NSF Standard(s) Impacted: NSF 173

Background:
Provide a brief background statement indicating the cause and nature of concern, the impacts identified relevant to public health, public understanding, etc, and any other reason why the issue should be considered by the Committee. Reference as appropriate any specific section(s) of the standard(s) that are related to the issue.

The intent of this proposal is to expand the content of NSF 173 with respect to its references to known toxic constituents and known adulterants and to add recognition of certain botanical species that are prohibited from use in dietary supplements.

Section 5.3.5 Known adulterants lists a few botanical species and notes that the list is not intended to be exhaustive. It is proposed that the existing list be expanded to include other known adulterants as identified by the American Herbal Products Association (AHPA) guidance policy on this topic and other references as may be appropriate.

Recommendation:
Clearly state what action is needed: e.g., recommended changes to the standard(s) including the current text of the relevant section(s) indicating deletions by use of strike-out and additions by highlighting or underlining; e.g., reference of the issue to a Task Group for detailed consideration; etc.

5.3.5 Known adulterants substitutes

Products shall be evaluated to ensure that they do not contain known adulterants including, but not limited to, the following: Products labeled as containing ingredients based on the following botanicals shall be evaluated to ensure that they do not contain material from the associated known adulterants substitutes including, but not limited to, the following:

— Eleutherococcus senticosus shall not contain Periploca sepium;
— Plantago lanceolata shall not contain Digitalis lanata; and
— Scutellaria lateriflora shall not contain Teucrium chamaedrys.

<table>
<thead>
<tr>
<th>Botanical material</th>
<th>Adulterant Reported substitute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actaea racemosa (black cohosh) root</td>
<td>Other Actaea spp. root</td>
</tr>
<tr>
<td>Arnica montana [should this be Arnica spp.?] flower</td>
<td>Heterotheca inuloides flower</td>
</tr>
<tr>
<td>Eleutherococcus senticosus (eleuthero) root</td>
<td>Periploca sepium root</td>
</tr>
<tr>
<td>Hoodia gordonii powder of aerial parts</td>
<td>Other powders including Opuntia spp. and other Hoodia species</td>
</tr>
<tr>
<td>Illicium verum (star anise) fruit</td>
<td>Illicium anisatum fruit</td>
</tr>
<tr>
<td>Plantago lanceolata (English plantain) leaf</td>
<td>Digitalis lanata leaf</td>
</tr>
<tr>
<td>Scutellaria lateriflora (skullcap) herb</td>
<td>Teucrium chamaedrys herb</td>
</tr>
</tbody>
</table>

5.3.6 Known adulterants
Products labeled as containing ingredients based on the following botanicals shall be evaluated to ensure that they do not contain material from the associated known adulterants including, but not limited to, the following:

<table>
<thead>
<tr>
<th>Botanical material</th>
<th>Reported adulterant</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Citrus × paradisi</em> (grapefruit) seed extract</td>
<td>Benzalkonium chloride, benzethonium chloride, triclosan, methyl paraben, or any other synthetic antimicrobial agent</td>
</tr>
<tr>
<td><em>Ginkgo biloba</em> leaf extract standardized to flavonol glycosides and terpenes</td>
<td>Added flavonol glycosides or aglycones</td>
</tr>
<tr>
<td><em>Vaccinium myrtillus</em> (bilberry) fruit extract</td>
<td>Red dye #2 (amaranth dye)</td>
</tr>
</tbody>
</table>

Supplementary Materials (photographs, diagrams, reports, etc.):
If not provided electronically, the submitter will be responsible to have sufficient copies to distribute to committee members.

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Is this a revision of a previous Issue Paper (if yes put original issue number): Yes
173i67
Submission Date: 7/26/18

Please submit to: Joint Committee Secretariat, Rachel Brooker at rbrooker@nsf.org or to standards@nsf.org

*Type written name will suffice as signature