November 7, 2017

Division of Corporation Finance Office of Healthcare & Insurance Securities and Exchange Commission 100 F Street, N.E. Washington, D.C. 20549 Attention: Dorrie Hale and Suzanne Hayes

> Re: Responses to the Securities and Exchange Commission Staff Comments dated November 6, 2017, regarding AntriaBio, Inc. Amendment No. 1 to Registration Statement on Form S-1 Filed October 31, 2017 File No. 333-220585

Dear Ms. Yale and Ms. Hayes:

This letter responds to the staff's comments set forth in the November 6, 2017 letter regarding the above-referenced Amendment No. 1 to Registration Statement on Form S-1 (the "<u>Registration Statement</u>"). For your convenience, the Staff's comments are included below and we have numbered our responses accordingly.

In some of the responses, we have agreed to change or supplement the disclosures in future filings. We are doing so in the spirit of cooperation with the staff of the Securities and Exchange Commission, and not because we believe our prior filing is materially deficient or inaccurate. Accordingly, any changes implemented in future filings should not be taken as an admission that prior disclosures were in any way deficient. We have also indicated in some responses that we believe no change in disclosure is appropriate, and have explained why. Our responses are as follows:

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

Documents Incorporated by Reference, page 30

Staff Comment No. 1.

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

AntriaBio, Inc.'s Response:

We have updated the "Documents Incorporated by Reference" section in the Amendment to incorporate the 8-Ks we've subsequently filed.

Division of Corporation Finance Office of Healthcare & Insurance Securities and Exchange Commission November 7, 2017 Page 2

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AntriaBio, Inc. hereby acknowledges that:

- AntriaBio, Inc. is responsible for the adequacy and accuracy of the disclosure in the filing.
- Staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing.
- AntriaBio, Inc. may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Thank you for your review of the filing. If you should have any questions regarding the response letter, please do not hesitate to contact the undersigned at 303-222-2128, or Anthony Epps of Dorsey & Whitney LLP at (303) 352-1109.

Sincerely, AntriaBio, Inc.

/s/ Nevan Elam

Nevan Elam Chief Executive Officer

cc: Anthony Epps, Dorsey & Whitney LLP Michael Weiner, Dorsey & Whitney LLP