

APPENDIX 2

METAL LEVELS IN *PENAEUS ESCULENTUS* - NORMALITY OF DATA

The following table and frequency polygons illustrate typical data distributions for levels of some metals in tail flesh of *P. esculentus*. To avoid confounding factors, only medium sized prawns from one site (south) and season (October/November 1992), were selected. Only metals for which there are MPC or health standards have been included.

The standardised coefficients of skewness and kurtosis measure departure from symmetry and relative flatness or steepness respectively. For both statistics, when the values are outside the rang +2.0 to -2.0, the data may depart significantly from a normal distribution. Calculations were done in the statistical computer package 'statgraphics'.

	Mean	Standardised Skewness	Standardised Kurtosis
Aluminium	3.09	4.12	1.76
Arsenic	49.80	- 0.29	- 1.09
Cadmium	0.55	2.94	0.19
Copper	14.69	- 1.35	- 0.65
Mercury	0.08	3.94	2.55
Lead	0.19	10.32	27.36
Selenium	1.85	0.99	- 0.38
Zinc	53.87	2.88	0.11

While aluminium and lead data clearly do not follow a normal distribution, symmetry and kurtosis of other metals do not display gross departures from normality. Considering this, along with Underwood's (1981) discussion on the general robustness of ANOVA to violations of the normality assumption, data in the present study was not transformed prior to analysis.







