

Economics Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Industry Portfolio
Budget Estimates Hearing 2014-15
2-3 June 2014

AGENCY/DEPARTMENT: CSIRO

TOPIC: Health Benefits of CSIRO's Resistance Starch Projects

REFERENCE: Question on Notice (Hansard, 2 June 2014, page 14)

QUESTION No.: BI-88

Senator XENOPHON: I am acutely aware of time constraints, and I want to put a couple of questions to you, one on notice. The CSIRO is currently working on projects relating to resistance starch and its role in bowel health. On notice, can you tell me the benefits of this project in terms of preventive health and whether this budget will be affected by budget cuts? The second question is that I note that the CSIRO has been credited with developing wi-fi technology. How much, in monetary terms, has this brought back to the taxpayers of Australia?

Dr Clark: I can answer both of those without taking them on notice. The answer to the second question is \$425 million from our wireless LAN licences—

Senator XENOPHON: And counting.

Dr Clark: We still have a small part of the market that we are chasing for licences. In terms of the first question, we have made the decision that the work that we do in the combination of food and nutrition is vital to the decade or future of the nation, and we will continue to work very actively in the area of food and nutrition and the combination, particularly leading on the strength that we have in resistance starch and the strengths we have in those areas.

Senator XENOPHON: And will the budget cuts affect that work?

Dr Clark: We are only reducing our areas of clinical medicine in the areas that do not relate to food and nutrition.

ANSWER

Gastrointestinal illnesses have a big impact on Australian health. Over 14,000 Australians are diagnosed with colorectal cancer (CRC) and 4,000 Australians die from the disease every year. It has been estimated that up to 70 per cent of CRC cases could be prevented by modification of diet and lifestyle risk factors. CSIRO's research has shown that resistant starch reduces DNA damage in the large bowel, and is particularly effective in subjects consuming a typical western diet high in protein and saturated fats. Resistant starch is also thought likely to assist the 60,000 Australians living with inflammatory bowel diseases (IBD) and the 10 per cent of Australians who live with the discomfort of irritable bowel syndrome. IBD alone has been estimated to cost Australia \$2.7 billion per annum, through the combination of direct health costs, burden of disease and lost productivity.

Estimates suggest that current daily intakes of resistant starch in Australian diets are somewhere between 6g and 9g. It is predicted that CRC incidence could be reduced if intakes of resistant starch were increased to 20g per day. CSIRO researchers are working with the food industry to introduce more products and ingredients with elevated levels of resistant starch, to assist in reaching this target. One example is the CSIRO-developed BARLEYmax grain, which has already been incorporated into a range of breads, cereals, wraps and muesli bar products.