

Food and nutrient intakes in naturopathy students

HB Muggleston

School of Natural and Complementary Medicine, Southern Cross University, NSW, 2480

A study was undertaken to determine food and nutrient intakes of third year students enrolled in a four year Bachelor of Naturopathy degree. Twenty-two students (17 female, five males, age 21-53 years, BMI 18-32, 15 omnivores, six lacto-ovo vegetarians, one vegan vegetarian) provided dietary assessment data from a three day food intake study completed as part of a unit assessment. Dietary intakes were quantitatively analysed by the Serve Nutrition Management System (1) and by the NH&MRC Core Food Group system (2).

Comparison to nutrient goals & RDI's. Nutrients expressed as a % of total energy & RDI (Mean ± SD) (3,4)

Nutrient Goals	Protein 10 -15 %	Fat ≤ 30 %	CHO ≥ 50 %	ETOH < 5 %	Calcium % RDI	Iron % RDI	Zinc % RDI	K:Na 1:1
n=22	16.2 ± 3	32.4 ± 8	48.7 ± 10	2.7 ± 3	96.9 ± 51		82.0 ± 33	1.1 ± 0.6
Female	16.2 ± 3	31.7 ± 8	49.8 ± 10	2.3 ± 3	85.4 ± 28	80.1 ± 21	69.1 ± 20	1.3 ± 0.6
Male	16.4 ± 4	34.9 ± 7	44.7 ± 9	3.9 ± 3	135.8 ± 88	317.4 ± 91	125.9 ± 36	0.7 ± 0.2
Omnivore	17.0 ± 3	31.8 ± 9	48.8 ± 10	2.4 ± 3	96.6 ± 57	93.9 ± 38*	83.1 ± 37	1.0 ± 0.5
Lo vege	14.3 ± 4	32.5 ± 6	49.5 ± 10	3.6 ± 4	93.4 ± 40	88.3 ± 34*	75.3 ± 27	1.3 ± 0.8
Vegan	16.0 ± 0	41.6 ± 0	40.9 ± 0	1.47 ± 0	77.6 ± 0	118.1 ± 0*	105 ± 0	2.1 ± 0

* RDI = 16 mg iron

A key finding of the study revealed that the nutrient intakes of the student population are similar to that of the current Australian diet (5). A criticism of the research suggests that a longer investigation period is indicated as recommended by Basiotis et al. (6). As an adjunct to this investigation, an analysis of food and nutrient intake through a comparison with the NH&MRC Core Food Group guide highlighted discrimination against many common foods consumed by the study population. Foods such as hommous, tofu, seaweed, seeds, miso, and tempeh are excluded from Australian quantifiable food guidance systems. This limits their use as assessment and education tools for diets other than those usually consumed in traditional Western cultures. It was necessary to adapt Australian food selection systems to provide a more extensive list of foods appropriate to the study population.

Data from this study will from a basis for further investigation. Future research will continue to focus on the food habits and attitudes of the naturopathic student population and the impact of nutrition education on food and nutrient intake.

1. Serve Nutrition Management System (computer program). Version 3.0 for windows. 1997.
2. Cashel L, Jeffreson S. The core food groups. The scientific basis for developing nutrition education tools. NH&MRC: AGPS, 1995.
3. Commonwealth Department of Human Services and Health. Better Health Outcomes for Australians. National goals, targets and strategies for better health outcomes into the next century. Canberra: Commonwealth Department of Human Services and Health, 1994.
4. NH&MRC. Recommended dietary intakes for use in Australia. Canberra: AGPS, 1991.
5. Baghurst KI, Record S, Syrette J, Powis G. Food and Nutrition in Australia - does five years make a difference? Results from the CSIRO Australian Food and Nutrition Surveys 1988 and 1993. Adelaide: CSIRO Division of Human Nutrition, 1996.
6. Basiotis PP, Welsh SO, Cronin J, Kelsay JL, Mertz W. Number of days of food intake records required to estimate individual and group nutrient intakes with defined confidence. Journal of Nutrition 1987;117:1638-1641.