

Illness associated with rudderfish/ escolar in South Australia

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Nineteen out of 41 people who attended a dinner on 10 March 1999 developed gastrointestinal symptoms, 18 of them within 2 days. The dinner was held at a restaurant associated with a tertiary educational institution in metropolitan Adelaide.

The associated educational institution had reported the growth of a faecal coliform on in-house testing from its potable reticulated water supply sampled on 9 March 1999 after the repair of a damaged water pipe. On the advice of the Environmental Health Branch of the Department of Human Services, South Australia (DHS SA) water from the suspected system was boiled before consumption until further microbiological testing by the relevant water authority indicated it was safe to drink.

The Communicable Disease Control Branch of DHS SA carried out a cohort study. The restaurant provided a menu and 40 of the 41 people who attended the dinner were questioned regarding items on the menu that were eaten. Only one food item, rudderfish, served as a main course, had a significant risk ratio: 2.53 (confidence interval 1.13–5.70). Fourteen of the 19 persons who ate the fish reported illness. By contrast, water served at the dinner posed no risk: risk ratio 1.00 (confidence interval 0.35–2.83).

After a more recent event in South Australia, in October 1999, an implicated so called rudderfish fillet was speciated as *Lepidocybium flavobrunneum* by protein fingerprinting.¹ According to industry sources this fish is imported into South Australia from Queensland and Western Australia. It is not clear if other species which cause the same symptoms are also sold under this or other names or if the *Lepidocybium flavobrunneum* is sold under names other than rudderfish. The recommended marketing name for *Lepidocybium flavobrunneum* is escolar.¹

Usually people complain of diarrhoea, often oily and orange coloured, within hours of consumption. The diarrhoea may be urgent enough to cause repeated faecal incontinence. Abdominal discomfort, nausea and occasionally vomiting have also been reported.

The cause of illness seems to be the high oil content of the fish rather than a recognised toxin or bacterial contamination. Nevertheless, when any fish is identified as a possible cause of food poisoning it is recommended that advice be sought to arrange testing to exclude microbiological and toxic causes.

In South Australia, between 1997 and October 1999, there have been seven other reports of abdominal symptoms following consumption of rudderfish, involving at least 19 people. After media interest following the October cases, a further 60 people phoned DHS SA with complaints of illnesses which occurred from 1997 to 1999 following rudderfish consumption. The Food Unit of the Environmental Health Branch then advised seafood retailers to display a sign advising that rudderfish might cause these problems. Since then there have been no further complaints to date related to rudderfish consumption in South Australia.

Reference

1. Yearsley GK, Last PR, Ward RD. Australian Seafood Handbook: an identification guide to domestic species. CSIRO Marine Research; 1999.

Postscript: 'Rudderfish' is now a recognised marketing name but for a different fish (*Centrolophus*, *Scedophilus* and *Tubia* species).