Establishment of an animal model for the search of food allergens and quantitation of the allergenicity of the allergens

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Abstract

For the search of food allergen, and to quantitate the allergenicity of each allergen, we established a mouse model based on the fall of blood pressure, which is characteristic of anaphylaxis. Using this model, 15 kinds of food samples were examined their allergenicities.

As shown in Fig 1, mackerel as well as egg white, milk and soybean were potent allergens as in human cases. It is very interesting that the allergenicity of egg white could be significantly reduced as demonstrated in the case of whole egg, suggesting that some suppressive factors work in controlling allergenicity.

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