

Due to recent developments the HEALTHGRAIN definition of whole grain is getting a growing support in the European Union. Therefore the Board of the Healthgrain Forum released this statement, summarizing key points of the definition and the importance of harmonized definitions in Europe and worldwide.

SUMMARY

Currently “wholegrain” is not defined well both qualitatively and quantitatively in countries across Europe and worldwide. This impacts negatively on companies that supply cereal grain and bakery ingredients and goods across borders and on communication to consumers. To help resolve this problem, the EU HEALTHGRAIN consortium developed a comprehensive definition of wholegrain, reflecting current good manufacturing practices, state of the art science as well as industrial adoption feasibility. The Healthgrain Forum is aiming at wide acceptance of this definition in Europe and worldwide.

Adoption of the HEALTHGRAIN whole grain definition in Europe and worldwide will contribute to:

- Harmonized conditions for trade and industry
- Minimizing misunderstanding by consumers about wholegrain issues.
- Facilitation of the approval of whole grain related health claims in Europe
- Uniform characterization of whole grain for science

INTRODUCTION

The Healthgrain Forum (www.healthgrain.org) was initiated in 2010 with the aim to help implement and valorize the research outcomes and continue the communication activities of the HEALTHGRAIN EU project (2005-2010), the largest cereals-health project ever.

In addition to its research, the HEALTHGRAIN project has developed a comprehensive definition of wholegrain, released in concept in 2010 and published in a peer reviewed journal February 2014.

A clear definition was needed since:

- In many countries wholegrain is not defined at all.
- Most existing definitions are short and don't clarify issues like ‘which grains are included’? and ‘what types of processing are allowed’?
- Consumption of wholegrain products is increasingly included in official dietary guidelines.
- Thousands new wholegrain products are being launched annually worldwide – and many of them are being sold in a range of countries.

One uniform definition in Europe and if possible worldwide will contribute to:

- Avoiding confusion among consumers
- Creating an equal playing field for industry, taking into account food safety and quality
- Facilitation of the approval of whole grain related health claims in Europe. One reason why EFSA did not evaluate submitted proposals for whole grain related health claims was that whole grain is defined differently in different European countries and therefore is not considered as sufficiently characterised

The HEALTHGRAIN Consortium, uniting a range of scientific disciplines ((bio-)chemistry, technology, nutrition and regulatory affairs) and industries, (breeding, flour milling, production of a wide range of cereal based consumer products) agreed that: *a relevant definition should reflect current accepted good manufacturing practices for production of wholegrain flour and -products, since consumption of such products has been shown in major observational studies to be convincingly associated with health benefits.*

The definition focuses on the definition of wholegrain and wholegrain flour as a food component.

The HEALTHGRAIN DEFINITION OF 'WHOLE GRAIN'

THE DEFINITION – the 2 key points

- 1) Whole grains shall consist of the intact, ground, cracked or flaked kernel after the removal of inedible parts such as the hull and husk. The principal anatomical components the starchy endosperm, germ and bran are present in the same relative proportions as they exist in the intact kernel.
- 2) Small losses of components that is, less than 2% of the grain/10% of the bran that occur through processing methods consistent with safety and quality are allowed.

Explanations regarding the definition itself and associated *questions* (e.g. *Which grains are included? What kind of processing is allowed?*) are addressed in the full definition document - [Whole grain definition by the HEALTHGRAIN consortium](#), edited December 2013 and, more comprehensively, in the publication The HEALTHGRAIN definition of 'whole grain' (Food & Nutrition Research 2014, 58: 22100 - <http://dx.doi.org/10.3402/fnr.v58.22100>)

Part 1) of the definition is similar to the whole grain definition used most frequently earlier: the definition issued in 1999 by AACCI, the American Association of Cereal Chemists International.

Part 2) of the definition reflects milling practices applied worldwide.

Unwanted compounds – for example mycotoxins, agrochemicals and microbial contaminants - tend to be concentrated in the outer bran layers. Therefore Part 2) is included and is in practice focusing on removing unwanted parts of the bran.

- In Germany this option was already included in the DIN norm in 1961, as yet without naming a percentage (DIN 10355 Mahlerzeugnisse (Vormals 17 DVO zum Getreidegesetz vom 21.7.1961).
- In Switzerland, a country with great understanding of grain milling (with the Bühler company, producing flour mills used worldwide) the 2% removal was included in 2005 (Departements des Innern (EDI) über Getreide, Hülsefrüchte, Pflanzenproteine und derer Erzeugnisse vom 23.11.2005 Kapitel 2, 1 Abschnitt: Definitionen, Art 5.).
- Denmark is currently the country in Europe paying most attention to regulations related to wholegrain, as part of its successful Public Private Partnership for promoting consumption of wholegrain products. In the recent Executive order how to apply the definition of wholegrain into practice the 2%/10% removal as stated in the HEALTHGRAIN definition is included.

Production of wholegrain flour – the importance of Good Manufacturing Practices

The composition of wholegrain flour can vary to some extent, due to natural variations. No analytical methods exist for determining whether a flour is exactly a wholegrain flour. Also, no method exists for determining whether the removal (Part 2) is 2% or less of the grain/ 10% or less of the bran.

Therefore the HEALTHGRAIN definition document stipulates that *production of wholegrain flour and wholegrain-based products must follow appropriate Good Manufacturing quality systems.*

The Healthgrain Forum appreciates the initiative of the Dutch bakery Centre for implementing a certification system for whole grain wheat flour delivered by flour mills to Dutch bakeries.

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