Patients who need low salt meals in hospital

Rationale of the clinical routine at the Menzies Research Institute, Hobart

Rationale

Salt-related health problems (caused or aggravated by salt) affect at least half of the adult population [1]. Most would be highly preventable—and all would be treatable—by following the Australian Dietary Guidelines (ADGs), which recommend everybody to *choose foods low in salt* [2]. Urinary sodium excretion falls below 50 mmol/day in people who follow this guideline strictly, selecting only fresh foods and processed foods that comply with the definition of *low salt foods* in the ANZ Food Standards Code (sodium must not exceed 120 mg/100g).

Many salt-related health problems show great improvement with good dietary compliance (confirmed by sodium excretion rates below 50 mmol/day). It removes fluid retention [3], and usually abolishes the severe vertigo of Meniere's Disorder (MD) [4, 5]. For over 10 years Sydney teaching hospitals have used the Menzies literature, now in book form [1], to help out-patients control the vertigo of MD using the ADGs with special attention to salt. To control vertigo, they find a sodium excretion rate below 50 mmol/day is *'more effective and less troublesome than diuretics'* [6].

An unexpected new problem with hospital in-patients

The medical treatment for salt-related health problems is a diuretic, and the need to control salt intake is increasingly ignored except in acute heart failure and kidney failure (catered for by the diet kitchen). Some hospital main catering services no longer provide low salt meals, even when requested by the patient.

Compliance with the ADGs is always variable in hospital meals—due to the over-riding importance of giving patients food they will eat—but there is surely an obligation to supply low salt meals to patients who ask for them on legitimate medical grounds. Patients with MD who have had dramatic relief at home with good urine results are giving these hospitals a new problem—their ethical and medicolegal liability if salty hospital food triggers severe vertigo. The hospital's best defence would be clinical evidence that this patient's 24-hour sodium excretion had been less than 50 mmol on the food it had provided.

Less dramatic but equally important is the need to control salt intake to counter the rising epidemic of chronic heart failure [7]. How many people can follow the salt guideline at home but not in hospital?

THE SOLUTION

Every hospital can provide *low salt fresh foods* and *low salt processed foods*. Selecting foods that comply with the Australian Dietary Guidelines is nothing more than selecting the healthiest produce on the market.

LOW SALT FRESH FOODS

These include all fresh fruit and vegetables, fresh meat, poultry and fish, unsalted nuts and unsalted dairy foods. With vinegars, herbs and spices they can make delicious meals. The only fresh foods that are too salty are marine molluscs (shellfish, squid, octopus) and crustaceans (prawns, shrimps, crayfish).

LOW SALT PROCESSED FOODS

The mandatory Nutrition Information Panels identify low salt foods—the sodium content must not exceed 120 mg/100g.

Replace cornflakes (sodium 820 mg/100g) with a popular *low salt* cereal and do the same with every other processed food, including bread.

	Quantity per serving	Quantity per 100 g
Energy	608 kJ	405 kJ
Protein	4.2 g	2.8 g
Fat, total	7.4 g	4.9 g
– saturated	4.5 g	3.0 g
Carbohydrate, total	18.6 g	12.4 g
– sugars	18.6 g	12.4 g
Sodium	90 mg	60 mg

24-hour urine collections within 24 hours of admission and 4–5 days later will show how well patients were controlling their salt intake at home and how well they are controlling it in hospital.

December 2006 Dr Trevor C Beard

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