

manufacturing operations or to prevent mixup between different raw materials and products;

- Establishing a quality control unit;
- Establishing and following written procedures for:

1. Maintaining and cleaning equipment and utensils;
2. Receiving, testing, or examining materials received and testing of finished product;
3. Using master and batch control records;
4. Handling consumer complaints; and
5. Maintaining records for laboratory tests, production control, distribution, and consumer complaints.

Based on the ANPRM, the comments that we received in response to the ANPRM, our outreach activities (which we discuss below), and our own knowledge and expertise about CGMPs for foods, drugs, cosmetics, devices, and biologics, we are proposing to establish these CGMP regulations for dietary ingredients and dietary supplements. The proposed regulations would impose requirements for: (1) Personnel, (2) physical plants, (3) equipment and utensils, (4) production and process controls, (5) holding and distributing, (6) consumer complaints related to good manufacturing practices, and (7) records and recordkeeping.

C. Industry and Consumer Outreach

During 1999, we conducted a number of outreach activities related to dietary supplements. We held several public meetings to obtain input from the public on developing our overall strategy for achieving effective regulation of dietary supplements, which could include establishing CGMP regulations. We also held public meetings focused specifically on CGMPs and the economic impact that any CGMP rule for dietary ingredients and dietary supplements may have on small businesses. Additionally, FDA staff toured several dietary supplement manufacturing firms to better understand the manufacturing processes and practices that potentially would be subject to a CGMP regulation for dietary ingredients and dietary supplements. Each of these activities contributed to our knowledge about the industry.

1. Dietary Supplement Strategic Plan Meetings

We held public meetings on June 8 and July 20, 1999, to collect stakeholder comments on the development of our overall strategy for achieving effective regulation of dietary supplements. We designed the meetings to provide an opportunity for public comment on both

the activities we should undertake as part of an overall strategy and the prioritization of those activities. In the notices for these meetings, we identified the development of CGMPs for dietary supplements as one activity that should be considered in an overall strategy.

During and after the strategic meetings, we received comments from consumers, consumer advocacy groups, health care professionals, health care professional organizations, industry, and industry trade associations. The comments addressed a wide range of activities related to regulating dietary supplements. (These comments can be seen at our Dockets Management Branch (*see ADDRESSES*) in docket number 99N-1174.) The comments generally identified the development of CGMP regulations as a high priority activity that should be included in any FDA strategic plan for regulating dietary supplements. Some comments that addressed the development of CGMPs are summarized as follows:

- It would be useful to industry to have FDA establish CGMPs especially for small and intermediate-size firms that are not clear on what they should be doing;
- CGMPs would establish a level playing field for industry, which would help prevent irresponsible firms from making and selling adulterated products;
- CGMPs should be able to accommodate a wide variety of firms, that is, small and large firms that manufacture a wide array of different types of products and ingredients;
- CGMPs should ensure that consumers get dietary supplements with the strength and the purity that consumers expect;
- CGMPs should ensure that every dietary supplement on the market has the safety, identity, purity, quality, and strength it purports in the label to possess;
- CGMPs should include ingredient identity testing and other testing;
- CGMPs should ensure that dietary supplements are produced using a master formula procedure and produced in a sanitary facility;
- CGMPs should require that manufacturers have documented evidence that their manufacturing process is under control on a consistent basis;
- CGMPs should require manufacturers to test dietary ingredients, particularly imported botanicals, for heavy metals, pesticides, and industrial contaminants;
- CGMPs should require expiration dating and testing for dissolution and bioequivalence;

- CGMPs should require that companies report adverse reactions; and
- CGMPs should include guidance on testing for ingredient identity and adulteration with toxic substances.

2. Small Business Outreach Meetings

We held public meetings on July 12, September 28, and October 21, 1999, to collect information from industry and others that would help us to understand the economic impact on small businesses of CGMP regulations for dietary supplements. Transcripts of these public meetings (docket number 96N-0417, "Development of Strategy for Dietary Supplements") are available at our Dockets Management Branch or electronically at <http://www.fda.gov/ohrms/dockets/dockets/96n0417/tr00001.pdf>. Public comments from small businesses included both support of and concern for CGMP regulations. Small businesses expressed concerns about the cost and the time involved in complying with any rule that contains the following requirements:

- Conducting tests to determine identity, purity, quality, strength, and composition of dietary ingredients and dietary supplements;
- Maintaining written procedures and records documenting that procedures are followed; and
- Providing data that support expiration dating.

Public comments from small business expressed support for dietary supplement CGMP regulation. Some small businesses (1 with 15 employees) commented that they have CGMPs in place with written procedures tailored to the size of their operations. One small business with sales under \$1 million commented that their plant materials received in fresh form are identified onsite by a botanist, and when the onsite botanist is not able to confirm identity, the plant material is sent to an outside laboratory that conducts chemical analysis to confirm identity.

3. Site Visits to Dietary Supplement Manufacturing Firms

During the summer and fall of 1999, we visited eight dietary supplement manufacturing firms. These visits included firms that: (1) Manufacture a vitamin using a fermentation process; (2) grind, sift, blend, and otherwise treat raw agricultural commodities (e.g., botanicals); (3) manufacture dietary ingredients for use in manufacturing dietary supplement tablets, capsules, softgels, and powders; (4) manufacture dietary supplements for packaging and labeling by others; and (5) manufacture, package, and label dietary supplements under their own and others' labels. The