UWA Nobel Laureate develops drug to prevent food allergies

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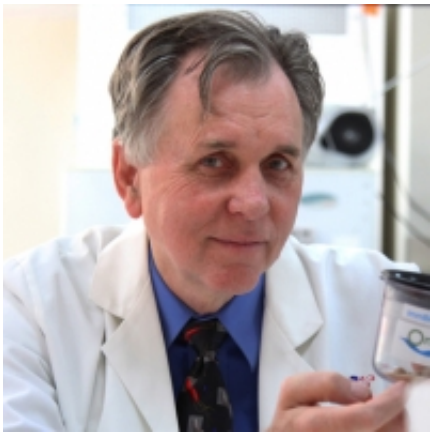

Credit: University of Western Australia

A new drug which "fine tunes" the immune system is being developed to help prevent asthma and allergies to foods such as peanuts and shellfish.

Nobel Laureate Professor Barry Marshall from The University of Western Australia is developing an oral treatment called Immbalance, which is designed to restore balance to the immune system and desensitise allergic responses.

Professor Barry Marshall said the drug would harness the immune properties of common bacterium Helicobacter pylori, that naturally resides in the human gut and move the allergic response down into the normal range.

"Studies in the USA show children infected with Helicobacter have a 45 per cent reduction in allergies and asthma," Professor Marshall said.

"Now in the 21st Century as Helicobacter is disappearing, humans in response have become hyper-reactive to allergies. If we put Helicobacter back in a safe way we can move allergic people back into a normal range.

"By developing an oral product which contains non-viable Helicobacter we can get the immune advantages that Stone Age man used to get by having live bacteria, with none of the disadvantages."

Professor Marshall's company, Ondek, based in Perth and Sydney, has been developing the drug for the past seven years and said it can be formulated as tablets, capsules, liquids or powdered product.

"Children could spread the powder on their cereal or put it in a drink and over the course of a few months could supress their allergic response," he said.

"We think it's going to be 100 per cent safe. It won't remove your immune system; it will just take the edge off."

Australia has one of the highest allergy and asthma rates in the world and over the last 10 years has seen a 10-fold increase in referrals for food allergies, and a five-fold increase in hospital referrals for food-related severe allergy or anaphylaxis.

"It appears when everything is very clean and children aren't exposed to enough infectious or non-infectious bacteria the immune system can get ramped up," Professor Marshall said.

"They then can become more reactive to all kinds of new proteins in

their diet or susceptible to pollen in the air."

Professor Marshall will be looking to trial the drug on humans within two years and hopes to make Immbalance available within five years.

Provided by University of Western Australia