

SODIUM AND POTASSIUM CONTENTS OF HOME-COOKED AND CAFETERIA FOODS

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Considerable information has been obtained on the sodium and potassium contents of Australian processed, takeaway and ethnic group foods (Maples, Wills and Greenfield 1982) but little comparable information is available on cafeteria and home-cooked foods.

A study was carried out in Sydney to determine the levels of sodium and potassium in a range of foods obtained from cafeterias (5) and households (28, in suburbs across the socioeconomic scale in Sydney). The cafeteria foods comprised 12 main meal foods (casseroles, roasts, fried rice, pasta and quiche) and 7 meal accompaniments (gravy, rice, vegetables); the household foods comprised 2 main meal foods (hamburger patties, roast beef) and 4 accompaniments (gravy, vegetables). For comparative purposes hamburgers were also obtained from 9 fast-food chain outlets and, salted, or unsalted at purchase, from 9 other takeaway food outlets. The takeaway patties were separated from the bun and other ingredients before analysis. All food samples were analysed for sodium and potassium using the methods described by Wills, Maples and Greenfield (1981).

In the cafeteria study, among the main meal foods, sodium was lowest in sweet & sour chicken/pork (170 ± 56 mg/100 g) and highest in quiche (300 ± 158 mg/100 g) while among the accompaniments sodium contents were relatively low in vegetables and boiled rice at 22 - 140 mg/100 g and higher in gravy at 290 ± 182 mg/100 g. In the household study, hamburger patties contained 257 ± 141 mg/100 g and roast beef 98 ± 51 mg/100 g of sodium while vegetables ranged from 90 - 156 mg/100 g in sodium and gravy again was higher at 418 ± 254 mg/100 g.

Comparison of the hamburger patties for sodium contents showed that the home-cooked patties and fast-food chain patties were similar in sodium content (257 ± 141 mg/100 g and 178 ± 111 mg/100 g) while patties from other takeaway outlets were significantly higher ($P < 0.05$) in sodium content whether they were salted at point of purchase or not (763 ± 367 mg/100 g and 557 ± 345 mg/100 g, respectively).

In the cafeteria study, among the main meal foods, potassium was lowest in fried rice (70 ± 24 mg/100 g) and highest in roast beef (320 ± 56 mg/100 g); accompaniments ranged from 22 ± 9 mg/100 g in boiled rice to 500 ± 19 mg/100 g in roast potato. In the household study, hamburger patties contained 344 ± 62 mg potassium/100 g and roast beef 365 ± 43 mg/100 g, while the vegetables ranged from 207 ± 81 mg/100 g (carrots) to 825 ± 173 mg/100 g (fried potato chips) and gravy contained 305 ± 193 mg/100 g.

Of the five foods common to the cafeteria and household study (roast beef, gravy, fried potato chips, mashed potato, boiled carrots) only roast beef showed a significant difference in sodium content being lower ($P < 0.05$) in the home-cooked beef (98 ± 51 mg/100 g versus 220 ± 257 mg/100 g). Potassium contents were significantly higher in the home-cooked foods, except in the case of carrots which showed no difference between household or cafeteria food samples.

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Food Technol.Aust. 33 : 274.

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