USANA

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June 4, 1997

Dockets Management Branch (HFA-305)
Food and Drug Administration
12420 Parklawn Dr., Rm. 1-23
Rockville, MD 20857

Re.: Docket No. 96N-0417

To whom it may concern:

This letter outlines comments on the proposed framework for *Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Dietary Supplement* as presented in the Federal Register, Vol. 62, No. 25, February 6, 1997, pp. 5700-5709, Docket No. 96N-0417.

General Comments. Our firm, USANA Inc., manufactures and distributes a diverse line of dietary supplement products including vitamin and mineral tablets, nutritional drink mixes, and nutrition bars. We do not manufacture or distribute raw herbal products. At present, we sell our supplements throughout the U.S. and Canada, and we have plans to expand further internationally.

Because our vitamin and mineral tablets are considered to be non-prescription drugs in Canada, our manufacturing systems for these products are regulated under strict "pharmaceutical" GMP's as imposed by Canada's Health Protection Branch. These GMP's are similar in scope and detail to those used by the FDA for pharmaceutical manufacture in the United States. Food products sold by our company are produced for us by contract manufacturers, and CGMP's appropriate to these products are followed.

In general, we find the CGMP's as presented in the Industry draft to be appropriate and workable for the products the we manufacture and/or sell. We are confident that they provide the necessary level of control to ensure that consumers are provided with dietary supplement products that are safe, that meet the identity and potency specified by labeling, and that meet other quality criteria that the end product is represented to meet.

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We understand that some ingredients currently used in dietary supplements have not been fully characterized with respect to activity and safety, and we address these issues in more specific responses below.

Importantly, given our internal commitment to quality and our on-going business in Canada, USANA is already adhering to strict "pharmaceutical" GMP's, in the manufacture of our vitamin and mineral tablets. As such, we strongly urge that any new GMP's imposed by the FDA on dietary supplements be compatible with existing regulations that we are required to follow. Imposition of a new set of regulations that conflict with existing requirements will cause undue hardship and expense for our company.

Specific Comments. With respect to specific technical issues concerning the adoption of the proposed CGMP's, our comments are as follows.

With respect to Issue No. 2. regarding appropriate testing requirements to provide positive identification of dietary ingredients, particularly plant materials used in dietary supplements, our comments are as follows. Many, but not all, beneficial botanical extracts and/or powders contain active ingredients that have been characterized by scientific research and that can be identified and quantified by established chemical methods. At a minimum, most of these extracts and materials contain signature compounds or classes of such compounds that can be so identified and quantified. Examples include the proanthocyanidin monomers, catechin and epichatechin, in grape seed extracts, hesperidin in citrus extracts, kava lactones in extracts of kava kava, and ginkolides in *Ginkgo biloba* extracts.

Our current practice for evaluating the quality and potency of botanical extracts used in vitamin and mineral products involves assaying such raw materials for the presence and/or amounts of the active or signature compounds. Such testing might be required to provide positive identification of dietary ingredients.

Again, this approach will work for many, but not all such botanical ingredients, and any regulations imposing such requirements for analysis should be accompanied by a list of the botanical ingredients to which they apply.

With respect to Issue No. 3 regarding standards that should be met in certifying that a dietary ingredient or dietary supplement is not contaminated with harmful impurities, our comments are as follows. Testing for harmful microbiological contaminants is straight forward, and guidelines provided in appropriate food regulations, the USP, the British Pharmacopoeia, and the British Herbal Pharmacopoeia can be used to draft regulations for dietary supplements. The same holds for heavy metal contaminants (e.g. lead, cadmium, arsenic, mercury). The above compendia contain useful guidelines for regulating levels of these metals.

We do not feel that it will be possible to regularly screen raw ingredients for pesticide contaminants. The broad diversity of such compounds and the sophisticated analytical equipment needed to measure levels of pesticide residues will make such screening prohibitively expensive. We suggest that work be funded to determine the risk of pesticide contamination in the ingredients used in dietary supplements. If that risk is found to be significant, then approaches to screening for pesticides can be explored.

With respect to Issue No. 4 regarding the requirement for documentation that a manufacturer is following established procedures prescribed for the manufacture of a dietary supplement, our comments are as follows. USANA has a full set of written SOP's governing the manufacture of our vitamin and mineral tablets. Employees are regularly trained in these GMP's, and training records are kept. In addition, we fully document our manufacturing procedures for each batch of tableted product using standard batch production and control records. Finally, Quality Control assays are run on each batch of product, and results are fully documented. These systems are vital components of our quality assurance program and we recommend that they be adopted as part of the CGMP's for dietary supplements.

With respect to Issue No. 5 regarding whether reports of injuries or illnesses to a firm be evaluated by competent medical authorities, our comments are as follows. The base issue here is what constitutes a reportable injury or illness, i.e. an adverse event. Our internal policy follows FDA guidelines for drugs. We consider an event serious when it results in death, a life threatening condition, hospitalization, disability, congenital abnormality, or required intervention to prevent permanent impairment or damage. We feel that this policy is responsible and should be adopted by our industry.

With respect to Issue No. 6 regarding whether CGMP for dietary supplements should require that manufacturers establish procedures to identify, evaluate and respond to potential safety concerns with dietary ingredients, our comments are as follows. We agree that safety is fundamentally important, and that comprehensive guidelines concerning product safety should be implemented for dietary supplements. We suggest an approach involving a clear categorization of ingredients into (perhaps) three classes: (1) those that are generally regarded as safe at any dose (e.g. most tableting excipients, food constituents, etc.); (2) those that are regarded as safe below a specified maximum dose (e.g. most vitamins and minerals and many plant extracts); and (3) those whose safety is not fully characterized (e.g. some plant extracts and some hormone-like compounds). Constituents in categories 1 and 2 could be used freely within established dosages. Items in the third category could be targeted for toxicology research to establish safe dosages, acute effects, long-term effects, benefits, etc.

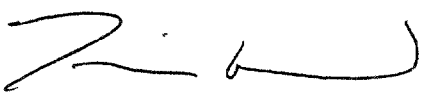
With respect to Issue No. 7 regarding how best to ensure that the software programs and computer equipment used to direct the manufacture of dietary supplements are properly designed, validated, and monitored, our comments are as follows. We question the need to implement extensive procedures for validating software used in the manufacture of nutritional supplements. The protocols specified for the drug and medical device

industries require a major effort, and implementation is extremely costly. We recommend that software validation procedures not be required for nutritional supplement manufacture. We do not believe that such procedures would address significant risk of product failure, as proposed GMP guidelines already afford redundancy in quality assurance,

With respect to Issue No. 9 regarding the adequacy of broad CGMP regulations to cover all sectors of the dietary supplements industry our comments are as follows. We strongly believe that a single set of CGMP's should be adopted for our industry. Furthermore, as noted above, these regulations need to be compatible with existing GMP's as imposed by other government agencies.

We look forward to your reply to our comments. Let us know if we can be of further assistance in defining CGMP's for our industry.

Best regards,



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