KEY WORDS AND PHRASES FOR
Ability to Produce Type I Toxins

Are engulfed by antigen presenting cells (APCs), degraded into epitopes, bind to the peptide groove of MHC-II molecules, and are put on the surface of the APC. Here they are recognized by specific T4-lymphocytes having a T-cell receptor (TCR) with a corresponding shape.

Bind directly to the outside of MHC-II molecules and activate large numbers of T4-lymphocytes

ETEC enterotoxin

Production of other cytokines such as tumor necrosis factor-alpha (TNF-alpha), interleukin-1 (IL-1), inflammatory chemokines such as IL-8, and platelet-activating factor (PAF)

Secretion of excessive amounts of the cytokine interleukin-2 (IL-2) as well as the activation of self-reactive T-lymphocytes

Streptococcal pyrogenic exotoxin (Spe)

Superantigens are unusual bacterial toxins that interact with and activate exceedingly large numbers of T4-lymphocytes.

The APC activates the T4-lymphocyte with a corresponding T-cell receptor.

Toxic shock syndrome toxin-1 (TSST-1)