

ALLERGY, VITAMINS

# ANOTHER CHALLENGE OF THE HYGIENE HYPOTHESIS

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The hygiene hypothesis usually assumes an “underemployed” system that is directed against self-defined allergen targets – a rather mechanistic view of a half filled barrel. A new [Nature paper on memory CD8 T-cells](#) now explains why this view is rather odd as the T cell compartment grows in size with immunological experience

... It has long been proposed that the number of memory CD8 T cells in the host is inflexible, and that individual cells are constantly competing for limited space. Consequently, vaccines that introduce over-abundant quantities of memory CD8 T cells specific for an agent of interest could have catastrophic consequences for the host by displacing memory CD8 T cells specific for all previous infections ... Here we show that, in contrast to expectations, the size of the memory CD8 T-cell compartment doubled to accommodate these new cells, a change due solely to the addition of effector memory CD8 T cells.

Yea, yea.

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