



## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### CODEX COMMITTEE ON NUTRITION AND FOODS FOR SPECIAL DIETARY USES

#### Thirty-eighth Session

Hamburg, Germany, 5 – 9 December 2016

#### PROPOSED DRAFT DEFINITION FOR BIOFORTIFICATION

*Comments of Ecuador, European Union, India, Nigeria, Peru, Thailand and the African Union*

#### ECUADOR

##### (i) Comentarios generales

Ecuador agradece el trabajo realizado, sin embargo mantiene su reserva de emitir observaciones a este documento de anteproyecto, toda vez que en Ecuador no se contempla aún esta práctica de Bioenriquecimiento.

Adicional se considera que para la definición que propone este anteproyecto se deberían considerar criterios objetivos, como los valores de referencia de nutrientes, y no solo un aumento de la cantidad de nutrientes en comparación con los productos no enriquecidos.

##### (ii) Comentarios específicos

Ecuador en base al comentario general expuesto no posee comentarios específicos al presente documento.

#### EUROPEAN UNION

##### [Mixed competence](#)

##### [European Union vote](#)

The European Union and its Member States (EUMS) would like to express their gratitude to the Republic of Zimbabwe and the Republic of South Africa for their work as Chairs of the electronic working group and would like to express their appreciation for the possibility to comment on the proposed Draft Definition for Biofortification and on the proposed criteria to be covered by the definition, as presented in CX/NFSDU 16/38/7, Appendix I and II.

The EUMS would like to make the following comments on the recommendations proposed by the co-Chairs:

##### **Scope and purpose of the definition for ‘biofortification’**

The EUMS would like to question the exact scope of the definition for ‘biofortification’ as proposed by the co-Chairs. The EUMS consider that the scope and purpose of defining this term and how it will be used needs to be further discussed. The EUMS believe that in the absence of a clear scope and in particular which methods of production are considered to be included in the scope, the most appropriate term cannot be determined for the definition.

In addition, in the absence of a clear scope there is a risk of misuse of the term resulting in the consumer being misled as to the benefit of the food and the production method used. The EUMS consider that various production methods (criterion 1: “*all potential types of food production processes*”) would fall within the proposed definition i.e. “*the process by which the nutrient content of food produce and products is increasing by a measurable amount in a readily absorbable form, through an intervention in the source organism for an intended purpose*” (for example, genetic engineering techniques). However, the EUMS consider that some food production processes would not fall under the definition as they do not intervene in the source organism (for example, UV-treated milk). In this context the EUMS would appreciate a discussion to clarify exactly which production methods are considered to be included.

Moreover, the EUMS consider that the purposes for the addition of nutrients to food are clearly stated in the Codex General Principles for the Addition of Essential Nutrients to Foods (CAC/GL 9-1987). Furthermore the EUMS consider that a food that has been ‘biofortified’, may use nutrition claims as defined by the Codex

Guidelines for Use of Nutrition and Health Claims (CAC/GL 23-1997) if the conditions laid down are met; for example, a 'nutrient comparative claim' or a 'nutrient content claim' may be used for such foods.

The EUMS consider that it is important to ensure that by defining 'biofortification', the eventual use of the definition would not lead to consumers being misled as to the method of production, the nutrient level of the food and the benefit that may be obtained from consuming such a food as opposed to a food that has been fortified by traditional means (as defined in the Codex General Principles for the Addition of Essential Nutrients to Foods (CAC/GL 9-1987)). It is therefore important to clarify what is the distinction between "biofortification" and conventional addition of nutrients to foods.

The co-Chairs recommend *"that the CCNFSDU and CCFL consider a discussion on the labelling of biofortified foods once a definition for Biofortification has been adopted"*. The EUMS would like to raise their concerns regarding the potential use of a definition for 'biofortification' for labelling purposes in the light of the above explanations. At this point, as the scope of the term 'biofortification' has not been clearly defined and the term has not been agreed yet, the EUMS cannot provide any specific comments on the criteria to be included in the definition, the proposed draft definition, and on where and how such a definition would be placed and used.

The EUMS also note that the FAO has developed a background paper on "Biofortification: A Food Based Approach for Improving Micronutrient Intake" as part of a broader portfolio of food-based approaches to prevent micronutrient deficiencies. The paper aims to inform policy makers on the "biofortification" process, outlining development and implementation issues and providing policy considerations to inform further discussions on the topic. Its publication is expected by the end of this year and this Committee should take it into consideration in its deliberations before advancing a draft proposal for a definition for "biofortification" in the step procedure.

#### **Use of the term 'biofortification'**

The EUMS consider that development of a definition for the term 'biofortification' at Codex level would be problematic in the EU, in that the term 'bio' in a number of EU languages is associated with organic food by consumers. Furthermore, EU legislation on organic production lays down that the use of the terms 'bio' and 'eco' are regarded as referring to the organic production method when they are used in the labelling, advertising material or commercial documents of a food product, independently of the language used, and can only be used for organically produced foods. Legislation on organic farming plays an important role in the EU's agricultural policy framework and aims to ensure consumer confidence in products that are labelled as organic, in addition to providing conditions under which the sector can progress in line with production and market developments.

According to the comments received from Codex members, *"the term 'biofortification' has been used in the past twenty years in various languages, and is widely known and used throughout the world."* The EUMS do not share this view as the term 'biofortification' is not used in the EU. The EUMS would therefore appreciate precise information on the basis for this statement.

### **INDIA**

#### **Specific Comment:**

**Recommendation 1:** Revision of the proposed criteria for the Biofortification Definition.

**Criteria 1: India suggests the following amendment to the text:**

All potential types of primary food production processes, used for biofortification of food **except addition of nutrients during the processing of foods, for biofortification through conventional plant breeding,** which include all potential organisms (animal and animal feed, plant and plant, fungi and yeasts and fertilizers thereof). That may be involved in bio-fortification.

#### **Rationale:**

- A. It is necessary to clarify that biofortification differs from addition of nutrients during normal food processing which is done post production.
- B. India supports biofortification only through Conventional Plant Breeding.
- C. Biofortification does not apply to animal feed and fertilizers.

**Recommendation 2:** The proposed draft definition of Biofortification

India supports the proposed definition with the following amendment:

Biofortification is the process by which the nutrient content **and/or nutrient quality** of food produce and products is increased by a measurable amount in a readily absorbable form, through an intervention\*(**that**

**does not include addition of nutrients during the processing of foods)** in the source organism for an intended purpose\*

\*To be determined by competent National/Regional Authority.

**Rationale:**

Biofortification should lead to an increase in either the nutrient quality or quantity or both of the food product, demonstrable by a public health benefit.

**Recommendation 3:** Where will be the definition be used.

India support the recommendation and suggest that the definition also be referenced in the 'General Principles for the Addition of Essential Nutrients to Foods (CAC/GL 9-1987)'

**Recommendation 4:** CCNFSDU consider retaining the "Biofortification" terminology.

India suggests retaining the "Biofortification" terminology.

**Rationale:**

The term "agro-fortification" would limit the definition to agricultural crops and may not adequately capture all relevant method. Also, that the use of new terminology could lead to confusion in the population and might be incorrectly interpreted.

**Recommendation 5:** The co-Chairs recommend that the CCNFSDU and CCFL consider a discussion on the labelling of biofortified foods once a definition for Biofortification has been adopted

India accepts the recommendation that the CCNFSDU and CCFL consider a discussion on the labelling of biofortified foods once a definition for Biofortification has been adopted.

## NIGERIA

**Recommendation 2 Definition**

Nigeria supports the definition for biofortification as proposed by the eWG chaired by Zimbabwe and South Africa, based on the criteria in appendix II with slight modification to read "Biofortification is the process by which the nutrient content of food produce ~~and products~~ is increased by a measurable amount in a readily absorbable form, through an intervention\* in the source organism for an intended purpose".

**Recommendation 3 Where the Definition will be used**

We support adoption of the recommendation that the definition of biofortification be placed in Guidelines for Use of Nutrition and Health Claims (CAC/GL 23-1997).

**Rationale:** Given that the definition of biofortification will be provided, there will be no confusion between the term and biotechnology.

## PERU

**Observaciones generales:** La opinión de Perú en el marco del Codex Alimentarius al documento CX/NFSDU 16/38/7 es favorable sobre la definición de bioenriquecimiento, según lo planteado en el apéndice I de dicho documento.

**Específicas:**

No hubo.

## THAILAND

General comments

We agree with the document in principle.

Specific comments

Our comments for specific sections of the document are as described below.

Appendix II: Summary of Proposed Criteria to be Covered by the Definition

Criterion	1 What types of food	2 Food	3 Nutrition	4 Outcome	5 Purpose	6 Method
	All potential types of food production	<del>Both To allow for all essential nutrients</del>	Improved nutrients* content and quality or	To improve the nutritional quality of food intentionally	Improved nutrient levels and quality	Via any method of production**, prior to

	<del>processes which include all potential organisms (animal and animal feed, plant and plant, fungi, yeasts and fertilizers thereof) that may be involved in biofortification</del>	(micro- and macro-nutrients)	<u>bioavailability*</u>  Increased level of absorption	<u>for human health</u>  Intended purpose	<u>significantly for benefit of individuals and public health</u>  increased nutrient levels that are measurable	processing.
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\* defined in the Codex Nutritional Risk Analysis Principles and Guidelines for application to the work of CCNFSDU.

\*\* To be determined by competent national or regional authorities

## AFRICAN UNION

### Issue: Recommendation 1 Criteria

i) Criteria

#### Comments

- a) Criteria 1: Delete fertilizers and feed and move them to criteria 6 (These are methods of production).
- b) Criteria 2: Use the term nutrient rather than 'essential nutrient' to allow biofortification of all nutrients and not limit it to the essential nutrients as defined in the General Principles for the Addition of Essential Nutrients to Foods (CAC/GL 09-1987)
- c) Criteria 3: Replace level of absorption with increasing bioavailability. It is not possible to increase absorption of nutrient by biofortification; rather the purpose is to increase nutrients content and bioavailability.
- d) Criteria 4, 5 & 6 (Intended purpose, increased nutrient levels that are measurable and Methods of production): Acceptable as drafted

### Issue: Recommendation 2 Definition

**Comment:** Biofortification is the process by which the nutrient content of food produce ~~and products~~ is increased by a measurable amount in a readily absorbable form, through an intervention\* in the source organism for an intended purpose

### Issue: Recommendation 3 Where the Definition will be used

**Comment:** The AU supports adoption of the recommendation that the definition be placed in the Guidelines for Use of Nutrition and Health Claims (CAC/GL 23-1997) and used in the following fields as recommended:

- i). It is proposed that the definition can be used in dictionaries, as guidance by researchers, regulatory authorities, food manufacturers, packers, traders, consumers, risk assessors (e.g. scientific bodies) et cetera.
- ii). The definition can be used in the development of new breeds, labelling of foods, development of food regulations, acts and policies, in reports of risk assessments, marketing of products, and already existing codex texts.
- iii). Once adopted, the definition can be used by other subsidiary bodies, such as CCFL, CCGP, etc.

### Issue: Recommendation 4 CCNFSDU consider retaining the "Biofortification" terminology

**Comment:** The AU supports retaining the term biofortification.

**Rationale:** Given that the definition of biofortification will be provided, there will be no confusion between the term "Biofortification" and the term "biotechnology".

**Issue: Recommendation 5 The co-Chairs recommend that the CCNFSDU and CCFL consider a discussion on the labelling of biofortified foods once a definition for Biofortification has been adopted.**

**Comment:** The recommendation should be for the CCNFSDU to consider requesting CCFL discuss the labeling of bio fortified foods upon adoption of the definition. This is because labeling is within the mandate of CCFL and not CCNFSDU.