COMMENTS

Feeding DHEA to C57/B167 Mice: The Authors Respond (44534B)

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We would like to thank Dr. Leon Bradlow for his remarks on our study. This paper described male C57BL/6 mice fed *ad libitum* either an A-76A diet containing DHEA (0.45%, w/w of food) or A-76A alone (1). As stated in the paper, our study was restricted exclusively to C57BL/6 mice, which was prompted by our observation that these mice are particularly susceptible to dietary DHEA.

As reported, food intake by mice fed DHEA was significantly decreased compared with controls throughout a 28-day study in which daily food consumption was determined. In this study, the body weights were significantly decreased after 7 days on the DHEA diet and remained decreased throughout the study, whereas body weights of controls were slightly increased.

We were aware that various strains of mice and even rats may respond differently to intake of DHEA-containing food, and Dr. Bradlow's letter-to-the-editor is a quite reasonable response to our findings. Thus, in the Results section of our paper we stated, "In contrast to these findings, in studies conducted with other strains of mice and with obese versus lean Zucker rats receiving either regular chow or palatable food with and without DHEA, variable effects on food intake were observed (10, 12, 47, 48)." Moreover, as stated in the Introduction, "DHEA administration to mice and rats can significantly decrease food intake (12, 14, 33, 34); thus, one of the possible mechanisms by which dietary DHEA may exert its beneficial effects is through the induction of food restriction." We stated in the Abstract and reaffirmed in the Discussion section that "dietary DHEA decreased food intake in male C57BL/6 mice, and this decrease apparently led to increased apoptosis of lymphocytes, with decreased lymphoid cell numbers and functions." Lastly, we agree with Dr. Bradlow in that taste may play a role in the intake of DHEA-containing food in some animal strains, perhaps especially in C57BL/6 mice.

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1. Catalina F, Kumar V, Milewich L, Bennet M. Food restriction-like effects of dehydroepiandrosterone: Decreased lymphocyte numbers and functions with increased apoptosis. Proc Soc Exp Biol Med 221:326–335, 1999.