

Biological significance of Giardia-specific antibodies.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1002340>

PMCID: PMC1002340 PMID: 2333703

Cited in:

West J Med. 1990 Mar; 152(3): 293–295.

Biological significance of Giardia-specific antibodies.

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Abstract

THE PAST DECADE has been a time of substantial growth in the understanding of immunologic responses against *Giardia lamblia*. The realization that such responses contribute to the clearance of *Giardia* infection came originally from the finding that hypogammaglobulinemia predisposes to chronic giardiasis. Subsequent clinical and experimental studies have generated a relatively coherent picture of *Giardia*-specific immunity. These studies have included the documentation of human serum antibody responses to *G lamblia*, explorations of intestinal immunity using rodent models of giardiasis, and in vitro work with *Giardia* trophozoites.

In this issue of the journal, Janoff and co-workers report a detailed study of *Giardia*-specific antibody titers in US and Thai populations spanning an age range from infancy to older than 60 years. The most significant finding in this report is that *Giardia*-specific serum IgA persisted at a high level throughout adult life in residents of Thailand but declined after adolescence in the US population studied by the authors. While the reason for this divergence in IgA responses between the two populations is unknown, the authors' data are consistent with the possibility that the persistence of *Giardia*-specific IgA reflects a continual acquisition of *Giardia* from the environment. Thus, *G lamblia* was detected in fecal specimens from young children in Denver and Thailand and from adults in Thailand but not from a population of adults in Denver.

Reference

Gandhi BM, Buch P, Sharma MP, et al: ELISA for anti-giardia IgM (Letter). *Lancet* 1989; 2:685