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Dietary practices, attitudes and nutritional knowledge of Auckland club rugby players

A thesis presented in partial fulfilment of the requirements for the
degree of Masters of Science
in Nutritional Science

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Abstract

Aim: The primary aim of this study was to establish the nutritional knowledge, attitudes and beliefs of Auckland rugby union players. Furthermore, a secondary aim was to investigate the dietary intake of these players and to examine how the knowledge and attitudes might affect nutritional intake.

Method: Sixty Auckland premier grade rugby union players, completed two self-administered questionnaires. The first was designed to determine nutritional knowledge, attitudes and beliefs of Auckland rugby union players and the second to investigate the physical activities of the participants. Four-day dietary record was kept for assessment of dietary intake. Finally, body composition of the players was measured using the International Society for the Advancement of Kinanthropometry anthropometry method.

Results: The rugby players had a mean (\pm SD) age of 22.8 \pm 2.5 years, with a mean height and weight of 181 \pm 6.5 cm and 98.2 \pm 14.2 kg. Only nine out of 60 players returned food record diaries. Their mean daily energy intake was 17.3 \pm 4.3 MJ. The contribution of energy intake was 46% from CHO, 16% from protein, 35% from fat and alcohol supplied 3% of daily energy. The mean score of correct nutrition knowledge questions was 42% \pm 20.

Conclusions: This study has shown that rugby union players have a few misconceptions regarding nutrition and performance. The major misunderstandings are mainly concerning major fuel source to provide energy. The majority of players believed that protein was the predominant source of fuel used by muscles. The data suggests that these athletes may benefit from nutritional support. The players mean daily intake was inadequate for the large amounts of training they were undertaking. However, the contribution of carbohydrate, protein, fat and alcohol to the mean daily energy intake was nearly identical to that of the general New Zealand population. Players need to increase the amount of carbohydrates that they consume as this may help to improve their performance and delay time to fatigue.

Key words: Questionnaire, nutritional information, physical characteristics, food diary

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