



DEPARTMENT OF HEALTH & HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION

Public Health Service

Memorandum

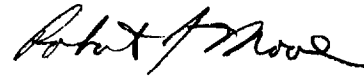
MAR - 5 1999

7364 '99 MAY 10 11:40

Date
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: Huperizine A
Firm: Kingchem, Inc.
Date Received by FDA: February 22, 1999
90-day Date: May 22, 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 May 22, 1999.


Robert J. Moore, Ph.D.

95S-0316

SUP4



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
Washington, DC 20204

7365 '99 MAY 10 09:40

MAR - 5 1999

Mr. Neil C. Sullivan
Kingchem, Inc.
296 Kinderkamack Road
Oradell, New Jersey 07649

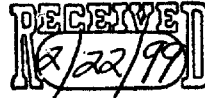
Dear Mr. Sullivan:

This is to notify you that your submission pursuant to section 413(a)(2) of the Federal Food, Drug, and Cosmetic Act (the Act) dated February 18, 1999, concerning the marketing of a substance that you assert is a new dietary ingredient (i.e., huperizine A) was received by the Food and Drug Administration (FDA) on February 22, 1999. Your submission will be kept confidential for 90 days from the date of receipt, and after May 22, 1999, your submission will be placed on public display at Dockets Management Branch (Docket No. 95S-0316). Commercial and confidential information in the notification will not be made available to the public.

Please contact us if you have questions concerning this matter.

Sincerely,

Robert J. Moore, Ph.D.
Senior Regulatory Scientist
Division of Programs and Enforcement Policy
Office of Special Nutritionals



February 18, 1999

Dr. Robert Moore
Office of Special Nutritionals
(HFS-450)
Center for Food Safety and Applied Nutrition
Food and Drug Administration
200 C St. SW
Washington, DC 20204

**Subject: New Dietary Ingredient Notification
For "Huperzine A", an extract of *Hyperzia serrata***

Dear Dr. Moore:

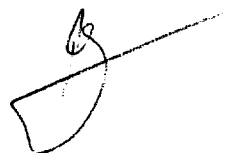
As per the requirements stated within TITLE 21 Sec. 190.6, we provide with the below stated information:

- 1) Complete name of distributor for the new dietary ingredient:
Kingchem, Inc.
296 Kinderkamack Road
Oradell, New Jersey 07649
USA
- 2) Complete name of the dietary ingredient: Huperzine A
And the botanical name as Hyperzia serrata.
- 3) A description of the dietary supplement/s expected to contain the subject material is best described according to proposed conditions suggested in the labeling of the dietary supplement.
The level of the dietary ingredient is 50 µg (microgram) per day.
- 4) The historical use of the natural compound Huperzine A is documented in a number of publications and a few are herein enclosed. The material is derived from *Hyperzia serrata* that is club moss found growing in China and is known as the Chinese herbal remedy *Qian Chen Ta*. In recent years attention has focused Huperzine A as a novel, potent, reversible, and selective acetylcholinesterase (AChE) inhibitor being used to improve memory.

For evidence of safety, we make reference to four (a,b,c,d) exhibit documents and a fifth (e) exhibit which is a compilation of published articles pertinent to the issue. All exhibits are enclosed herein and presented in no order of significance. We submit an original copy and two additional copies. In the case of exhibits originally composed in the Chinese language, we also enclose the original copy in Chinese for your inspection.

Continued ...

63829



February 18, 1999
Dr. Robert Moore, Food and Drug Administration

Exhibit A: A translation from Chinese. The Experiment in the Acute Toxin of Huperzine-A Capsule on Mice. (Content within Exhibit A is proprietary and confidential.)

Exhibit B: A translation from Chinese. The Information on the Experiment in the Pharmacological Property of Huperzine-A Capsule. (Content within Exhibit B is proprietary and confidential.)

Exhibit C: A translation from Chinese. The Clinical Report About Huperzine-A Capsule. (Content within Exhibit C is proprietary and confidential.)

Exhibit D: a publication.

Bagchi, Debasis, Ph.D., F.A.C.N. and Barilla, Jean, MS "Huperzine A: Boost Your Brain Power." Keats Good Health Guides (1998).

Exhibit E: Published scientific articles mentioning elements of safety in use and administration of Huperzine A rather than articles reviewing the pharmacology of Huperzine A for which there are numerous references.

- i. "Toward A Third Generation of Cholinesterase Inhibitors", E. Giacobini
- ii. "Effect of Huperzine A, a New Cholinesterase Inhibitor, on the Central Cholinergic System of the Rat", X.C. Tang
- iii. "Synthesis of Huperzine A and Its Analogues and Their Anticholinesterase Activity", A.P. Kozikowski et al.
- iv. "Huperzine A ameliorates the spatial working memory impairments induced by AF64A", Z.Q. Xiong et al
- v. "Old Chinese Herbal Medicine Used for Fever Yields Possible New Alzheimer Disease Therapy", A.A.Skolnick
- vi. Identification of a More Potent Analogue of the Naturally Occurring Alkaloid Huperzine A. Predictive Molecular Modeling of Its Interaction with AChE", A.P. Kozikowski et al
- vii. "Pharmacokinetics of tablet huperzine A in six volunteers", B.C. Qian
- viii. "Acute and Chronic Studies with the Anticholinesterase Huperzine A: Effect On Central Nervous System Cholinergic Parameters", S. Lagantere et al

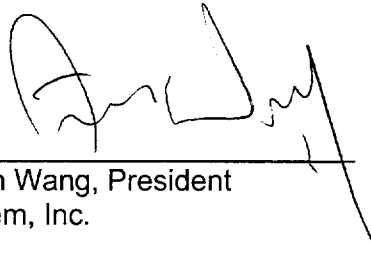
Continued...



February 18, 1999
Dr. Robert Moore, Food and Drug Administration

- ix. "Cognition Improvement by Oral Huperzine A: A Novel Acetylcholinesterase Inhibitor", Tang X.C.
- x. Huperzine A (Shuangyiping): a promising drug for Alzheimer's disease, Tang X.C.
- xi. "Facilitatory effect of huperzine-A on mouse neuromuscular transmission *in vitro*", Lin J.H. et al

5) The signature of the person designated by the distributor of the dietary ingredient.

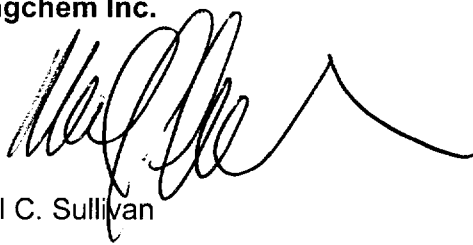


Stephen Wang, President
Kingchem, Inc.

This letter and its attachments are respectfully submitted and intended to be a premarket notification to the FDA. In due course, we request a receipt acknowledgement.

Of course, if there are questions or clarifications needed for your review and consideration of these documents please immediately contact the undersigned and I will endeavor to address your questions and/or additional requirements.

With kind regards,
Kingchem Inc.



Neil C. Sullivan

Encl.

*This document contains copyrighted material which maybe
viewed at:*

***DOCKETS MANAGEMENT BRANCH
FOOD AND DRUG ADMINISTRATION
5630 FISHERS LANE, ROOM 1061
ROCKVILLE, MD 20852***