

## Fermenting Soy Dramatically Reduces its Allergenicity

Foods Matter, June 2008 ~ Two studies by Elvira de Mejia, associate professor of food science and human nutrition at the University of Illinois, show that fermenting soy dramatically reduces its potential allergenicity by as much as 99%, and increases the number of essential amino acids in the soya. These results were achieved when the blood plasma of persons allergic to soy was challenged with protein extracts from both fermented and unfermented soy products ...

*L. plantarum*-fermented soy flour showed the highest reduction in immunoreactivity &ndash; 96 to 99% &ndash; depending upon the sensitivity of the human plasma. During the fermentation process, proteins are broken down into pieces so small that they cannot be identified by the antibodies that produce the allergic reaction.

In the two studies soya was subjected to both solid and liquid fermentation by exposing samples to a number of microorganisms, including bacteria, moulds, and yeast. Their next step will be to optimise the fermentation conditions to produce zero-tolerance allergens.

Although soy allergy affects only 0.5% of the US population, that figure may be rising. And because soya is used as an ingredient in so many food products a technique that can eliminate its allergenicity is being widely sought.

More at <http://tinyurl.com/6aukqk>