## **EDUCATION, SCIENCE AND TRAINING**

## SENATE LEGISLATION COMMITTEE - QUESTIONS ON NOTICE 2005-2006 ADDITIONAL ESTIMATES HEARING

Outcome: CSIRO Output Group: CSIRO

**DEST Question No. E1057\_06** 

Senator Stephens provided in writing.

## Question:

It is reported that only a 12-week study was undertaken and that it involved only women (Herald-Sun 10/1/06, p.2) – is this true?

What were the age-groups involved, duration, cost, location, participating scientists and what grants were provided for the study?

## Answer:

CSIRO has provided the following response.

CSIRO Total Wellbeing Diet

No. CSIRO based the *Total Wellbeing Diet* on several trials of its own as well as from published literature from overseas scientists, which has consistently shown that higher protein intakes had some metabolic advantages over higher carbohydrate dietary patterns.

Since 1998, CSIRO had conducted several dietary trials including trials which examine the effects of protein on appetite control. The organisation has received \$875,000 in grants and contributed a further \$1.865 million to fund the research into higher protein intakes (see summary table below).

Details of these studies are as follows:

- o Overweight people with markers of Syndrome X (1998)
  - o 12 week study
  - o Forty nine subjects with characteristics of syndrome X (39 female, 10 male)
  - o Scientists: M Whitrow, M Noakes, PM Clifton
- Overweight people with type 2 diabetes (2000-01)
  - o 16 week study and followed up for one year
  - o 54 obese men and women (19 men, 35 women)
  - o Scientists: Parker B, Noakes M, Luscombe N, Clifton P, Brinkworth GD
- Overweight women with polycystic ovary syndrome (2001)
  - o 16 week study
  - o 28 women
  - Scientists: Moran LJ, Noakes M, Clifton PM, Tomlinson L, Galletly C, Norman RJ

(Note: All the studies listed above were funded by CSIRO at a total cost of \$1.309 million)

- Overweight men and women (2001)
  - o 16 week study
  - o 50 subjects (20 men, 30 women)
  - o Scientists: Bowen J, Noakes M, Clifton P.

- Funding Dairy Australia and CSIRO (Total DRDC \$261K CSIRO \$144K)
- Overweight men and women with cardiovascular risk factors (2003-03)
  - One year study
  - o 67 subjects (12 men, 55 women)
  - o Funding National Heart Foundation \$92K and CSIRO \$150K
- Overweight people with elevated insulin (2002-03) two separate studies
  - o 57 subjects (24 men and 23 women); 57 subjects (14 men, 43 women),
  - o 16 week studies and followed up for one year
  - Scientists: Luscombe-Marsh ND, Noakes M, Wittert GA, Keogh JB, Foster P, Clifton PM. Farnsworth E, Argyiou E, Brinkworth GD
  - Funding NHMRC \$146K and CSIRO \$206K
- Overweight women 100 (2002-03)
  - o 12 week study and follow up for one year
  - o Scientists: Noakes M, Keogh JB, Foster PR, Clifton PM
  - o Funding Meat and Livestock Australia \$322K
- Overweight men (2004)
  - o One day studies testing protein and carbohydrate preloads on food intake
  - o 19 subjects
  - o Scientists: Bowen J, Noakes M, Trenerry C, Clifton PM.
  - Funding: National Centre of Excellence for Functional Foods \$54K and CSIRO \$56K