Steven L. Spinner Chief Executive Officer United Natural Foods, Inc. 313 Iron Horse Way Providence, RI 02908

Re: United Natural Foods, Inc.

Form 10-K for Fiscal Year Ended August 1, 2009

Filed September 30, 2009

Proxy Statement on Schedule 14A

Filed December 3, 2009

File No. 0-21531

Dear Mr. Spinner:

We have reviewed your response letter dated March 17, 2010 and have the following comment. Please provide a written response to our comment. Please be as detailed as necessary in your explanation. In our comment, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Definitive Proxy Statement on Schedule 14A

Compensation Discussion and Analysis, page 19

Performance-Based Cash Incentive Compensation, page 24

1. We note your response to comment five. With respect to the performance targets, such as payroll as a percentage of gross margin, inventory management, and information technology operating expenses as a percentage of consolidated revenues, and any other non-division performance target, please provide us with your proposed revisions so that we may have a better understanding of how you intend to comply.

Please respond to this comment within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your response to our comment and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comment.

Steven L. Spinner United Natural Foods, Inc. April 5, 2010 Page 2

You may contact Robert W. Errett, Staff Attorney, at (202) 551-3225 or Mara Ransom, Legal Branch Chief, at (202) 551-3264 or me at (202) 551-3720 with any other questions.

Sincerely,

H. Christopher Owings Assistant Director