



ENZYME RESEARCH GROUP

The Safety of Enzymes Derived from Aspergillus

Enzymes derived from Aspergillus fermentation were first used in food production at the turnoff the century. Since their introduction, there has never been a documented case of illness from mycotoxins associated with fermented enzymes, which is a testament to the effectiveness of the screening process employed by the enzyme manufacturing industry. Before the Aspergillus fungal organism is used in fermentation, the specific strain is extensively screened to determine if the organism is capable of producing mycotoxins under the conditions of fermentation, every second generation is again checked to verify that mutations have not occurred which might enable the organism to produce mycotoxins.

Theramedix only uses plant enzymes derived from the fermentation of specific strains of Aspergillus. The Aspergillus used is a "pharmaceutical grade" which establishes their safe use in the production of enzymes, amino acids, and other beneficial compounds.

Enzymes are Isolated Proteins not Living Organisms

Once fermentation by the Aspergillus organism is complete, the enzymes are extracted by a complex process that isolates protein compounds from the surrounding material. No living Aspergillus cells remain in the isolated enzyme after the extraction process is complete.

Infections Associated with Aspergillus

Enzymes derived from the fermentation of Aspergillus are purified compounds, which do not contain any living

Aspergillus cells and therefore, cannot initiate infection or colonization. No cases of Aspergillus infections have ever been documented in association with the consumption of purified fermented fungal enzymes.

Allergic Reactions to Aspergillus

Allergic responses to Aspergillus organisms and the products of their fermentation do occur; although their occurrence is largely isolated to regular airborne "dust" exposure by workers in the food industry. If an allergic reaction is to occur, it is generally the protein fraction of a substance that will elicit such a reaction. Enzymes derived from Aspergillus fermentation are free of any living Aspergillus cells.