

DHEA Levels and tapeworm

Source: <http://sci.tech-archive.net/Archive/sci.anthropology/2007-12/msg00005.html>

- *From:* James Michael Howard <jmhoward@xxxxxxxxxxxxxxxxxxxx>
 - *Date:* Tue, 18 Dec 2007 06:33:41 -0600
-

Int J Parasitol. 2007 Nov 4 [Epub ahead of print]

Treatment with dehydroepiandrosterone in vivo and in vitro inhibits reproduction, growth and viability of *Taenia crassiceps* metacestodes.

Vargas-Villavicencio JA, Larralde C, Morales-Montor J.

Departamento de Inmunología, Instituto de Investigaciones Biomédicas, Universidad Nacional Autónoma de México, AP 70228, 04510 México DF, México.

The aim of this work was to explore the effect of dehydroepiandrosterone (DHEA) on the establishment, growth and reproduction of the metacestode stage of the tapeworm *Taenia crassiceps*, both in vivo and in vitro. Administration of DHEA prior to infection in mice of both sexes reduced the parasite load by 50% compared with untreated mice. This protective effect was not associated with the immune response, since there was no effect of DHEA treatment on mRNA levels of IL-2, IFN- γ , IL-4 or IL-10. DHEA treatment of infected mice increased androgen receptor expression in splenocytes of both sexes. Moreover, in vitro treatment of *T. crassiceps* with DHEA reduced reproduction, motility and viability in a dose- and time-dependent fashion. Results indicate that DHEA has strong negative direct modulatory effects on murine cysticercosis.

.