

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

November 6, 2017

Nevan Elam Chief Executive Officer AntriaBio, Inc. 1450 Infinite Drive Louisville, CO 80027

Re: AntriaBio, Inc.

Amendment No. 1 to Registration Statement on Form S-1

Filed October 31, 2017 File No. 333-220585

Dear Mr. Elam:

We have reviewed your amended registration statement and have the following comment. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to the comment, we may have additional comments.

Amendment No. 1 to Registration Statement on Form S-1

Documents Incorporated by Reference, page 30

1. Please revise your incorporation by reference section to incorporate the Form 8-K filed on November 3, 2017.

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Please contact Dorrie Yale at 202-551-8776 or Suzanne Hayes at 202-551-3675 with any questions.

Division of Corporation Finance Office of Healthcare & Insurance

cc: Michael L. Weiner