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**The Use of Dietary Supplements in
Two Groups of New Zealand Children
and Adolescents**

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A thesis submitted in partial fulfilment
of the requirements for the degree of

Master of Philosophy
in Nutritional Science

Massey University, Albany, New Zealand

2001

Dedicated to the memory
of my parents,
Betty and Jack Crowley

Abstract

In Western societies, personal responsibility for health has become an important pre-occupation during the latter part of the 20th century, with guidelines issued by governments as part of encouraging a healthy lifestyle. Many sectors of any given society have embraced this issue, but often in different ways. Dietary supplementation, as part of general self-medication, is particularly prevalent among women, but not exclusively so. Supplementation reflects concerns about dietary adequacy and an attempt to manage nutritional status. It may also be that by virtue of the roles which many women occupy, including as shopper and health care dispenser, they may be more exposed to dietary and health information that encourages a degree of dissatisfaction with existing diets and makes supplementation more attractive. The consumption of supplements by children suggests that supplementation reflects a range of group or social influences. Communication between family members and external sources of health information, for example, friends, the family doctor and the media, may also encourage the adoption and maintenance of supplementation patterns.

The purpose of this study was to determine the use of dietary supplements in two different groups of New Zealand children and adolescents. The first group consisted of children between 1 and 14 years of age from rural and urban areas who were targeted for the pilot study for the Children's Nutrition Survey. The pilot study consisted of a pre-testing and validation component. In the pre-testing component, there were 428 children, 137 of whom were Maori, 147 were Pacific peoples and 148 European/Pakeha. In the validation component, there were 183 children, with 60 Maori, 63 Pacific and 60 European/Pakeha. Questionnaires were used to provide demographic data and information on food and dietary supplement use. The pilot study found that 12.8% of the children of 1 to 14 years of age consumed dietary supplements. Supplement use was highest in children in the age range of 1 to 5 years (52.3%) and decreased to 47.6% in children 6 to 14 years. Maori and Pacific children were less likely to consume supplements than European/Pakeha children. The most popular supplements consumed were vitamin C, either alone or in combination with vitamins A and D, or echinacea (49.9%), and multi-vitamins (30.9%). Herbal combinations were

consumed by 16.5% of the children. Most of the children who consumed supplements took them daily.

Further study of the prevalence of dietary supplement use by children in New Zealand will take place in the proposed Children's National Nutrition Survey.

The athletes' study provided the second set of data. One hundred year 9 and 10 children (67 males and 23 females), who were identified as having potential in their respective sports, were recruited from two decile one North Shore secondary schools. Questionnaires were used to provide demographic data, information on the use of dietary supplements, influences on dietary supplement use and the perceived benefits of dietary supplement use. The mean age of the athletes was 13.5 years. Twenty-eight sports were represented. Seventy percent of the athletes took dietary supplements. Supplement use was higher in females (84.8%) than males (62.5%). Energy products, the most popular dietary supplement, were consumed by 43.1% of the athletes. These were followed by vitamins (28.7%) and recovery products (7.1%). Meal replacers, herbal supplements and "other" (12.2%) were the least popular supplements. Vitamin C and multivitamins were the most popular vitamins consumed, while minerals were consumed only by a few athletes. Parents and coaches were found to be the most important sources of information amongst those who took dietary supplements (59.5%) and they were also found to be the most likely to be the person(s) who suggested taking dietary supplements (66.39%). Dietary supplements were perceived to benefit athletes' performances in a variety of ways, from providing more energy, to improving fitness, or to preventing illness.

The findings from the athletes study suggests that sports organisations need to adopt a proactive stance to ensure that young athletes understand the importance of nutrition for both their sporting performance and their long-term health.

Acknowledgements

There are a number people to whom I owe sincere thanks. Clare Wall who has supervised the thesis and done the job so willingly and extremely competently in spite of substantial commitments. I am grateful for her helpful comments.

Viv McGuire has been involved with the preparation of the thesis and her skill in this area has been very valuable. My family have lived with the project as much as I have. Thank you to Paul who has been so supportive of my work and my sons Jacob and Nathan for their tolerance and understanding.

There are others who have provided help, advice and information and in particular, I want to thank Patricia Kay and Sharon Bonham, Albany librarians at Massey University and Ingrid Radkey, reference librarian, University of Berkeley, California.

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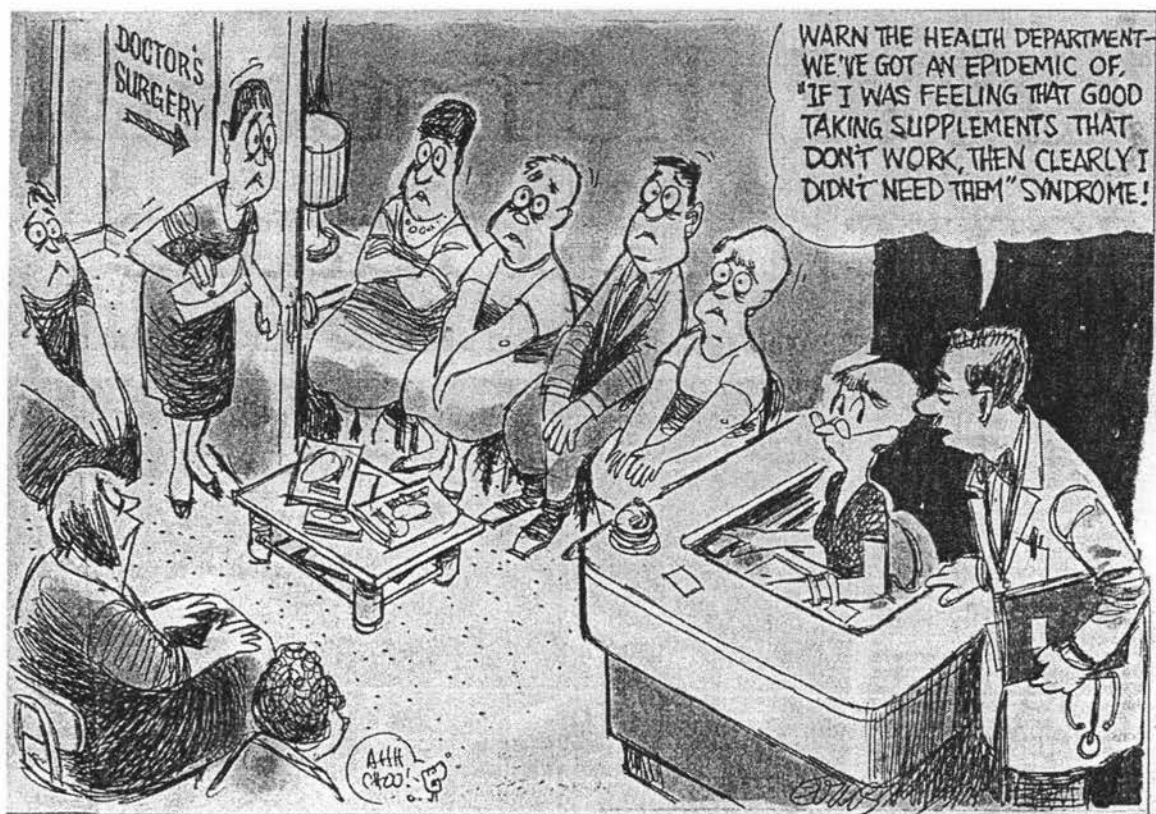
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