Senate Community Affairs Committee

ANSWERS TO ESTIMATES QUESTIONS ON NOTICE

HEALTH AND AGEING PORTFOLIO

Supplementary Budget Estimates 2010-2011, 20 October 2010

Question: E10-022

OUTCOME 1: Population Health

Topic: GM FOODS

Written Question on Notice

Senator Siewert asked:

Is the Department aware that prior to commercial release, a GM crop developer may have only given regard to two possible tests with non-standard associations with allergenicity:

a) Compared an intended sequence of a GM protein with a limited database of known allergenic proteins.
b) Tested an artificially produced version of the intended GM protein in a pharmacological digestion test, of a certain acidity and pepsin (a digestive enzyme) content.

Answer:

The Department is aware that all GM foods have been thoroughly assessed for potential allergenicity by Food Standards Australia New Zealand and none have been approved solely on the basis of the two tests described above.

The pre-market safety assessment is conducted strictly in accordance with guidelines developed specifically to assess the safety of whole foods. As there is no definitive test that can be applied to assess whether a novel protein is likely to be allergenic, the safety assessment uses an established step-wise, weight-of-evidence approach.

A range of information is relevant for this process including the source of the genetic material, its history of use in foods, structural similarity with known allergens, digestibility studies and immunological testing using human blood or human volunteers who are allergic to a particular food. Because assessments are conducted on a case-by-case basis, the type of data required depends on the characteristics of the novel protein in question, and human testing is not required in every case.