Senate Community Affairs Committee

ANSWERS TO ESTIMATES QUESTIONS ON NOTICE

HEALTH AND AGEING PORTFOLIO

Supplementary Budget Estimates 2010-2011, 20 October 2010

Question: E10-019

OUTCOME 1: Population Health

Topic: GM CROPS

Written Question on Notice

Senator Siewert asked:

Is the Department aware of the range of risks associated with GM crops include:

- a) Altered toxicity;
- b) Novel or altered allergenicity;
- c) Increased capacity to promote immune response through production of novel adjuvants;
- d) Altered nutritional content;
- e) Risks associated with antibiotic resistance

Answer:

- a) The Department is aware that genetic modification in theory could introduce changes which could impact on toxicity. The pre-market safety assessment of Genetically Modified (GM) foods and GM crops specifically investigates whether the levels of naturally occurring toxicants change as a result of the genetic modification and whether the novel protein exhibits any potential toxicity.
- b) The Department is aware that genetic modification in theory could introduce an allergen or alter the levels of existing allergens in specific foods. An assessment of potential allergenicity associated with the genetic modification is a key component of the premarket safety assessment for GM foods.
- c) See response to b).
- d) The Department is aware that genetic modification can intentionally or unintentionally alter the nutritional content of a food. This is comprehensively addressed in the premarket safety assessment of a GM food by the requirement for a detailed comparative analysis with the conventional counterpart and a range of commercially-available varieties currently in the food supply. Any nutritional changes in the GM food are considered specifically for their potential impact on the safety and wholesomeness of the food.
- e) The Department is aware of claims that the use of antibiotic resistance marker genes could theoretically compromise the therapeutic use of certain antibiotics. However, the weight of scientific opinion is that potential risks have been significantly overstated. To avert public concern, in recent years, the use of antibiotic resistance marker genes in the early stages of development of GM crops has been discontinued.