

## DAIRY PRODUCTS AND NUTRIENT INTAKE IN TEN YEAR OLD CHILDREN

J.A. SYRETTE and K.I. BAGHURST

A study of the lifestyle correlates of coronary risk factor status in children was conducted jointly by workers from the CSIRO Division of Human Nutrition and the Adelaide Children's Hospital as part of the WHO Multicenter collaborative study. The dietary intake of some 300, ten year old children and their parents was assessed using the food frequency technique (Baghurst and Record 1984) and this has subsequently been analysed in relation to food sources of nutrients in differing occupational (or social status) groups.

The children were classified into four groups based on their father's occupation. The upper quartile included professional and higher managerial occupations; the upper-middle, semi-professional and middle management; the lower-middle, skilled tradesmen and clerical workers and the lower quartile, unskilled manual, clerical and sales staff.

Dairy products played a significant role in the diets of the children although there were few major sex or occupational differences. As a group, dairy products provided 12-13% of energy intake, 14-16% of protein intake and 50% of calcium. The contribution of dairy products to total fat intake was higher in girls (19% of intake) than boys (16%) and there was a higher contribution in upper occupational groups (Girls; 19% upper, 17.5% lower. Boys; 17% upper, 15% lower). The table below shows the relative contribution to calcium intake in the upper and lower groups for boys and girls.

Dairy Product % contribution to calcium intake	Total n= (146)	Girls		Total (169)	Boys	
		Upper (38)	Lower (37)		Upper (38)	Lower (37)
Whole milk	12.8	10.9	11.1	13.0	12.0	14.6
Reduced fat milk	8.4	8.7	7.8	12.1	12.1 <sup>†</sup>	8.4
Flavoured milks*	6.0	5.4	7.7	6.7	7.0	6.9
Cheese**	14.6	15.0 <sup>†</sup>	14.3	12.2	11.3	14.8
Cream	0.2	0.3	0.2	0.2	0.3	<0.1
Yoghurt	4.9	5.9	4.3	3.4	3.5	2.7
Ice-cream	3.9	3.9	4.9	3.7	4.1	3.7
<b>Total</b>	<b>50.8</b>	<b>50.1</b>	<b>50.3</b>	<b>51.3</b>	<b>50.3</b>	<b>51.1</b>

\* thick shakes, milk shakes, flavoured milk drinks

\*\*all cheese, including cream cheese, cheese spread

<sup>†</sup> P < .05

Whole milk, in the main, contributed more to intake than reduced-fat milk, although there was a somewhat high contribution of reduced-fat milk in the boys and, in particular, the upper occupational group. These differences were mainly due to variation in milk intake associated with the use of breakfast cereals. Cheese was a higher contributor to nutrient intake in girls, especially in the upper occupational group.

The trends in contribution are consistent with those reported for their parents (Baghurst and Syrette 1988) although the differences were not as striking in the children.

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CSIRO Division of Human Nutrition, Kintore Avenue, Adelaide, South Australia 5000