NSF International

MEMORANDUM

TO: Joint Committee on Dietary Supplements

FROM: Brian Zamora, Chair of the Joint Committee

DATE: November 22, 2019

SUBJECT: Proposed revision to NSF/ANSI 173 – *Dietary Supplements* (173i88r1)

Revision 1 of NSF/ANSI 173 issue 88 is being forwarded to the Joint Committee for consideration. Please review the proposal and **submit your ballot by December 13, 2019** via the NSF Online Workspace <www.standards.nsf.org>.

When adding comments, please identify the section number/name for your comment and add all comments under one comment number where possible. If you need additional space, please upload a word or pdf version of your comments online via the browse function.

Purpose

The proposed revision will add hemp based criteria definitions in section 3, adds *Cannabis sativa* (Hemp) to the list of known adulterants in section 5.3.6 and adds section 5.7 Hemp and/or hemp derived ingredients.

Background

Following international usage of hemp derived ingredients in consumer products (e.g. Canada), the passage of the Farm Bill (2018) and the U.S. FDA no objection GRAS dossiers (765, 771 and 778) the NSF International Toxicology Services department convened a hemp task group. The purpose of this task group was to discuss developing and adding hemp specific criteria to NSF/ANSI 173. This issue paper submission demonstrates the commitment of NSF International to add hemp based criteria to NSF/ANSI 173 through collaboration with our Joint Committee.

A list of additions for the definitions section are outlined below. These definitions clarify terms used in the hemp specific criteria sections and were generated in consultation with the hemp task group.

Section 5.3.6 has been updated to address adulterants in hemp and hemp derived ingredients. It is the intent of the update of this section to require that hemp and hemp derived ingredients are evaluated for known adulterants, including artificial cannabinoids. The hemp task group considered that a list of specific adulterants and artificial cannabinoids should be provided if the list was complete. Given that the list of artificial cannabinoids is continuously evolving it was not feasible to provide a comprehensive list of chemicals to be analyzed. The hemp task group agreed that to be consistent with the standard a general statement regarding adulterants and artificial cannabinoids was most appropriate.

Section 5.7 has been added to provide criteria for hemp and/or hemp derived ingredients. It is the intent of this section to mandate that all dietary ingredients and finished products containing hemp and/or hemp derived ingredients have the THC content tested and verified at no more than 0.3% on a dry weight basis.

Please see the recommendations section for the addition of definitions, criteria for hemp-specific adulterants and criteria for hemp and/or hemp derived ingredients.

If you have any questions about the technical content of the ballot, you may contact me in care of:

Brian Zamora
Chair, Joint Committee on Dietary Supplements
c/o Rachel Brooker
Joint Committee Secretariat
NSF International
Tel: (734) 827-6866
Email: rbrooker@nsf.org

Not for publication. This document is part of the NSF International standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

[Note – the recommended changes to the standard which include the current text of the relevant section(s) indicate deletions by use of ~~strikeout~~ and additions by gray highlighting. Rationale statements are in *italics* and only used to add clarity; these statements will NOT be in the finished publication.]

NSF Standard for Dietary Supplements –

Dietary Supplements

.
.
.

3 Definitions

.
.
.

3.X cannabinoids: For the purposes of this standard, phytocannabinoids, the typically, C_{21} (C_{22} for carboxylated forms) terpenophenolic compounds, and their carboxylic acids, and degradation products, produced only in *Cannabis sativa* L.

3.X chemovar: a chemically distinct cultivar.

3.X cultivar: an assemblage of plants that (a) has been selected for a particular characteristic or combination of characteristics, (b) is distinct, uniform and stable in those characteristics, and (c) when propagated by appropriate means, retains those characteristics.

3.X endocannabinoids: neurotransmitters produced in the human body that bind to cannabinoid receptors.

3.X hemp: the *Cannabis sativa* L. plant with a THC concentration of not more than 0.3% on a dry weight basis, or as otherwise limited by the relevant national government of sale, that is the source of hemp plant parts. It is used to manufacture hemp ingredients and products, such as phytocannabinoids. Hemp is distinguished from drug-type *Cannabis* chemovars that contain THC concentrations above 0.3%. For the purposes of this standard, *Cannabis sativa* includes the variety which was formerly known as *Cannabis indica.*

3.X hemp-derived ingredients: ingredients produced from hemp, such as fiber, seed oil, and phytocannabinoids.

3.X THC: delta-9-tetrahydrocannabinol.

3.X THCA: delta-9-tetrahydrocannabinolic acid.

.
.
.

5.6 Proteins

Protein content, for products that claim protein at greater than 5% daily value (DV), shall exclude quantifiable nonprotein nitrogen-containing substances (e.g., free amino acids, taurine, creatine, alkaloids, etc.) that may be present in the product.

5.7 Hemp and/or hemp derived ingredients

Dietary ingredients and finished products containing hemp, hemp plant parts and/or hemp derived ingredients shall be tested for THC content and shall not exceed the limit of THC established by the country of sale. If the country of sale has not established a THC limit, the dietary ingredient and/or finished product shall not exceed the US Federal limit of not more than 0.3% THC on a dry weight basis. The determination of the THC concentration must take into account the potential to convert THCA into THC. The THC concentration will be evaluated to the acceptable hemp THC level incorporating measurement uncertainty.

6 Test methods used by testing laboratories for identification and quantification of ingredients – Dietary ingredients and finished products

.
.
.

Rationale: These definitions clarify terms used in the hemp specific criteria sections and were generated in consultation with the hemp task group.