is the process by which the essential nutrient quality of food including essential amino acids and fatty acids, is improved through the use of agricultural methodologies, as well as reducing anti-nutritional factors with the aim of making the nutrients bio-available to the body after ingestion, in order to provide a health benefit.Biofortification is the process by which food is enhanced by increased essential nutrients to a measurable level ensuring an increased level of absorption and a reduction of anti-nutritional elements, resulting in a public health benefit.Biofortification is the process by which nutritional quality of food is improved through intervention in the source organism by increasing or adding the essential nutrient(s) and/or reducing anti-nutrients.Biofortification is the process by which the essential nutrient quality of food including essential amino acids and fatty acids, is improved through the use of agricultural methodologies, with the aim of making the nutrients bio-available to the body after ingestion, in order to provide a health benefit.	<p>Colombia se declara en reserva, con respecto a las definiciones propuestas para Biofortificación.</p>

INDIA

Section 11: Final Proposed Definitions:

India supports option (i) of the definition with an inclusion of a word “indigenous” beforeagriculture methodologies....” The same may be reworded as follows:

Bio-fortification is the process by which the essential nutrient quality of food including essential amino acids and fatty acids, is improved through the use of **indigenous** agricultural methodologies as well as reducing anti-nutritional factors with the aim of making the nutrients bio-available to the body after ingestion, in order to provide a health benefit.

Section 12: Issues that may require further discussion:

India proposes the following issues for further discussion:

- i. The issue of Anti-nutrients should be included.
- ii. Bioavailability: Bioavailability is a functional end point (haemoglobin) and may not fit into the definition rather the term “absorption” can be included as given in modified definition.
- iii. Bioprocessing: Not agreed, as it is a post-harvest technology and may not fit into the definition.

KENYA

This agenda item was discussed in the context of para 5 of agenda item CX/NFSDU 15/37/2 on matter referred by CAC.

Issue: Reply to CAC

Position: Kenya supports the development of definition for the term Biofortification taking into consideration that CCFL requested the definition for use in labeling purposes so as to provide a common understanding of the term to both the public as well as to the regulatory bodies.

Issue: PROPOSED DRAFT DEFINITION FOR BIOFORTIFICATION

Kenya support the forth definition “*Biofortification is the process by which the essential nutrient(s) in food is improved through the use of conventional breeding methodologies with the aim of making the nutrients available at adequate levels in order to improve and maintain health*”.

MALAYSIA

Malaysia supports the first definition as in CX/NFSDU 15/37/6. However, Malaysia would like to include other process of biofortification ie. breeding and modern biotechnology in the definition as follow:

Biofortification is the process by which the essential nutrient quality of food including essential amino acids and fatty acids, is improved through **breeding, modern biotechnology tools and** the use of agricultural methodologies, as well as reducing anti-nutritional factors with the aim of making then nutrients bio-available to the body after ingestion, in order to provide a health benefit.

THAILAND

General comments

We agree with the document in principle.

Specific comments

However, we would like to propose our comments on specific sections of the document as follows.

FINAL PROPOSED DEFINITIONS

We agree with the final proposed definition in option ii, however the proposed definition should be slightly revised, because the biofortification aims to improve bioavailability that could or could not decrease anti-nutritional elements, resulting in a public health benefit. Therefore, the final proposed definition should be read as follows:

“*ii. Biofortification is the process by which food is **improved through the use of agricultural methodologies and** enhanced by increased essential nutrients to a measurable level ensuring an increased level of absorption and/or a reduction of anti-nutritional elements, resulting in a public health benefit.*”

ISSUES THAT MAY REQUIRE FURTHER DISCUSSION

Our comments on this section are as described below.

- Biofortified foods should have improved absorption, in particular the increase of absorption level and bioavailability. Meanwhile, a reduction of anti-nutritional elements could or could not occur, because many of them are dietary fiber such as phytate in rice that causes a reduction of iron absorption.
- In food industries, the use of the term “bio-processing” can cause confusion with the term “fermentation”.