

TECHNICAL REFERENCE

Guidelines for developing food products that qualify for approved nutrition or health claims





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Foreword

This Technical Reference (TR) was prepared by the Working Group on Food Products that Qualify for Approved Nutrition or Health Claims under the direction of the Food Standards Committee.

This TR is developed to meet the demand by consumers for food with health benefit properties. It aims to provide guidance for manufacturers to conceptualise, develop, validate and translate the product to commercial run. It aims to achieve widespread adoption by local food manufacturers, which in turn benefits consumers.

This TR is a provisional standard made available for application over a period of three years. The aim is to use the experience gained to update the TR so that it can be adopted as a Singapore Standard. Users of the TR are invited to provide feedback on its technical content, clarity and ease of use. Feedback can be submitted using the form provided in the TR. At the end of the three years, the TR will be reviewed, taking into account any feedback or other considerations, to further its development into a Singapore Standard if found suitable.

In preparing this TR, reference was made to the following publications:

- 1. Allen, L., Benoist, B. de., Dary, O., & Hurrell, R., World Health Organization, Food and Agricultural Organization of the United Nations, Guidelines on food fortification with micronutrients, 2006, Extracted from: <u>https://apps.who.int/iris/rest/bitstreams/51508/retrieve</u>
- 2. FAO and WHO. 1997. *Guidelines for Use of Nutrition and Health Claims* (CAC/GL 23-1997). Codex Standard, no. 23. Codex Alimentarius Commission. Rome.
- 3. FAO and WHO. 1985. *General Standard for the Labelling of Prepackaged Foods* (CXS 1-1985). Codex Standard, no. 1. Codex Alimentarius Commission. Rome.
- 4. Functional Foods and Natural Health Products, Agriculture and Agri-Food Canada
- 5. Institute of Food Technologists Expert Report, Functional Foods: Opportunities and Challenges
- 6. International Food Information Council (IFIC) Foundation, 2021 Food and Health Survey, Extracted from: <u>https://foodinsight.org/2021-food-health-survey/</u>
- 7. International Life Sciences Institute Southeast Asia Region (ILSI SEAR) Monograph Series, Functional Foods in Asia: Current Status and Issues, Extracted from: <u>https://ilsisearegion.org/wp-content/uploads/sites/21/2022/02/ILSI-SEA-Region-Functional-Food-Monograph-P-revised-Jan-2022.pdf</u>
- 8. M.D. Earle and R.L. Earle., Creating New Foods. The Product Developer's Guide, the Web Edition, 2009, The New Zealand Institute of Food Science & Technology (Inc.), Extracted from: https://nzifst.org.nz/resources/creatingnewfoods/index.htm

Acknowledgement is made for the use of information from the above publications.

Attention is drawn to the possibility that some of the elements of this TR may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

- 1. Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as "mature standards". Mature standards will not be subject to further review unless there are requests to review such standards.
- 2. An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore and the Singapore Standards Council shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.
- 3. Compliance with a SS or TR does not exempt users from any legal obligations.

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0 Introduction

Food technology and nutrition have played critical roles in the dramatic increase in life expectancy and quality in the past decades, but the importance of food's contribution to health is greater than basic nutrition.

There is a growing body of evidence that points toward the health benefits of food ingredients (nutrients and non-nutrients). Scientific advances and analytical tools have enabled food scientists and others to characterise the biological functions of numerous food ingredients and their roles in health maintenance.

Additionally, there is an increasing trend for food products with health benefits among consumers who are interested in health maintenance and/or disease prevention. Studies reported significant interests from consumers in food with health benefits (IFIC Foundation, 2021).

To be more competitive, local manufacturers use functional ingredients to add value to their food products. While local food manufacturers aim to develop and market food products with health benefits, most manufacturers may not have the necessary guidance to do so.

Various organisations, such as the World Health Organization (WHO), Institute of Food Technologists (IFT), International Life Sciences Institute Southeast Asia Region (ILSI-SEAR), and Agriculture and Agri-Food Canada (AAFC) have defined "functional food", but to date, this term and its definition remains arbitrary. Hence, the term "functional food" is not used in this Technical Reference (TR).

The Singapore Food Agency (SFA) has published a list of approved nutrition and health claims. This TR provides practical guidance for local food manufacturers to develop food products with health and/or nutrient claims, within the legal framework of Singapore's food regulations and in accordance with Codex recommendations.

1 Scope

The TR specifies the recommended practices/processes for the application of functional ingredients in food and beverage products and gives guidelines for developing food products that qualifies for approved nutrition or health claims.

2 Normative references

There are no normative references in this standard.