DEPARTMENT OF HEALTH & HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION

Public Health Service

Memorandum

Date . MAY 27 1999

8049 '99 JUN -1 A10:00

From Senior Regulatory Scientist, Regulatory Branch, Division of Programs & Enforcement Policy (DPEP), Office of Special Nutritionals, HFS-456

Subject 75-day Premarket Notification for New Dietary Ingredient

To Dockets Management Branch, HFA-305

New Dietary Ingredients:	*Imperata cylindrica* *Ganoderma lucidum*
Firm:	P&Y American Dietary Supplements, Inc.
Date Received by FDA:	March 23, 1999
90-day Date:	June 20, 1999

In accordance with the requirements of section 413(a)(2) of the Federal Food, Drug, and Cosmetic Act, the attached 75-day premarket notification for the aforementioned new dietary ingredient should be placed on public display in docket number 95S-0316 after June 20, 1999.

Robert J. Moore

Robert J. Moore, Ph.D.

95S-0316

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DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
Washington, DC 20204

MAY 27 1999

Mr. Simon Ko
President & CEO
P&Y American Dietary Supplements, Inc.
288 N. Ridge Road
P.O. Box 321
Marathon, Wisconsin 54448

Dear Mr. Ko:

This is in response to your letter to the Food and Drug Administration (FDA) dated March 8, 1999, making a submission for a new dietary ingredient pursuant to 21 U.S.C. 350b(a)(2) (section 413 of the Federal Food, Drug, and Cosmetic Act (the Act)) and 21 CFR 190.6. Your letter notified FDA of your intent to market products containing the ingredients *Imperata cylindrica* and *Ganoderma lucidum*.

Under 21 U.S.C. 350b(a), the manufacturer or distributor of a dietary supplement that contains a new dietary ingredient that has not been present in the food supply as an article used for food in a form in which the food has not been chemically altered must submit to FDA, at least 75 days before the dietary ingredient is introduced or delivered for introduction into interstate commerce, information that is the basis on which the manufacturer or distributor has concluded that a dietary supplement containing such new dietary ingredient will reasonably be expected to be safe. FDA reviews this information to determine whether it provides an adequate basis for such a conclusion. Under section 350b(a)(2), there must be a history of use or other evidence of safety establishing that the new dietary ingredient, when used under the conditions recommended or suggested in the labeling of the dietary supplement, will reasonably be expected to be safe. If this requirement is not met, the dietary supplement is deemed to be adulterated under 21 U.S.C. 342(f)(1)(B) because there is inadequate information to provide reasonable assurance that the new dietary ingredient does not present a significant or unreasonable risk of illness or injury.

Your submission contained information that you believe establishes that the new dietary ingredients, *Imperata cylindrica* and *Ganoderma lucidum*, when used under the conditions recommended or suggested in the labeling of the dietary supplements, will reasonably be expected to be safe. FDA has carefully considered the information in your submission, and the agency has significant concerns about the evidence on which you rely to support your conclusion that a dietary supplement containing *Imperata cylindrica* and *Ganoderma lucidum* will reasonably be expected to be safe.

First, you state that the ingredients that are the subject of your submission are "popular nutritional foods that have a long history of use in Asia" and that both have been used as herbal medicines for centuries. However, no documentation or information was provided on the exposure of humans to these ingredients from typical food or medicinal uses. Consequently, the historical use of these substances does not provide a basis to conclude that the use of your dietary supplement containing *Imperata cylindrica* and *Ganoderma lucidum* would reasonably be expected to be safe.

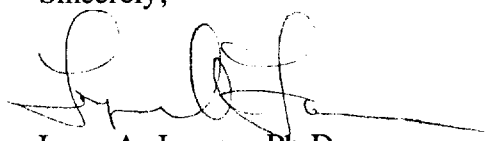
Second, the articles you submitted are not relevant to making a determination of the safety of a product containing these two dietary ingredients. The studies that are the subject of the papers you submitted describe the pharmacological effects of substances isolated from the root *Imperata cylindrica* and from the plant *Ganoderma lucidum*. Because these studies were not designed to study the toxicity or safety of the new dietary ingredients of interest, there were no dose-response data, appropriate control groups, or measurements of toxicological concern that are needed to evaluate the safety of a food. Moreover, all but one of the studies described in the papers you submitted are studies of specific chemical substances isolated from the two ingredients that are the subject of your submission; while such information may be useful in understanding the biological effects of that chemical entity and the botanical that contains it, that type of information is wholly inadequate to be the basis for concluding that the parent botanical ingredient is safe because the potential biological actions of other substances in the plant material cannot be determined from such studies.

Finally, these botanicals have been used or promoted for use as diuretics and anti-inflammatory agents (*Imperata cylindrica*) or to inhibit platelet aggregation (*Ganoderma lucidum*). Your submission, however, does not address the potential serious risks that might exist for persons already taking drugs or other products with similar pharmacological effects, if any, that would result from the use of your proposed product at its recommended intake.

For the reasons discussed above, the information in your submission does not provide an adequate basis to conclude that *Imperata cylindrica* and *Ganoderma lucidum*, when used under the conditions recommended or suggested in the labeling of your product, will reasonably be expected to be safe. Therefore, your product may be adulterated under 21 U.S.C. 342(f)(1)(B) as a dietary supplement that contains a new dietary ingredient for which there is inadequate information to provide reasonable assurance that such ingredient does not present a significant or unreasonable risk of illness or injury. Introduction of such a product into interstate commerce is prohibited under 21 U.S.C. 331(a) and (v).

Please contact us if you have any questions concerning this matter.

Sincerely,



Lynn A. Larsen, Ph.D.
Director
Division of Programs and Enforcement Policy
Office of Special Nutritionals
Center for Food Safety
and Applied Nutrition

P&Y American Dietary Supplements, Inc.

288 N. Ridge Rd, P.O. Box 327
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Tel: 715-443-3338 Fax: 715-443-2818

March 8, 1999

Lynn A. Larsen, Ph.D.
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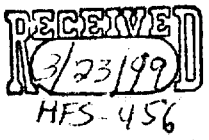

RE: Notification of New Dietary Ingredients Imperata cylindrica and Ganoderma lucidum.

Dear Dr. Larsen,

In response to your letter dated February 17, 1999 concerning lack of reprints or photostatic copies of references in support of RE: notification, I hereby attach five articles for Imperata cylindrica and two articles for Ganoderma lucidum for your reference.

Both Imperata cylindrica and Ganoderma lucidum have been used as food and herbal medicine in many Asian countries such as China, Japan, Korea for centuries without any ill effects. They are both edible and used in large quantity in oriental cooking. The pharmacological effects of the dried powders and aqueous extracts (that are not chemically altered) have been widely studied in recent years. Most of those publications are in either Chinese or Japanese that make them difficult to be translated for submission. The long history of safe use as food for these two plants, and the much lower amount (compared to food consumption) recommended in our dietary supplement product strongly suggested that these two ingredients are expected to be safe.

I appreciate very much your reconsideration. Please contact me if you have any more questions concerning this matter. Thank you.

Sincerely yours,

Simon Ko
President & CEO

Attachments: 5 reprinted articles for Imperata cylindrica.
2 reprinted articles for Ganoderma lucidum.