

# TRANSCRIPT OF PROCEEDINGS

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
FOOD AND DRUG ADMINISTRATION  
PUBLIC HEALTH SERVICE

SMALL BUSINESS OUTREACH MEETING

"CURRENT GOOD MANUFACTURING PRACTICES  
IN THE DIETARY SUPPLEMENT INDUSTRY"

Pages 1 thru 66

Baltimore, Maryland  
October 21, 1999

MILLER REPORTING COMPANY, INC.

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FOOD AND DRUG ADMINISTRATION  
PUBLIC HEALTH SERVICE

SMALL BUSINESS OUTREACH MEETING

"CURRENT GOOD MANUFACTURING PRACTICES  
IN THE DIETARY SUPPLEMENT INDUSTRY"

Thursday, October 21, 1999

7:00 p.m.

Chesapeake Room  
Holiday Inn Inner Harbor  
301 West Lombard Street  
Baltimore, Maryland

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P R O C E E D I N G S

1  
2 MR. NARDINELLI: Let me welcome you to the Small  
3 Business Outreach Meeting for the current Good Manufacturing  
4 Practices in the dietary supplement industry. My name is  
5 Clark Nardinelli. I am with the Food and Drug  
6 Administration, the Center for Food Safety and Applied  
7 Nutrition.

8 I would like to tell you a little bit about our  
9 format for tonight. We're going to start with a couple of  
10 presentations from the Food and Drug Administration, and  
11 then we're going to ask for general comments. We have three  
12 people here who have already asked to comment: Michael  
13 McGuffin, Charles Raubicheck, and Jarrow Rogovin. Are you  
14 all here, three of you? One of them is. Okay.

15 MR. MCGUFFIN: I can talk three times.

16 MR. NARDINELLI: Okay. We have a transcriber, and  
17 so if you have some general comments, we would appreciate  
18 you using the microphone in the center of the room. It is  
19 turned on. But after the general comments, we're going to  
20 break up and just have everybody talk at the tables, so this  
21 is why the table setup is as it is. Each table should have  
22 one person from the FDA who is there just as a facilitator,  
23 and we're really going to be here to listen.

24 So the purpose of the people at the table is just  
25 to listen to what you have to say. We have some handouts to

1 kind of guide the discussion, but many of the people here  
2 are not necessarily even experts on this particular rule, so  
3 we're not here to answer questions about the ANPR, but to  
4 hear what you have to say.

5           Also, we're scattered about a little bit, so  
6 perhaps if the room doesn't fill, when we do go to the  
7 discussion session, if we could combine some of the tables  
8 that are not quite full so that we have at least one FDA  
9 person sitting at each table.

10           And during the discussion session, we're going to  
11 ask each table to select somebody to be a recorder who will  
12 make notes of the five or six principle comments your table  
13 has, and then we would ask them just to talk about those  
14 comments briefly after the breakout session. We will also  
15 leave room at the end for another general discussion, for  
16 anybody who has further things to say or who perhaps had  
17 comments that didn't make it onto the list.

18           Any questions about the format?

19           [No response.]

20           MR. NARDINELLI: Okay, let's get underway, then.  
21 Richard Williams will be our first FDA presenter. He's from  
22 Division of Market Studies, Center for Food Safety and  
23 Applied Nutrition.

24           MR. WILLIAMS: Thank you for coming tonight. This  
25 is the third time we've done this, and let me elaborate a

1 little on what Clark said.

2 One of the things we found out was before when  
3 everybody was sitting and we said, "Please come up to the  
4 microphone and speak," we found out a lot of people don't  
5 like to come up to a microphone and speak in front of a lot  
6 of people, so we weren't getting a lot of comments. So  
7 we're trying this, and this is new for us and it's  
8 different.

9 I think the only table that we don't have an  
10 FDA'er at, because we would sort of like to, is that last  
11 table. Would you all mind moving up to this table? You  
12 know, this is one of the "move to the front of the class"  
13 things. Thanks.

14 This is our last session that we're going to do,  
15 and it really is important that we hear from you all  
16 tonight. It really is important that you express your  
17 opinion. One thing that Clark didn't say, when you do just  
18 speak at the tables, if you don't want to identify yourself  
19 and you don't want us--you know, you don't want to be on the  
20 record as "This is what my company says," that's fine. Just  
21 tell us what you think. Okay?

22 And that's really mostly what we're here for.  
23 We're not really here to talk a lot tonight. We're here to  
24 listen to you, and I think that's the most important thing.  
25 If you don't have a lot to say, we'll all go home early and

1 we'll watch the Ravens game. Okay?

2 But I think it's important that you should know  
3 that a potential regulation is in the work and it might have  
4 a considerable impact on your business, so it's important to  
5 us and I think it should be important to you that we hear  
6 from you.

7 What I'm going to talk about tonight a little bit  
8 is what the requirements are that we are under to listen to  
9 small business, and I'd like to think we would be here even  
10 if we didn't have those requirements; what the process of  
11 our regulations development is; and how you can make an  
12 impact on this rule through your comment.

13 So I'm going to start here. Sorry about the light  
14 in here. Clark, you want to see if you can do something  
15 with the lights? It isn't showing up very well. If you can  
16 just turn off the front ones and leave me in darkness here.  
17 None of them work? Great. That's all right. I'll just  
18 tell you what they are.

19 The first thing that we fell under was, in 1980  
20 the Congress passed and the President signed the Regulatory  
21 Flexibility Act of 1980. That was really the first time  
22 that the government recognized the unique concerns of small  
23 businesses. Okay?

24 But it really was given teeth in 1996 with what we  
25 call SBREFA, the Small Business Regulatory Enforcement and

1 Fairness Act. I have to look at it to remember how to say  
2 it correctly. And that's the one that says that we have to  
3 go out and we have to listen to what you want to say, what  
4 you think about the regulation, and if we can, if we can  
5 still protect the public health, we can still accomplish our  
6 public health mission and minimize the burden on you, then  
7 we're required to do that. Okay?

8 So that, you want to keep that in your mind when  
9 you make your comments. And your comments I'll spend a  
10 little bit of time talking about. First let me talk about  
11 the process, though, and I want to talk about where we are.

12 You have on your table, most of you, I hope--if  
13 not, do we have any more copies--the Advance Notice of  
14 Proposed Rulemaking. Did we get those done? Okay. That's  
15 the thing with the real tiny type that we published. And  
16 what this was, this was an industry proposal where industry  
17 came in and said, "FDA, if you're going to do Good  
18 Manufacturing Practices, this is an idea of what we think  
19 they should look like."

20 This has been published. We've already received  
21 some comments on that. Okay? The next thing that we're in  
22 the process of doing now is these small business meetings,  
23 and this is the third and last of those. Okay?

24 Oh, thank you. Is that better? Sorry. Well,  
25 don't put them in the dark back there if you can help it.



1           If we do go forward, the very next step that we'll  
2 have is a Notice of Proposed Rulemaking. The nice thing is,  
3 we're out here. We're talking to you now before we go to  
4 the proposed rulemaking, so this is an excellent time for  
5 you to get your comments in to the FDA, to say, "Look, this  
6 is something that works for us; this is something that  
7 doesn't."

8           It doesn't mean this is the last chance you'll get  
9 to comment, though. The Notice of Proposed Rulemaking, if  
10 it comes out, will come out, you'll get another chance.  
11 That's comments from the public. That's everybody,  
12 including small businesses. That's when we'll be soliciting  
13 written comments from the public.

14           Generally what happens is, after that we will go  
15 to a final rulemaking, and the final rulemaking will include  
16 in it a date at which you must comply.

17           Just some things that you can think about here:  
18 What are some things that you can comment on the rule?  
19 Obviously, you can comment on anything you want. One, you  
20 can say, what is the need for this rule? If you think there  
21 is a need for this rule. That's sort of a big comment, the  
22 general, global kind. Do you think that FDA really needs to  
23 have this rule? This is a really important one.

24           Okay, FDA has some public health goals and some  
25 identity goals in mind. What other ways can you think of

1 that FDA, you can accomplish your mission but do something  
2 perhaps that minimizes the burden on us? So that's a great  
3 thing to comment on.

4 We have here with us, I think most of the people  
5 from FDA here are economists, and they are responsible for  
6 analyzing your costs of the rule under SBREFA, and I'll  
7 speak a little bit more about this.

8 But one of the things that you know most about is  
9 your business and what your business costs are, and if you  
10 look at a set of regulations, what is it going to cost you?  
11 That's a really--that's something that you can really help  
12 us with. And under the law we have to consider, under  
13 SBREFA we have to consider your costs.

14 Maybe you can look at particular provisions and  
15 you say, "Well, would this provision accomplish what FDA is  
16 trying to accomplish?" If you have some ideas about how it  
17 might not, you can certainly tell us that.

18 Let me talk about costs again for a minute. You  
19 have on your table, I hope every one of you has something  
20 that's brand new for us. In fact, I think it's brand new  
21 for the government. And it says "Guidance for Small  
22 Businesses."

23 MR. NARDINELLI: Does anybody not have one? We  
24 have plenty.

25 MR. WILLIAMS: We have some more up here. Does

1 anybody not have one? Can we hand some of these out?

2           This just gives you some suggestive ideas about  
3 how you can comment on the rule. One of the things that  
4 you're going to see it's going to focus on is cost, and the  
5 reason it focuses on cost is because costs aren't  
6 necessarily the way that you might think about cost. Most  
7 of you have accountants, and the accountants sort of tell  
8 you what your costs are.

9           That's not the way that the Federal Government  
10 thinks about costs. That's not the way that these Federal  
11 Government economists--and they're not all economists. and  
12 I'm sure that the ones will tell you that they're not  
13 economists--but that's what they're going to analyze.

14           For the accounting types of costs that you all  
15 generally think of, you say, "Am I going to have to buy  
16 something? Am I going to have to buy some new equipment, or  
17 is this going to make me buy more raw materials?" That is a  
18 cost, but it's not necessarily the only cost that you might  
19 have. "Am I going to have to hire somebody new to comply  
20 with this regulation?" Again, that's a cost but it's not  
21 the only type of cost that you might incur.

22           The way economists think about cost is, is anybody  
23 at your plant going to have to do something different from  
24 what they're doing now? So, for example, many of you in  
25 here are probably managers of your own plant. You run your

1 own plant.

2           If you have to stop focusing right now on perhaps  
3 some sort of quality improvements or cost-lowering function  
4 or hiring or something else, and you have to do something to  
5 comply with this rule, like for example you have to figure  
6 out what's in this rule and how to comply with it, you  
7 anticipate you'll have to figure out how to comply with it,  
8 what to do, that's a cost to an economist. Your account  
9 will tell you, "Well, it's no cost. You're still going to  
10 get your same salary," and so forth.

11           The economist will say, "No, the hours you spend  
12 figuring out what to do with that regulation is a cost," and  
13 the same is true for every single member of your plant. If  
14 they have to do something different, that's what we want to  
15 hear. What is it they'll have to do? What will they have  
16 to do different? How much time will it take? How much do  
17 you pay them? Okay?

18           All of that is in this. Okay? Which I wrote the  
19 first draft of, and like most things in the Federal  
20 Government, it only went through 100 revisions, but I still  
21 take credit for all the errors in it. And it can help you.  
22 There's a phone number in here. If you have any trouble  
23 figuring out what it's trying to say, please call the phone  
24 number and we'll be happy to talk to you about it.

25           Okay, so that walks you through that. These are

1 some of the things that we heard about from some of the  
2 other small businesses, both in the comments and the  
3 meetings, and Dr. Karen Strauss is going to talk to you  
4 about these.

5 But the written procedures, okay, that's standard  
6 operating procedures. There's a potential for some  
7 requirement for written procedures, for people to figure  
8 things out. Record-keeping, we've had some concerns raised  
9 by small businesses about how much record-keeping might be  
10 required. And finally, testing.

11 Those are kind of the big three things that I  
12 think we've heard from. And all I'm doing is pointing out,  
13 you know, that these are things we've heard from, these are  
14 things you might want to pay attention to, you might want to  
15 talk to us about.

16 Okay, that's all I have to say. Do you want to  
17 continue this, Karen?

18 MR. NARDINELLI: Karen Strauss will now talk about  
19 the ANPR, the industry submission, and that's the thing with  
20 all the little print. Karen is also from the Center for  
21 Food Safety and Applied Nutrition.

22 MS. STRAUSS: I'm going to speak from a chair. I  
23 feel it's less formal, and that's how I want this to be.  
24 It's less formal, so that's how I'll do it.

25 Before I begin, I wonder how many of you--because

1 I'm going to do a quick, brief, superficial walk-through of  
2 the ANPR--I wonder how many of you have reviewed the ANPR on  
3 a previous occasion before today?

4 [A show of hands.]

5 MS. STRAUSS: And so for the rest of you, you have  
6 not heard of or seen of it before? Okay. The purpose, as I  
7 mentioned, of my presentation is to introduce you to or, for  
8 some of you, to review the GNP sections included in the  
9 industry outline that was submitted to FDA.

10 Time tonight doesn't allow an in-depth review of  
11 the outline. Instead, for more information you have the  
12 ANPR, and there were a limited number of copies. If you  
13 didn't get one and you would like to get one, it's available  
14 through the FDA's Center for Food Safety and Applied  
15 Nutrition web site, or you could let one of us know and we  
16 could get a copy to you.

17 I refer you to the ANPR sections that also are  
18 listed on your table. There is a one-pager that has the  
19 various topics in the ANPR.

20 As I mentioned, we want to hear your comments on  
21 any proposal that FDA would make to establish GMPs, and your  
22 input will assist FDA to understand the economic impact that  
23 any proposal to establish GMPs might have on small  
24 businesses in the dietary supplement industry.

25 Just a bit of background on why FDA is developing

1 a GMP proposal. DSHEA, the Dietary Supplement Health and  
2 Education Act, gives FDA the authority to adopt GMP  
3 regulations, and by submitting an outline and in other ways,  
4 the industry has told FDA that GMP regulations would be  
5 helpful. DSHEA defines dietary supplements, and there are  
6 five categories, and this is what the proposed GMP  
7 regulation would cover, would be vitamins; minerals; amino  
8 acids; herbs and botanicals; other dietary substances used  
9 to supplement the diet; concentrates, metabolites,  
10 constituents, extracts, or combinations of these.

11 As a starting point in our drafting the proposal,  
12 we're looking at the outline submitted by the Dietary  
13 Supplement Industry Coalition, and this was published, as  
14 was mentioned, as an Advance Notice of Proposed Rulemaking.  
15 It was published February 6, 1997. And so what I want to do  
16 over the next few minutes is provide a brief overview of  
17 what's included in the ANPR.

18 The Food, Drug and Cosmetic Act prohibits the  
19 selling of adulterated products, and the purpose of GMPs is  
20 to ensure that customers are provided with dietary  
21 supplements which are not adulterated during the  
22 manufacturing process. The industry-submitted draft GMP was  
23 modeled after the food GMPs, but also adapted, modified and  
24 expanded to meet the special requirements of dietary  
25 supplements.

1           And this slide shows the GMP topics that are  
2 outlined in the industry outline, and my purpose in showing  
3 these is to inform you of the types of issues that FDA is  
4 examining while developing GMP regs. And, as I mentioned  
5 before, at the conclusion we would like to hear from you  
6 about elements like the ones that I'm about to go through.

7           There are personnel provisions in the ANPR, and  
8 these are directed towards disease control. Preventing  
9 adulteration by personnel working in your plant; hygienic  
10 practices; education and training of employees in  
11 maintaining hygienic practices and in performing their  
12 assigned functions, are some of the elements in the industry  
13 outline, and supervision of employees is also addressed.

14           Grounds, plant construction and design, there are  
15 procedures that are designed to prevent adulteration of  
16 dietary supplements caused by the grounds around the plant,  
17 by the plant size, by the design of the plant, the  
18 construction, maintenance, and these are all included in the  
19 ANPR, in that tiny print.

20           Equipment and utensils, there are procedures in  
21 the ANPR to prevent adulteration caused by these. The  
22 industry outline describes provisions for equipment design,  
23 equipment installation, cleaning and sanitation, and  
24 calibration, as measures to prevent adulteration.

25           This one is a little bit more involved. These



1 elements are included in the ANPR section on production and  
2 process controls. A quality control unit or a quality  
3 control person is included in the ANPR, as are laboratory  
4 operations, manufacturing operations, packing and labeling,  
5 and holding and distributing.

6           The industry outline includes a quality control  
7 unit or a quality control person, and this unit has the  
8 responsibility and authority to do the following, and I'll  
9 list them: to approve or reject all procedures,  
10 specifications, controls, tests and examinations, or any  
11 deviations from these that might impact on the purity,  
12 quality, and composition of a dietary ingredient or a  
13 dietary supplement.

14           The quality control unit would have the authority  
15 and responsibility to approve or reject all raw materials,  
16 packing materials and labeling, and to assure that completed  
17 production records are reviewed. A provision in the outline  
18 states that there should be adequate laboratory facilities,  
19 and that the responsibilities and procedures of the  
20 laboratory should be established in writing and followed.

21           And for holding and distributing, elements are  
22 included which describe conditions under which ingredients  
23 and packing materials and labels are received, are held, and  
24 the holding of in-process and finished product, and also the  
25 distributing of dietary supplements.

1 Elements that are listed on this slide are found  
2 in various places in the ANPR. Some of them are in  
3 production and process controls, some in warehousing,  
4 distribution and post-distribution procedures. The ANPR  
5 states that ingredients, in-process materials, and finished  
6 dietary supplements must be stored in a manner that prevents  
7 adulteration, and upon receipt, ingredients, packing  
8 materials and labeling materials must be examined and tested  
9 to determine if they meet specifications.

10 Each lot of raw materials must undergo at least  
11 one test by the manufacturer to verify its identity and to  
12 conform to other specifications. Tests may include chemical  
13 and laboratory tests, gross organoleptic tests, microscopic  
14 identification, or analysis of constituent markers. The  
15 ANPR says that in lieu of such testing, a C of A or  
16 Certificate of Analysis may be accepted from a supplier,  
17 provided that the manufacturer establishes the reliability  
18 of the supplier's analyses.

19 The ANPR says that raw materials should be  
20 examined and tested for filth, insect infestation or  
21 extraneous material, microbiological contamination,  
22 aflatoxin and other natural toxins, and that in-process  
23 materials must be tested during manufacture to detect  
24 adulteration.

25 There is a section in the ANPR on packaging and

1 labeling operations, and these operations that are addressed  
2 include filling, assembling, packaging and other operations,  
3 and that these must be performed in a way that protects the  
4 dietary supplements against adulteration. The dietary  
5 supplements must be identified with a lot number that  
6 permits the determination of the history of manufacture and  
7 the control of each batch. Products and packaging materials  
8 not meeting specifications must be rejected.

9           Storing of finished product, the industry outlines  
10 provisions, says that finished product must be stored under  
11 conditions that will protect against adulteration, and that  
12 reserve samples of each batch of dietary supplements should  
13 be retained and stored under conditions with the product  
14 labeling.

15           Next one. This is the one on written procedures  
16 and records. The ANPR identified certain written procedures  
17 and records that the industry coalition thought were  
18 necessary to include in a GMP.

19           Under the ANPR outline, written procedures must be  
20 established and followed for: cleaning and maintaining  
21 equipment and utensils; for the receipt, storage, handling,  
22 examination or testing that may be necessary to assure the  
23 identity of labeling and the appropriate identity,  
24 cleanliness, and quality characteristics of packaging  
25 materials; written procedures for the responsibilities and

1 authorities of quality control; for the processing of  
2 batches, including a master production record and a batch  
3 production record; and the ANPR includes written procedures  
4 and records describing the handling of oral and written  
5 complaints regarding a dietary product.

6           Next one. The industry outline submitted  
7 identifies records as those to be retained, and they are  
8 listed here: raw material records; any lab record;  
9 production record; control record; distribution record; and  
10 any complaint record specifically associated with a batch of  
11 dietary supplement. And the outline submitted by the  
12 industry specifies that records must be retained for at  
13 least one year after an expiration date, if there is one; or  
14 if there is no expiration date identified on the product,  
15 for at least three years after the date of manufacture.

16           So there you have a quick run-through of some of  
17 the points that are in the ANPR. There is much more detail.  
18 My purpose is to just kind of quickly outline for you the  
19 items or the elements that are in the ANPR, so that you can  
20 have a framework for our later small group discussions.  
21 Thank you.

22           MR. WILLIAMS: One thing. Let's see. First off,  
23 would the people at this table move to some other tables,  
24 because we don't have anybody from FDA at this table, if you  
25 wouldn't mind. Just any of the other tables we've got

1 there. Thank you very much.

2           The second thing is, one of the things that we  
3 have to do, in order for any comment to be made--and again,  
4 you don't have to identify who you are if you don't want to,  
5 or what company you're from--but in order for us to take  
6 your comments and actually include them in our discussions  
7 about the proposed regulation, they've got to be on what we  
8 call the administrative record. So at your table, we want  
9 somebody to just--not the FDA but somebody else--to record  
10 the comments, and then after these sessions we want to sort  
11 of read these comments out, and we have a transcriber who  
12 will put them into the record, and that will be helpful to  
13 us. Okay? That's the only way we can include them.

14           MR. NARDINELLI: To go in the order I have, is  
15 Michael McGuffin here? Okay. You can be up first. Let me  
16 ask the speakers, those of you who have asked to speak, to  
17 please keep your remarks to 10 minutes or less, however,  
18 because we do want to leave room for the rest of the  
19 program. So, Michael McGuffin, do you want to speak?

20           MR. MCGUFFIN: Do you want me to speak from here?

21           MR. NARDINELLI: Yes, please.

22           MR. MCGUFFIN: Okay. I got almost everything done  
23 on my way here except printing this document, so I'm going  
24 to have to work from my laptop.

25           I want to start by saying thanks for the

1 opportunity. We do appreciate this forum. I'm here tonight  
2 on behalf of the American Herbal Products Association. AHPA  
3 is the national trade association and voice of the herbal  
4 products industry, and we will provide full written comments  
5 to the topic at hand at a later date, prior to the closing  
6 date.

7           As announced in the Federal Register notice of  
8 September 3rd, 1999, this meeting provides an opportunity to  
9 comment on the economic effects of a possible proposed  
10 regulation on CGMP for dietary supplements. This is the  
11 third such meeting, as you all have mentioned. We were  
12 represented at the first of these on July 12, 1999, by Beth  
13 Lambert of AHPA member company Herbalist and Alchemist. My  
14 comments will reiterate some of the points made in our  
15 earlier comments, and will be addressed to additional  
16 concerns of the herbal dietary supplements industry segment  
17 represented by AHPA.

18           I want to start with a little background. AHPA  
19 was one of the five trade associations that worked together  
20 to create the proposed CGMP for dietary supplements that  
21 were presented to FDA in November of '99, and that Dr.  
22 Strauss has referred to here tonight as the industry  
23 outline. Implicit in its role as a signatory to this  
24 industry draft CGMP, AHPA supported their adopting in 1995  
25 and continues to support the adoption of these or

1 significantly similar CGMP for dietary supplements at this  
2 time.

3 I'd like to talk a little about the prevalence of  
4 small businesses. The majority of AHPA's manufacturer  
5 members, that is, those who would be affected by any CGMP  
6 established for dietary supplements, are small businesses.  
7 Annual dues for active members in our association are  
8 assessed on a sliding scale based on annual revenues. At  
9 this time, 85 percent of AHPA's members report annual sales  
10 of less than \$10 million, and 95 percent pay dues in the  
11 categories defined by annual revenues below \$25 million.

12 On April 29, 1998, FDA published in the Federal  
13 Register a proposed rule on related regulations, on the  
14 regulations for statements made for dietary supplements  
15 concerning the effect of the product on the structure or  
16 function of the body. In its analysis in that rule or  
17 proposed rule, the economic impact of that proposed rule,  
18 FDA presented a thorough review of the industry.

19 Their analysis included a discussion of the  
20 appropriate SIC codes, existing definitions for small  
21 businesses within each code, as well as an examination of  
22 authoritative estimates of the revenues of the businesses  
23 that make up the dietary supplements industry. The agency  
24 concluded that, and I quote, "Because virtually all firms  
25 affected by this rule will be classified as small under SBA

1 standards, FDA assumes that small entities will bear 100  
2 percent of the costs."

3           We think the same estimation is true for any rules  
4 that have to do with dietary supplements, and any more  
5 specific analysis of the herbal dietary supplements industry  
6 would no doubt draw the same conclusions. We are an  
7 industry of small businesses, as shown by our internal  
8 documents as well as by FDA's own estimation. Any CGMP  
9 established for dietary supplements will be, by any measure,  
10 CGMP for small businesses.

11           With regard to minimizing the economic impact, I  
12 note in your earlier presentation you talked about the  
13 requirement to do so is established by Federal law, and we  
14 have defined, in order to minimize the economic impact, we  
15 proposed that at a minimum the following are included in the  
16 final draft:

17           Regarding time of implementation, based on  
18 communication with our members, we have tentatively  
19 concluded that small companies should be allowed an  
20 additional two years for implementation and manufacturing  
21 facilities of any final CGMP.

22           Training support: The agency should be prepared  
23 to develop an active training partnership with industry to  
24 provide training to small businesses in all elements of any  
25 CGMP established for dietary supplements. Further, the



1 agency should consider itself as a source of funding for  
2 such training, or alternately should assist industry in  
3 identifying alternate sources of funding.

4 And, finally, regulatory clarity: In order to  
5 minimize the financial burden on small businesses of legal  
6 review of any final rules, FDA should assure that these are  
7 clearly written.

8 I want to go off into a related topic with regard  
9 to the identification of dietary ingredients in CGMP. The  
10 industry draft addresses the issue of ingredient  
11 identification in quite straightforward language, and I  
12 quote, as Dr. Strauss did: "Each lot of raw materials shall  
13 undergo at least one test by the manufacturer to verify its  
14 identity."

15 The draft goes on to delineate specific  
16 appropriate tests by which such verification could be made.  
17 At no time does it state or imply that raw material for  
18 which identity is not verified can be used in the  
19 manufacture of a dietary supplement. At the same time,  
20 there is a need to provide good guidance to industry that  
21 can be used to accomplish such identity verification.

22 Dr. Forouz Ertl, AHPA's Standards Committee Chair,  
23 and I were active members of the GMP Working Group of FDA's  
24 Foods Advisory Committee. The efforts of the Working Group  
25 culminated in a report to the FAC, since forwarded to FDA,

1 that delineated recommendations toward the creation of a  
2 good guidance document for identification of dietary  
3 ingredients. The information provided by Dr. Ertl and me  
4 was specific to identification of botanical ingredients, as  
5 that is our field of experience.

6           As part of the process of managing the Working  
7 Group, FDA explained in detail the differences between a  
8 Federal regulation and a good guidance document. We were  
9 provided copies of the Federal Register notice dated  
10 February 27, 1997, which describes the agency's adoption of  
11 policies and procedures for the development, issuance and  
12 use of good guidance documents.

13           Our education on the agency's use of this  
14 excellent tool discussed the legal effect of guidance  
15 documents, and specifically the language in the notice that  
16 states that alternative methods that comply with the  
17 relevant regulation are acceptable. The requirement for any  
18 guidance to bear a statement of non-binding effect was also  
19 identified. Finally, we were informed that our work was  
20 addressed to the creation of a Level I guidance document.  
21 Such documents require that the agency in most cases solicit  
22 public input prior to implementation.

23           The implication of all this training, of course,  
24 was that our task was in the context of the development of  
25 just such defined good guidance document.

1           Now, why am I speaking about a good guidance  
2 document at a meeting that FDA has scheduled to discuss CGMP  
3 for dietary supplements? Why have I not kept my comments  
4 focused on the issue at hand, that is, the economic impact  
5 of any proposal to established CGMP?

6           I am speaking about this separate but related  
7 issue because significant confusion has apparently arisen  
8 over the work of the GMP Working Group. Others have  
9 appeared at earlier FDA public meetings to make statements  
10 in opposition to certain specific elements of the Working  
11 Group's recommendations.

12           I would agree with such stated opposition if FDA  
13 has any intention whatsoever to include any part of the  
14 Working Group's recommendations for utilizing multiple tests  
15 to identify botanical dietary ingredients in CGMP  
16 regulations. In fact, if FDA has any such intention, I  
17 would consider this to be an abandonment of the trust that  
18 the agency and industry representatives placed in each other  
19 throughout the process of the development of the Working  
20 Group's recommendations. Further, the inclusion of the  
21 guidance intended by the Working Group into a regulatory  
22 scheme might significantly increase the financial burden on  
23 manufacturers, and especially on the smallest companies.

24           In conclusion, AHPA and its members, small and  
25 large, continue to support the establishment of CGMP

1 specific to dietary supplements that are significantly  
2 similar to the industry draft published in the Federal  
3 Register on February 6, 1997. We believe that the economic  
4 impact of these can be mitigated. We strongly believe that  
5 the efforts of the GMP Working Group should be used for the  
6 purpose for which its efforts were undertaken, that is, the  
7 development of a good guidance document or some similar non-  
8 regulatory document.

9           And, finally, we believe that if the agency  
10 intends to include anything in final rules for CGMP for  
11 dietary supplements that is not significantly similar to the  
12 industry draft identified here tonight, this should be  
13 communicated in the form of a proposed rule to allow for  
14 review of our members who would be affected by such a final  
15 rule. Thank you very much.

16           MR. NARDINELLI: The next name I have on my list  
17 is Charles Raubicheck. Okay, please take your 10 minutes.

18           MR. RAUBICHECK: I will endeavor to be brief so we  
19 can move on. My name is Charles Raubicheck. I am a member  
20 of the firm of Sibley & Austin. We are general counsel to  
21 the National Nutritional Foods Association, often referred  
22 to as NNFA. We are the largest trade association in the  
23 industry, as I am sure many if not all of you know.

24           NNFA did join with AHPA and other groups to  
25 support the publication of the ANPR as a starting point.

1 NNFA did not necessarily concur with each and every  
2 provision in this document, but the agency felt that it was  
3 appropriate under DSHEA for FDA to move forward and for the  
4 industry to move forward together to develop common ground  
5 on the subject of having Good Manufacturing Practice  
6 standards for supplements, to ensure and indeed raise the  
7 quality of product being sold within the industry.

8           However, the ANPR has been on the books now for  
9 almost three years and has not proceeded to a proposal.  
10 NNFA felt that, in the interest of its members, in the  
11 interest of retailers and consumers who are even outside its  
12 membership, it would be appropriate for NNFA to continue to  
13 explore this issue. And indeed the Association has adopted  
14 its own GMP program, which was formally launched this past  
15 July in Las Vegas, as I'm sure many of you know. These GMP  
16 standards have been submitted to FDA to help assist the  
17 agency in moving forward with the agency's own proposal that  
18 is expected.

19           The hallmark of the NNFA program is the fact that  
20 it is an independent third party certification program.  
21 NNFA does not send its own members to inspect its own  
22 facilities. We have an independent GMP Advisory Committee.  
23 We have independent auditors who go in and inspect member  
24 facilities to determine whether they are in compliance with  
25 the standards. If they are, they get a third party

1 certification. That certification is mandatory for NNFA  
2 membership. Furthermore, that certification is good only  
3 for a period of three years and must be renewed with follow-  
4 up audits.

5           Now, in adopting these GNP standards, NNFA used  
6 the ANPR as a starting point because the agency--excuse me--  
7 the Association agreed with the agency that the GMPs ought  
8 to be modeled on food GMPs with certain additional  
9 provisions that were appropriate to dietary supplements.  
10 Upon further reflection, in a process, a deliberative  
11 process that has been vetted over time within NNFA, it was  
12 determined that certain provisions of the ANPR were not  
13 necessarily appropriate to supplements, and they do not  
14 appear in our standards.

15           But I think if you look at our standards, you will  
16 see a valid, workable set of dietary supplement GMPs that we  
17 believe can be met not only by our members but by other  
18 companies within the industry, and we think that FDA will  
19 like this document when it is reviewed in toto. It has been  
20 submitted to Joe Levitt. It has been submitted to Beth  
21 Yetley. We are in the process of getting a copy to Bob  
22 Moore.

23           The hallmark of the GMPs, for purposes of this  
24 meeting, is that we believe that these dietary supplement  
25 GMPs can be met and satisfied by all companies within the

1 industry, not simply large companies. They are designed and  
2 intended to be broad enough and flexible enough that all  
3 companies within the industry can comply. We earnestly hope  
4 that FDA will take our standards into consideration when  
5 coming up with the agency's own proposal. We are open to  
6 dialogue with FDA in terms of the agency's own process, and  
7 look forward to the day when both government and industry  
8 can essentially have a workable set of GMPs that will apply  
9 across the board.

10 Thank you very much.

11 MR. NARDINELLI: The last person who has requested  
12 time before the meeting is Jarrow L. Rogovin. Is he here?  
13 Okay. How is your name pronounced?

14 MR. ROGOVIN: Jarrow Rogovin.

15 MR. NARDINELLI: Rogovin. Okay.

16 MR. ROGOVIN: Forgive me for reading this. I'll  
17 push it through a little faster.

18 I am president of Jarrow Formulas, Inc. We've  
19 been in business about 23 years. We're a Los Angeles  
20 company.

21 One, DSHEA standard of food for dietary  
22 supplements: The dietary supplement industry specifically  
23 sought and achieved statutory limitations on any GMPs for  
24 the category. The language of the statute states: "Such  
25 regulations shall be modeled after current Good

1 Manufacturing Practice regulations for food."

2 The agency's February 6, 1997 ANPR frankly states:  
3 "However, the agency recognizes that the first question that  
4 must be addressed is whether there is a need for such  
5 regulations, or whether Part 100, 21 C.F.R., continues to be  
6 adequate."

7 The ANPR does not attempt to answer this question.  
8 Am I right? Is it 100 or 110?

9 VOICE: 110.

10 MR. ROGOVIN: Thank you. Typo. "...continues to  
11 be adequate."

12 The ANPR does not attempt to answer this question,  
13 not to my knowledge has the agency done so to date in other  
14 documents. This is particularly disturbing in light of the  
15 apparent redundant testing requirements that are being  
16 proposed. More than any other issue, testing, including  
17 shelf life stability testing if an expiration date is used,  
18 is a more pharmaceutical than food GMP procedure, and will  
19 be exorbitantly expensive.

20 Threshold Distributors, the parent company of  
21 Source Naturals and Planetary Formulas, has authorized me to  
22 state that they have written the NNFA concerning the issue  
23 of shelf live testing twice and received no response nor  
24 acknowledgement of their letter. The company, and many  
25 others, are concerned about this issue because the NNFA's



1 new regulations require expiration dating which will trigger  
2 the FDA stability testing requirement.

3           The agency should also answer the following  
4 questions: Are GMPs necessary, or are current regulations  
5 adequate? Many companies, including Jarrow Formulas,  
6 believe current regulations are, for the most part, adequate  
7 but simply have not been enforced. We question whether  
8 failure to enforce a policy should become a self-justifying  
9 argument for a more rigorous regime. Second, the agency  
10 needs to state whether a particular policy or procedure  
11 exceeds food GMPs and state the justification for doing so,  
12 including the cost versus the benefit.

13           Two, statutory requirement for OMB review of  
14 economic impact, and the failure of the NNFA to consider  
15 economic impact. I see no figures out of anybody on what  
16 this is going to cost. It is just presumptively concluded,  
17 "Oh, it's affordable, it's reasonable." I haven't seen the  
18 numbers.

19           The agency understands its responsibility to  
20 report to the OMB on the economic impact of its proposed  
21 rules. While the agency states that it has been approached  
22 by elements of the industry, the fact is that a very  
23 substantial portion if not the majority of the NNFA  
24 membership feels that the organization's leadership acted  
25 unilaterally and without proper consultation with the

1 affected membership. Views presented were from large  
2 companies that conduct a substantial amount of their  
3 business in the mass market, and who have a substantial  
4 motivation to run up the cost to smaller companies with  
5 superfluous testing.

6 I asked Mr. Ford in Las Vegas, and also a supplier  
7 member of the NNFA board from a large company, why products  
8 such as Vitamin E from a GMP manufacturer such as Henkel  
9 needs to be revalidated every time. This seems to be the  
10 NNFA standards. Why a periodic check to give a statistical  
11 result would not be appropriate, as long as the manufacturer  
12 was GMP; that the chances of mislabeling a shipment were too  
13 rare to justify the ongoing collective expense throughout  
14 the country of such redundant testing, including the  
15 finished product.

16 Both made an ad hominem response which obviously  
17 did not answer the question. The question of revalidating  
18 materials from a GMP house appears to be an issue with the  
19 NNFA standards and not FDA, but both entities need to be  
20 addressed at this time, given their parallel tracks. Again,  
21 the agency, with the cooperation of the industry, needs to  
22 survey the reliability of the industry's products before  
23 such an enormously expensive and time-consuming project is  
24 undertaken.

25 My company does currently between \$15 and \$25

1 million a year in sales. We are currently building a new  
2 facility, and intend to install an on-site analytical lab.  
3 However, I estimate the GMPs will cause us to hire an  
4 additional two persons, in addition to the lab personnel  
5 being planned. Additional costs will ripple through the  
6 company as our suppliers are required to do the same thing.  
7 The end benefit and increased cost to the consumer will be  
8 questionable.

9           Despite a lot of this, a company like mine is in  
10 something of the catbird's seat because we can change  
11 manufacturing vendors to supply our needs. However, there  
12 is a serious risk, as Mr. McGuffin pointed out, that  
13 smaller, traditional, older, quality tablet-making  
14 facilities will be put out of business.

15           Time frame: I would like to see phased-in GMPs  
16 beginning with ISO 9000 standards; basically, straighten out  
17 the paperwork. Sometimes cliches are also common sense:  
18 Walk before you run. The best approach to increasing  
19 quality control, and one that would save costs and give a  
20 sense of direction for the future, would be to implement  
21 ISO 9000 type standards first, raise the quality of  
22 paperwork, traceability and reproducibility of procedures.  
23 This will prepare an industry that is still growing and  
24 learning for the next stage.

25           In a sense, we are burdened by our own success.

1 Sine DSHEA, the industry has surged forward and is popular  
2 with the American people. Small, family-run businesses must  
3 now meet higher standards and compete with their newly  
4 interested competitors, mass marketers and pharmaceuticals.  
5 We have been a "last frontier" industry in many ways, the  
6 self-taught small entrepreneur with a passion for the  
7 subject. Now we must compete against multi-billion dollar  
8 companies who are also playing favorites with each other.

9 BASF has given favorable treatment to two large  
10 players for its sami product, and the natural foods industry  
11 has been hard-hit by this supplier's disregard for those who  
12 made this industry from the ground up. Now, to further  
13 burden us with a shortened time, particularly by the NNFA,  
14 to make even further substantial changes while we are being  
15 undercut by e-commerce and disloyal chemical suppliers, is  
16 problematic.

17 Accordingly, we ask to start with ISO 9000  
18 procedures, a phased approach, while we adjust to the  
19 ongoing consolidation of our retail market into very large  
20 natural food quasi-supermarkets and an uncertain future with  
21 our chemical suppliers.

22 Fourth, overemphasis on manufacturing of capsules  
23 and tablets compared to raw materials: Phil Visiant, a vice  
24 president of Reliance Vitamin Company, has correctly pointed  
25 out that the real quality issue in our industry is the raw

1 materials, the raw materials supplier. He cites, for  
2 instance, the peaking l-tryptophan from Showadanka when they  
3 changed procedures, possibly violated a drug master file  
4 doing so; ginseng and the quinsazine contamination, the  
5 pesticide; creatine monohydrate and dihydrotriazine;  
6 alphapolyic acid contaminant if not purified, and others.

7           Now, if a raw material is not coming from a GMP  
8 certified house, in a sealed drum from a GMP certified  
9 distributor, the tableter should be required to do more  
10 checking, obviously. Again, I have asked the NNFA about  
11 this and not received an adequate response.

12           Five, impact of expiration dating due to shelf  
13 life study requirement, including costs and probable delays  
14 in product introduction. The question might presently be  
15 better addressed in the NNFA, which seems intent on not  
16 answering it, but the NNFA expiration dating requirement  
17 will trigger the FDA's shelf life study requirement.

18           Other than the cost of these studies due to their  
19 complexity, such as periodic testing through the study  
20 period of each ingredient for which there is a test method,  
21 the resulting delay will destroy the competitive ability of  
22 most companies. Companies will not be able to introduce  
23 their products into a market that often has a short market  
24 life for peak sales.

25           Also, this appears to be more pharmaceutical than

1 food in nature. Food generally has product category  
2 expiration periods. This will, the dietary supplement  
3 requirement will be product-by-product testing rather than  
4 by category. An effort should be made to establish  
5 ingredient life expectancies depending upon the dose form  
6 and packaging. I apologize for the word "dose," but having  
7 been an English major, "dose" happens to be the best word to  
8 convey the concept.

9           Six, need for industry-wide data on reliability of  
10 manufacturing tablets and capsules; with micronutrients,  
11 need for data on stability of inherently oxidizable  
12 compounds such as Vitamin A or carotinoids. This impacts  
13 clearly on expiration date data but also on manufacturing  
14 methods.

15           There probably should be industry-wide standards  
16 set for premixing micronutrients and dosing of oxidizable  
17 compounds. Currently this is a matter of trade secrets.  
18 However, some sort of industry process should be set.  
19 Products presently on the shelf could be studied for these  
20 issues and then an analysis made of these--determinations  
21 made of these manufacturing issues.

22           Seven, analytical methodology problems: The  
23 foremost problem of analyzing finished products is sample  
24 preparation. It is not uncommon to have virtually  
25 impossible sample preparation problems. For instance,

1 analyzing a finished ginkgo product versus the bulk material  
2 often yields very large differences, and my company has a  
3 lot of experience in this issue. Accordingly, verification  
4 manufacturing may often need to be done based upon input  
5 versus yield calculations.

6           Eight, need to develop reasonable statistically  
7 based analytical requirements. More reasonable cost is  
8 commensurate with low level of risk. The cost of analyzing  
9 difficult materials or multiple ingredients mitigates  
10 against universal testing of finished products, particularly  
11 considering the low risk to consumers and low payoff in  
12 quality assurance.

13           The agency and industry need to adopt a critical  
14 point assessment and analysis approach. For instance, if a  
15 multivitamin mineral formula is checked for its  
16 micronutrients or a certain number of them with good  
17 results, then little or no testing should be required on  
18 macronutrients. Also, in multinutrient products, higher  
19 priority should be given to RDR nutrients than to  
20 ingredients such as herbs where the cost of analysis is high  
21 and the benefit of such testing low.

22           Nine, GMP standards should be set by the FDA, not  
23 the NNFA, and the NNFA should stay out of marketing and not  
24 promote an NNFA GMP logo. For one, the logo of this health  
25 food retailer organization will be brought into the mass

1 market by brand names that sell to both. That disserves the  
2 NNFA's traditional and mandated health food retailer  
3 membership, who are being seriously impacted by the mass  
4 market. Any GMPs are an FDA issue, not a marketing issue  
5 for a trade organization.

6 Ten, in conclusion, there is an industry-wide  
7 concern that the drive for GMPs is being driven by mass  
8 marketing pharmaceutical companies who wish to drive out  
9 competition from smaller companies. In particular, Jarrow  
10 Formulas is concerned that GMPs will invite FDA inspections  
11 where companies simply get nit-picked.

12 Many agents remain hostile to the industry and  
13 still resent the passage of DSHEA. I have received such  
14 comments. I have noticed that five years after the fact,  
15 FDA field agents frequently still do not know the difference  
16 between a DSHEA authorized structure and function claim and  
17 a drug claim. Opening the door to overregulation of  
18 tableting and capsulating, while the greater issue is raw  
19 material integrity, does less to protect the consumer than  
20 the cost warrants.

21 Thank you very much.

22 MR. NARDINELLI: We have time for other general  
23 comments. Again, as Richard Williams said, if you wish the  
24 comment to be on the record, you'll have to identify  
25 yourself and please come to the middle--



1 MR. WILLIAMS: Up there, not necessarily at the  
2 table.

3 MR. NARDINELLI: No, not at the table, not in the  
4 small discussion groups but in this section.

5 MR. DEUS: Can I get some clarification? I didn't  
6 have time to put this off on a word processor, and so I just  
7 jotted down my thoughts. They're very rough and my  
8 handwriting is atrocious. There's no way I can give you a  
9 printed record tonight.

10 MR. NARDINELLI: No, no, no.

11 MR. DEUS: But I can when I get back to the  
12 office.

13 MR. NARDINELLI: If you'd like to stand up and  
14 talk about them, that would be fine.

15 MR. DEUS: Yes.

16 MR. NARDINELLI: Stand right over there.

17 MR. DEUS: Okay. Good evening. My name is Jim  
18 Deus. I'm the owner and general director of Deus Research  
19 Laboratories. My company specializes in developing,  
20 manufacturing, and packaging products for our customers to  
21 market on a worldwide basis, primarily in the nutroceutical  
22 and cosmeceutical fields. We do not market any of our  
23 products ourselves, but are a private label producer only.  
24 That's why I'm not at the health food store, because I don't  
25 go to trade shows; my customers do.

1           We have been in the business for over 25 years  
2 now, which probably makes us one of the oldest manufacturers  
3 specializing in these fields. After all, it was only passed  
4 in '94, that they recognized it.

5           In the early years of our existence, we produced  
6 pharmaceuticals only, so that when we decided to produce  
7 only nutroceutical and cosmeceutical products, we had a lot  
8 of experience in dealing with the CGMPs as they are  
9 promulgated, an old FDA word, by the FDA in the  
10 pharmaceutical industry.

11           Having done both, I can unequivocally state that  
12 due to the considerable difference in the nature of the two  
13 products or the two industries, that if you attempt to  
14 interpret the regulations exactly as they are stated in Part  
15 211, we will have no trouble in passing. The problem has  
16 been with overzealous or inexperienced investigators who go  
17 far beyond what they say, and this has always been a  
18 problem. And we have done it, we have gone that extra mile,  
19 we have put it in place. We want to continue to do so.

20           I'm going to go ahead and give you a little  
21 background on the company because you asked for that, and  
22 I'm certainly what you would call a very small business.  
23 Unlike many other companies, we not only press tablets, fill  
24 capsules, and produce liquids, powders, lotions or gels, but  
25 we also do extractions of herbs. We do produce some of the

1 raw materials ourselves, when we cannot find the  
2 specifications we need to meet the requirements of our  
3 customers, so we synthesize chemicals occasionally, when we  
4 have to.

5 We are a small business. We have approximately  
6 50,000 square feet in our facility. Our employment averages  
7 around 30 people year-round, goes to a maximum of 40, and  
8 maybe a little lower at times. Our sales last year were a  
9 little over \$1 million, and we will do half again more than  
10 that this year, so we'll be just under \$2 million.

11 I've always predicted that you'll attempt to  
12 introduce, as closely as possible, GMPs into the  
13 nutroceutical field, similar to what you have had in the  
14 pharmaceutical field, and since we originally set up to  
15 follow those GMPs, I maintain much of the same procedures I  
16 used when I produced pharmaceuticals. However, I quickly  
17 learned that due to certain basic differences, we had to  
18 make some differences in the way we do them, and I would  
19 love to show you what those differences are if you're  
20 interested, particularly in herbs.

21 Most FDA inspectors want to see all stainless  
22 steel. They want to see all brand new stainless steel every  
23 year or two. And when you're grinding herbs that come in  
24 from all over the world, particularly from Third World  
25 countries, this is not always feasible. We do that in a

1 different--we have five and a half acres where we're located  
2 in a rural area in Texas, as you can tell from my accent.

3           So that area where we do the first processing is  
4 separate from, and most of it is outside because we don't  
5 want that dust in the plant, airborne contamination. As I  
6 said, my background was ethical pharmaceuticals. I worked  
7 for the major companies before I started my own company. So  
8 this is something I worry about. This is how we found to  
9 solve that problem.

10           Then as it moves through the phases, then we go to  
11 much more stainless steel, the whole bit, but the initial  
12 grinding has to be done in a different, different way, and  
13 that doesn't match up anything with what you do in the  
14 pharmaceutical field.

15           In keeping up with the demands in the  
16 manufacturing process of my customers, I have over the last  
17 five years or so invested approximately 80 percent of my  
18 profits back into facilities and equipment to expand our  
19 capabilities to meet our customers' needs. In the last year  
20 or so I have shifted gears somewhat by earmarking the bulk  
21 of that investment into our quality control and quality  
22 assurance departments.

23           I'm surprised, you talk about quality control, I  
24 don't hear anything much about quality assurance. They are  
25 two different things, although they are related.

1           To this end, I have expanded our QC laboratory by  
2 300 percent, added new equipment, where we have a complete  
3 microbiology laboratory now. We have ability for  
4 colormetric analysis of finished products and raw materials,  
5 and I put in a completely automated Farr UV scanning  
6 spectrophotometer. By the way, I used to sell medical  
7 diagnostics, so I used to teach it, so I know how to run  
8 this equipment.

9           I have spent roughly \$75,000 in the last year.  
10 Also, I have added two full-time employees and have placed  
11 additional duties on my existing employees, incurring  
12 overtime salaries in many instances. All this represents a  
13 major investment for a small company like mine.

14           My greatest fear is that I hope that I have not  
15 done all this in vain. My concerns are directed in three  
16 primary areas, although I could probably think of a lot  
17 more.

18           Number one, all this investment without question  
19 requires me to raise prices to cover these additional costs.  
20 I want to be certain that my competitors are required to do  
21 the same, if this is what I must do, so that we can all play  
22 from a level playing field.

23           I know from experience that industry self-  
24 regulation does not always meet the goals that it was  
25 intended to do, but it does make the end user, the customer

1 who buys the product, a little bit more comfortable with it.  
2 I would like to see minimum national licensing requirements  
3 which could be put in place as follows:

4 All manufacturers are required to be State  
5 licensed, usually as food manufacturers. That's the way we  
6 do it in Texas already. Why not put in place certain  
7 nationwide licensing requirements for a new classification  
8 of nutroceutical and cosmeceutical State licenses that must  
9 follow these requirements? Nothing would change, except the  
10 standard nationwide licensing programs would be an extension  
11 of the existing State licensing regulations that are already  
12 in place.

13 Number two, I've heard from many in the  
14 university/academic fields that call for all herbal extract  
15 supplements to undergo Phase I and Phase II testing for  
16 safety. Such a program would be unnecessary in most  
17 instances, as monographs for essentially all these extracts  
18 have already been done overseas and the information is in  
19 the public domain. I know. I manufacture for them. Such  
20 testing would only increase the income of those people who  
21 would do the unnecessary testing, in my opinion.

22 Number three, others have proposed an approval  
23 process for all nutritional and cosmeceutical products  
24 similar to NDAs and ANDAs, with some protection for the  
25 companies who spend the hundreds of millions of dollars to

1 do the submissions--and I know what it costs, I work with  
2 them all the time, that's one of the things I consult on--  
3 similar to what is used in the orphan drug programs. Again,  
4 this is totally unnecessary due to the fact that this work  
5 has already been done by foreign governments and the  
6 information is readily available.

7 Under the international harmonization process,  
8 which is rapidly ongoing at this time, such an arrangement  
9 as I have described is going to happen anyway, so that any  
10 money spent on safety testing of herbal supplements or  
11 approval process of products, such as an NDA or an ANDA,  
12 will be done in vain except for those who will be more than  
13 amply paid for doing this unnecessary work. There is no  
14 need to reinvent the wheels which already have been working  
15 for years in the rest of the world.

16 Whether we want to acknowledge it or not, we are  
17 not an island unto ourselves but are part of the world  
18 market. Introducing Phase I and Phase II herbal testing and  
19 NDA approval requirements would only increase prices to the  
20 end user, completely out of reason in relation to the  
21 expected benefits, and such products are not in the best  
22 interest of the public. Thank you.

23 MR. NARDINELLI: Somebody else? Please go ahead.

24 MR. COVEN: Mitch Coven from Vitality Works. I'm  
25 president of a small liquid extract company in Albuquerque,

1 New Mexico, and I also chair the Small Business Committee of  
2 the American Herbal Products Association.

3 First of all, I would like to thank the FDA for  
4 the opportunity to speak and give feedback as a small  
5 business member in the herbal industry, and I do want the  
6 FDA to know that most small companies are already doing most  
7 of what is already proposed in the GMPs, as far as I  
8 understand it, as are we, and it seems at this point there  
9 is just some tightening that needs to be done.

10 In the spirit of the attempt that was trying to  
11 happen today, we were trying to assess the cost impact, the  
12 economic impact of small businesses. I would like to  
13 address that most directly.

14 First of all, it seems like there were some  
15 attempts to find out from the small businesses what the  
16 financial impact would be, should the CGMPs go through, and  
17 I just want you to know that it's a difficult assessment for  
18 small businesses to project what that impact might be based  
19 on some of the aspects that we're not doing, some we are.  
20 And we're attempting to do that.

21 And information that was given us earlier today at  
22 the breakfast meeting of the American Herbal Products  
23 Association from Karen--I don't know your last name.

24 MS. STRAUSS: Strauss.

25 MR. COVEN: Strauss. It came to, it's the first



1 time I had heard that some visits were done to some  
2 manufacturing sites to assess how well some manufacturers  
3 were currently implementing Good Manufacturing Procedures.  
4 If the attempt is being done to assess the impact on small  
5 businesses, a question was brought up as to how many of the  
6 site visits that occurred were to small businesses as  
7 defined by the FDA, and the response was none.

8           We are wondering why no smaller businesses, as the  
9 FDA defines it, were visited to assess what kind of impact  
10 this may be on site. The American Herbal Products  
11 Association defines a small business member for committee  
12 purposes as revenues of \$5 million or less gross revenue,  
13 which at our last count comprised approximately two-thirds  
14 of the AHPA membership. As Mr. McGuffin stated, \$10 million  
15 or less were about 85 percent of the AHPA membership.

16           So I would like to ask, if possible, as the FDA  
17 tries to assess the economic impact to small business, if  
18 they can visit a smaller manufacturer in the herbal trade, I  
19 would like to invite them to do so. And at the meeting  
20 there were approximately four or six companies which  
21 volunteered to have their sites visited, which might provide  
22 some further education on the impact.

23           One other point. So we're looking for guidance as  
24 to any kind of economic information that currently exists,  
25 that FDA may have, as to what they project the economic

1 impact might be, should they have such numbers.

2 Another issue that I would like, as a point of  
3 clarification, one of the points that we see could have  
4 severe economic impact is the issue of botanical  
5 identification, how many kinds of tests need to be done. In  
6 the GMP it states that from a raw materials supplier, that  
7 we can accept a Certificate of Analysis if we can establish  
8 the reliability of a supplier.

9 As many know, there may be some importers or  
10 growers that may have container loads of raw material. If  
11 they can do testing once and spread out the economic impact  
12 on that through the whole crop, maybe the purchasers of such  
13 raw material may not have to duplicate the tests over many  
14 times. I'm looking for guidance on what does it mean, and  
15 can FDA define how one would establish the reliability of  
16 such a supplier to satisfy the FDA? So I'm looking for  
17 guidance on that as well.

18 Thank you.

19 MR. WILLIAMS: Let me just address a couple of  
20 points that were raised.

21 MR. NARDINELLI: Sure.

22 MR. WILLIAMS: The first thing, you are absolutely  
23 correct, except under FDA guidelines a small company is  
24 defined as a company, they have defined it by employment,  
25 it's less than 500 employees. We actually did visit some,

1 let's say "large" defined small companies, but up until I  
2 guess it has only been a few weeks ago, we didn't have any  
3 invitations at all from small companies, so this is good to  
4 hear.

5 We need to take that, we need to go back and look  
6 at our budget, okay, because we have exhausted quite a bit  
7 of money on some of these other visits, and see if we can do  
8 that. But we certainly appreciate the invitation, so we'll  
9 take a look at that.

10 The second thing you asked about was our  
11 projections of cost. Basically, our projections of cost are  
12 done within the executive branch and they have received  
13 clearance, and the first projections that you'll see of ours  
14 will be--will accompany the proposal, if we have one. Okay?  
15 So we're in the data gathering stage now. We want to learn  
16 from you what your projections are, and then we'll put all  
17 those together if we go forward with the proposal.

18 MR. NARDINELLI: Would someone else like to speak  
19 to the group as a whole?

20 [No response.]

21 MR. NARDINELLI: Okay. Well, for those of you who  
22 came in a little late, let me explain the next part of the  
23 meeting. We are going to engage in discussions at each  
24 individual table. There will be one FDA facilitator at each  
25 table, except there is nobody at that last table. Would it

1 be possible for you four ladies to find a seat somewhere?  
2 there are at least four more seats.

3           And the format here is just going to be open  
4 discussion. The FDA facilitator will be there not to answer  
5 questions but just to listen. Everything said at these  
6 tables will be anonymous. We would, however, like someone  
7 to volunteer to be the recorder, and the only not anonymous  
8 will be the five or six comments, main comments you might  
9 have after the discussion.

10           We'll try to organize the discussion around the  
11 one-page description here of the ANPR. Here is the ANPR  
12 itself, and if anybody does not have either of these  
13 documents, we've got some extras made, so we can start by  
14 making sure everybody has got them. If you're ready to go,  
15 you can start.

16           [Meeting recessed for roundtable discussion  
17 groups.]

18           MR. NARDINELLI: May I have your attention? I  
19 would like to reconvene the general session. All right.  
20 let's reconvene the general session, and the format for this  
21 next section is, we will begin by asking a representative  
22 from each table to briefly talk about the five or six  
23 comments, the most important comments that they would like  
24 to make, and then we'll just open up again for any general  
25 comments, discussion that anybody else would like to offer.

1           So, let me see. Does any table wish to volunteer  
2 to start, or do you want me to just pick one? Well, let's  
3 see. This is the biggest table. We'll start here. Oh,  
4 you're not ready? Okay, who's ready, then? We'll start  
5 there. Okay, this is also a big table. We'll start with  
6 them. Please, the microphone, so that our transcriber can  
7 get this down. Thank you.

8           MR. COVEN: Mitch Coven, Vitality Works.  
9 Hopefully I can do justice to the good conversation we just  
10 had. We have six points that we came up with that we would  
11 like to address on the GMPs.

12           Number one, we have concern that the FDA still  
13 does not have enough economic data from small businesses,  
14 i.e., companies well under 500 employees, to make an  
15 educated decision on the small business impact financially,  
16 and we request that the FDA make more attempts to gain more  
17 concrete information from small businesses, especially site  
18 visits to smaller businesses, so that the end result of the  
19 GMP may be more informed as to the impact so that the  
20 expense to small businesses may be more thought out.

21           Two, we hope that FDA keeps the section on  
22 botanical identification as it is current written, to avoid  
23 excessive economic burden for small businesses, and we fully  
24 back comments made earlier by Michael McGuffin on  
25 perspectives on the guidance document. We want to state

1 that raw material testing should be appropriate to the form  
2 of the raw material.

3 For instance, whole ginkgo leaf can be  
4 morphologically, organoleptically, and visually identified,  
5 and where it would be appropriate, if one has a powdered  
6 product called echinacea, then probably some kind of  
7 chromatography would be appropriate to distinguish echinacea  
8 angustifolia from echinacea purpurea. An inappropriate test  
9 would be any kind of chromatography on distinguishing whole  
10 herbs when visual, organoleptic, and morphological testing  
11 would suffice.

12 Three, document control maintenance is  
13 significant, and control of such costs is an issue.  
14 Maintenance of GMPs may be more significant costs than  
15 implementation costs. The proportionate cost to a small  
16 company who have no GMPs in place may be cost-prohibitive to  
17 such companies.

18 Four, these GMPs may reduce small raw material  
19 supplier selection. The GMPs will increase the business of  
20 suppliers who can produce a Certificate of Analysis and  
21 afford to provide appropriate documentation. The small  
22 harvesters or wildcrafters or growers cannot compete, the  
23 ones who supply 50 pounds of a raw material, versus a  
24 company that supplies 10,000 pounds of a lot, who can  
25 average the costs of testing over a larger lot, gives them

1 an economic advantage, and that the smaller companies who  
2 provide smaller lots may go out of business, thus reducing  
3 the choices in supply of raw materials. Commonly, it is  
4 thought that the smaller batches from smaller harvesters may  
5 be of a superior quality to some of the larger lots of some  
6 botanicals, although that is arguable.

7           Number five, defect action levels could have  
8 significant compliance costs to monitor the defect action  
9 levels per crop. Depending on what we need to do to be  
10 compliant, this may be expensive. It will also reduce raw  
11 materials suppliers, again, to those who can provide  
12 documentation that defect action levels are in compliance,  
13 and again those companies who can produce defect action  
14 level testing and average the costs over a large lot will  
15 have an economic advantage over those who harvest smaller  
16 lots and have to average it over a smaller lot, thus  
17 limiting raw materials supply from the smaller companies.

18           Six, the GMP states that we can accept a  
19 Certificate of Analysis on a raw material from a raw  
20 material supplier if we can establish the reliability of a  
21 supplier. As I asked earlier, and it hasn't really been  
22 answered at this point, we would like guidance on how to  
23 establish such reliability to help keep costs down as a  
24 small business. So if we can establish what it means to  
25 establish reliability of a raw materials supplier who

1 provides a Certificate of Analysis, that could help control  
2 our costs as a small business dramatically.

3 Thank you.

4 MR. NARDINELLI: Are you ready now? Okay.

5 MR. : I'm sure I'm not going to do our  
6 table justice, and I apologize for that. Not being herbs at  
7 all, this is an education day for me, and I appreciate it,  
8 my table. Thank you.

9 We also would like to see the tests that must be  
10 appropriate for the particular product or product form and  
11 company size. We also agree with that. The expiration  
12 testing, we had a comment on that. The table does not  
13 support that with respect to herbal products, because  
14 sometimes there is no one test to test for a herbal product,  
15 and so we do not support that.

16 Most importantly, the regs need to be clear and  
17 size-appropriate. In herbal products, again I'm learning  
18 today, and I appreciate it, the traditional knowledge needs  
19 to be respected along with modern science. There's a lot of  
20 knowledge I just learned that is not so well accepted  
21 outside of the herbal field, and it's interesting.

22 Training and guidance will also be very helpful  
23 when they're developing, when the companies develop their  
24 particular SOPs and meet the GMPs.

25 Was there anything else that we should bring up?



1 That's it? Okay. Thank you.

2 MR. NARDINELLI: Let's see. Richard, is your  
3 table ready?

4 MR. WILLIAMS: I have no clue. Are you ready?

5 MS. : we had some extremely educated  
6 people at our table that should really be giving this, but I  
7 volunteered, I don't know why, to do it. Just because I  
8 like to be in front of the microphone.

9 One thing I think that was interesting that was  
10 raised for some people who--I think one thing that was  
11 raised was that the learning curve on any education within  
12 the industry is varied, so one important thing I think that  
13 was pointed out was that there is this gap in the industry.

14 And the understanding is that these proposed GMPs,  
15 the baseline is really already there because the baseline  
16 for the GMPs was required in the food GMPs, and the proposed  
17 GMPS that we see now are really not that more significant.  
18 And, as a matter of fact, I guess there were some companies  
19 that were contacted, and the feedback from them in certain  
20 areas was, "Hey, you know, we're already doing this."

21 There was feedback from some of the companies that  
22 were contacted, and there are two areas of potential cost  
23 concern, and that was with identification and date labeling.  
24 As it relates to positive feedback, the no requirement for  
25 the expiration date, that was good, that was some positive

1 feedback. And also positive feedback was that the  
2 agricultural products are not subject to the GMPs, and that  
3 was some very positive feedback within our group.

4 We also talked about the Certificates of Analysis  
5 and questioning the reliability, and we had a discussion  
6 about raw materials. We learned that some--that there are  
7 some companies who do test and visit their suppliers, but we  
8 had concern that that's not true across the board. And I  
9 think our table in general believed that the Certificates of  
10 Analysis were a good thing.

11 In general, we talked about whether the GMPs were  
12 going to help, and I think our table agreed that the GMPs  
13 will help. They will raise the thresholds of reliability  
14 and responsiveness within the industry.

15 One of the things that we talked about as it  
16 relates to in addition to the GMPs was education, and we  
17 felt that education in addition to the GMPs is really key,  
18 and it was raised that perhaps the FDA should play a role in  
19 that education. We know that industry can provide  
20 education, but we think that it would be helpful for the FDA  
21 to get involved in that education, as well.

22 I guess that's it.

23 MR. NARDINELLI: Thank you. Pat, your table is  
24 ready? We have a volunteer.

25 MR. : A few of the points at our table,

1 number one, if GMPs are in fact appropriate, let's start  
2 slowly, phase in the GMPs by first beginning with raw  
3 materials, use that as a foundation and then move forward  
4 from there, because most of the quality problems happen at  
5 the beginning of the process.

6           Number two, and this really applies to dietary  
7 supplements, many issues of dietary supplements as well as  
8 GMPs, FDA needs to train its agents to be sensitive to the  
9 needs of the dietary supplement industry. Five years after  
10 the passage of DSHEA, some agents remain prejudiced against  
11 the industry and don't understand even the basic definition  
12 of a structure function claim.

13           Another comment at our table was that the FDA  
14 needs to teach in-house the difference between  
15 pharmaceutical models and nutritional models, regarding the  
16 law, procedure, and again the attitude of the agents.

17           Also, with respect to GMPs, phase in the  
18 requirement for expiration dating and stability testing,  
19 because those are the most expensive items. Also regarding  
20 costs, GMP supervisors are more expensive, and there's a lot  
21 of concern about soft costs, additional computers and  
22 software and training and a lot of expenses, particularly in  
23 large city companies, in training costs in connection with  
24 those issues.

25           And, finally, a comment that NNFA does not speak

1 for the industry. GMPs are an issue that will require more  
2 time to develop, and this process should not be rushed.

3 Thank you.

4 MR. NARDINELLI: Thank you. Next?

5 MR. : Speaking briefly, so we can all go  
6 home, as far as the outline, no one at the table had any  
7 particular disagreements with the concept of GMPs or  
8 controlling processes. I don't think anybody argued with  
9 the format there.

10 However, one of the effects on small business, we  
11 felt, was the fear of inspection and enforcement. I think  
12 the fear is that the quality of the inspectors could be  
13 inconsistent and that the training may be inconsistent.  
14 Experience indicates that inspectors that are out inspecting  
15 in the field are often one- and two-year employees, and  
16 possibly in the training process.

17 Also, it is noted that FDA inspectors often turn  
18 over. They either, if they are particularly good, they rise  
19 up through the organization, or if they are particularly  
20 good, they leave the agency and go to outside business.  
21 Therefore, the quality of inspectors for the inspecting of  
22 facilities is a fear, I think, of small businesses.

23 Another fear in the inspection and enforcement  
24 process is the "no liability" policy of the FDA. And what I  
25 mean by "no liability" policy, FDA inspectors cannot help or

1 suggest how to improve an operation. When they make an  
2 inspection, they're basically there to make an observation.  
3 Upon making the observation, if you ask them how you can  
4 improve or how you can do something, like how they can help,  
5 they are not allowed to, basically. They are not allowed to  
6 voice an opinion or to give any direction to the company.

7           And therefore there is a fear when an FDA  
8 inspector comes in, basically, when he does his exit  
9 interview, that you're basically a part of a legal process,  
10 and you almost don't know whether you need to have your  
11 lawyer there, because anything that you can say can be held  
12 against you. So I think a small business in particular is  
13 fearful of that FDA inspection, and therefore does not look  
14 very eagerly towards an FDA inspection.

15           Also, I think the small businesses are afraid of  
16 uneven enforcement across the country through the various  
17 districts. In the past, particularly in the drug area,  
18 while it is certainly far more unified today, there has  
19 been--the industry has classified enforcement as reasonably  
20 uneven from district to district, and so there's a fear that  
21 in New Jersey or California or Texas it may be particularly  
22 tough, but in Kansas City or St. Louis it may be a fairly  
23 lax enforcement.

24           I think there are some possible answers to this.  
25 First of all, I think we could, with industry-FDA

1 cooperation, let industry somewhat self-police itself  
2 through a program like the NNFA, which is an independent  
3 third party inspection program with supervision by another  
4 independent advisory committee which coordinates policy with  
5 the board of directors of the NNFA. The reason for this is  
6 that private inspections are more likely to be more helpful,  
7 offering suggestions and guidelines.

8           For example, in the NNFA program, the two current  
9 auditors are both ex-FDA employees. One is Jeff Hewen in  
10 California, with 10 years of experience, who has gone into  
11 the outside field and represents the NNFA's inspector. When  
12 Jeff does an inspection, he doesn't just leave the company  
13 with some observations or a pass/fail. Jeff reaches out to  
14 the company, and at some point where he sees they are not  
15 making the grade, offers suggestions or help, and will come  
16 back to reinspect at a later date rather than just giving  
17 them a blanket failure. People in the industry that have  
18 gone through that process find that very helpful.

19           I think also an independent third party person is  
20 less threatening to a supplier or manufacturer because he  
21 does not represent the formal government agency. I think  
22 third party independent inspectors can be more experienced  
23 than many of the current FDA inspectors. As I say, Jeff has  
24 got 10 years. The person that the NNFA has in Michigan has  
25 multiple years with the agency before going into private

1 practice. And they are familiar with the problems of  
2 private practices.

3 The fourth thing, I think, is it's an opportunity  
4 for the agency and the industry to work together on a  
5 program. The NNFA looks at approximately or a potential of  
6 some 530 manufacturers, suppliers, distributors or co-  
7 packers, that could be inspected by its program. And with  
8 that large number of people, those are people that the Food  
9 and Drug Administration would, if they implement a CGMP  
10 program, inspection program, are going to have to get out  
11 and visit.

12 One of the suggestions we came up with at the  
13 table is that maybe there is a possibility of some sort of--  
14 I don't know how you want to say it--but maybe the FDA could  
15 inspect, or if they would accept a third party inspection  
16 agency such as the NNFA program or State agencies or  
17 something else, that the certification by the third party or  
18 a State agency or some other group could be the equivalent  
19 of an FDA agency, and the FDA, while not giving up their  
20 authority certainly to go in and to inspect anybody, could  
21 accept that as an inspection. And, therefore, having that  
22 certification would be an alternative to the FDA coming in  
23 for a biannual or every two or three year type of  
24 inspection.

25 I think that was pretty much the comments that we

1 wrote down. Thank you.

2 MR. NARDINELLI: Has your table been heard from?

3 VOICE: Yes.

4 MR. NARDINELLI: Okay, so each table has been.  
5 heard from. Would someone like to make some additional--  
6 this is a quiet table. Yes, do we have additional comments?

7 MR. ROGOVIN: Yes, Mr. Rogovin from Jarrow  
8 Formulas. It would help if I had my glasses. Okay, a  
9 couple of things here.

10 Our otherwise thorough reporter did leave out the  
11 stated desire of a couple of companies to have ISO 9000  
12 first and phase into GMP. Again, it's the small company  
13 issue. This will really help small companies get organized,  
14 and then once they get used to the paper chase, it will be  
15 easier to implement further procedures.

16 As to the NNFA role, three issues. NNFA standards  
17 should not exceed FDA requirements. I don't see why the  
18 organization should take it upon itself to go beyond the  
19 statutory authority of even the FDA. And this is not  
20 something that has been agreed to by the affected  
21 membership. We see it as an imposition.

22 The other thing is, is to stay out of marketing.  
23 No go to the logo. I am getting 100 percent response of  
24 retailers as to this logo. They see it going into their  
25 competition. Something like 90 percent of the suppliers, on



1 being polled, oppose the logo.

2           The third issue is alternative auditors, for two  
3 reasons. If I can't stop the NNFA, I may pull out of the  
4 organization. And if I still want to do second party  
5 auditing or third party auditing, whatever, there should be  
6 other recognized auditors, not only because I'm not the only  
7 company that is at its wits end with the NNFA. There are a  
8 number of very large companies that have pulled out.

9           But I think that to be fair to our competition who  
10 are not NNFA members, maybe because they don't qualify, you  
11 know, they're involved in the mass market, whatever, they  
12 should be allowed, if the NNFA is going to function as an  
13 independent auditor recognized by the FDA, there ought to be  
14 some way to have some sort of other auditors also for these  
15 companies.

16           MR. NARDINELLI: Are there any other general  
17 comments? Somebody who didn't hear their concern or their  
18 comment mentioned previously? Here's your chance.

19           MR. MCGUFFIN: Yes, let me just clarify, to make  
20 certain that the point that I was trying to make is that the  
21 industry draft GMP specifically exempts raw agricultural  
22 commodities from these GMPs, and I think that that's a good  
23 point in these GMPs that should be maintained, that raw  
24 agricultural commodities should be exempt from CGMP for the  
25 manufacturer of dietary supplements.

1           MR. NARDINELLI: Okay. Well, if there are no  
2 further comments, let me thank you very much for coming here  
3 at the end of what i know has been a very long day. We have  
4 a few more copies of all three handouts. If you would like  
5 to take some for friends or family, please, it will save me  
6 from dragging them home.

7           [Whereupon, at 9:31 p.m., the meeting was  
8 concluded.]

9

## *CERTIFICATE*

I, **ELIZABETH L. WASSERMAN**, the Official Court Reporter for Miller Reporting Company, Inc., hereby certify that I recorded the foregoing proceedings; that the proceedings have been reduced to typewriting by me, or under my direction and that the foregoing transcript is a correct and accurate record of the proceedings to the best of my knowledge, ability and belief.

*Elizabeth L. Wasserman*

**ELIZABETH L. WASSERMAN**