

Via Facsimile and U.S. Mail
Mail Stop 4720

March 22, 2010

Rik J. Deitsch
Chief Executive Officer and
Chief Financial Officer
Nutra Pharma Corp.
1537 NW 65th Avenue
Plantation, FL 33313

Re: Nutra Pharma Corp.
Form 10-K for Fiscal Year Ended December 31, 2008
Filed April 15, 2009
Form 10-Q for the quarterly period ended September 30, 2009
Filed November 18, 2009
File No. 000-32141

Dear Mr. Deitsch:

We have reviewed your January 25, 2010 response to our December 15, 2009 letter and the January 25, 2010 filing of your 2008 Form 10-K Amendment 1 and Form 10-Q Amendment 1 for the quarterly period ended September 30, 2009 and have the following comments.

Form 10-K For The Fiscal Year Ended December 31, 2008

Patents, Trademarks, Licenses and Intellectual Property, page 12

1. Please confirm that you will revise your disclosure beginning with your December 31, 2009 Form 10-K to include the expiration date of each of your material patents including those that have been assigned or licensed to you.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations, page 24

2. Please confirm that beginning with your December 31, 2009 Form 10-K you will provide an explanation for significant changes in each line item in your results of operations.

Item 10. Directors and Executive Officers of the Registrant

Section 16(a) Compliance Officers and Directors, page 36

3. By supplemental response, please confirm to us when you expect any remaining delinquent forms to be filed and that you will update this information in your disclosure in your next annual report accordingly.

Item 8. Financial Statements and Supplementary Data

Report Of Independent Registered Public Accounting Firm, page F-1

4. Refer to Comment No. 10. We reissue our original comment because you did not provide the requested auditor's report from the prior auditors. As indicated in the third paragraph, Stark Winter Schenkein & Co., LLP has relied on other auditors as it relates to the period from inception (February 1, 2000) through December 31, 2003. Please amend your filing to include the other auditors' report covering this period in the filing as required by rule 2-05 of Regulation S-X. The report should reference the standards of the Public Company Accounting Oversight Board (United States). Refer to paragraph 3 of PCAOB Auditing Standard 1.

Item 9A. Controls and Procedures

Section 1

Evaluation of Disclosure Controls and Procedures, page 32

5. In responding to our Comments No. 14 and 17, you have now changed your conclusions as to the effectiveness of Disclosure Controls and Procedures from being ineffective to effective in both the Amended Form 10-K and Amended Form 10-Q. Please tell us the factors you considered and highlight for us those factors that support your revised conclusion. In light of the failure to adequately disclose on a timely basis your assessment of disclosure controls and procedures and internal controls over financial reporting and the fact that internal controls are ineffective, please tell us how you considered the definition of disclosure controls and procedures provided in Rule 13a-15(e), which indicates that effective controls and procedures would ensure that information required to be disclosed by the issuer is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms in reaching your revised conclusion.

Section 2.

Management's Annual Report on Internal Control over Financial Reporting, page 32

6. Refer to your response to our Comment No. 14. Please tell us why your discussion in the second paragraph of Section 2 and in Item 9B refers to

Disclosure Controls and Procedures when it would seem more relevant to refer to Internal Controls over Financial Reporting. Please amend your filing, as applicable, to clarify.

7. Please amend your filing to specifically discuss any material weaknesses over the internal control over financial reporting. Refer to Item 308 (a) of Regulation S-K. Please elaborate in this discussion of the steps that you are undertaking to improve your internal controls to describe the specific steps being undertaken to address each of the material weaknesses identified.

Form 10-Q Amendment No. 1 For The Quarterly Period Ended September 30, 2009

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Receptopharm, page 12

8. Refer to our comment number 15. Please confirm that beginning with your December 31, 2009 Form 10-K you will expand your disclosures to provide, for each project, the costs incurred during each period presented in the financial statements. Please ensure that the information provided agrees to the research and development expense on the financial statements. In addition, reconcile the project title to the projects discussed in the business section.

Exhibit 31.1

9. Refer to our Comment No. 18. Please confirm that beginning with your December 31, 2009 Form 10-K you will conform the certification language to that in Item 601(b)(31) of Regulation S-K, specifically paragraph 4 (b), consistent with your certification filed as Exhibit 31.1 with Form 10-K Amendment No. 1.

* * *

As appropriate, please amend your December 21, 2008 Form 10-K and respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provide the requested information. You should furnish the letter to us via EDGAR under the form type label CORRESP.

Please contact James Peklenk, Staff Accountant, at (202) 551-3661 or Mary Mast, Senior Accountant, at (202) 551-3613 if you have any questions regarding the processing of your response as well as any questions regarding comments on the financial statements and related matters. You may contact Scot Foley, Staff Attorney, at (202) 551-3383 or

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Jeff Riedler, Assistant Director, at (202) 551-3715 with questions on any of the other comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief
Accountant