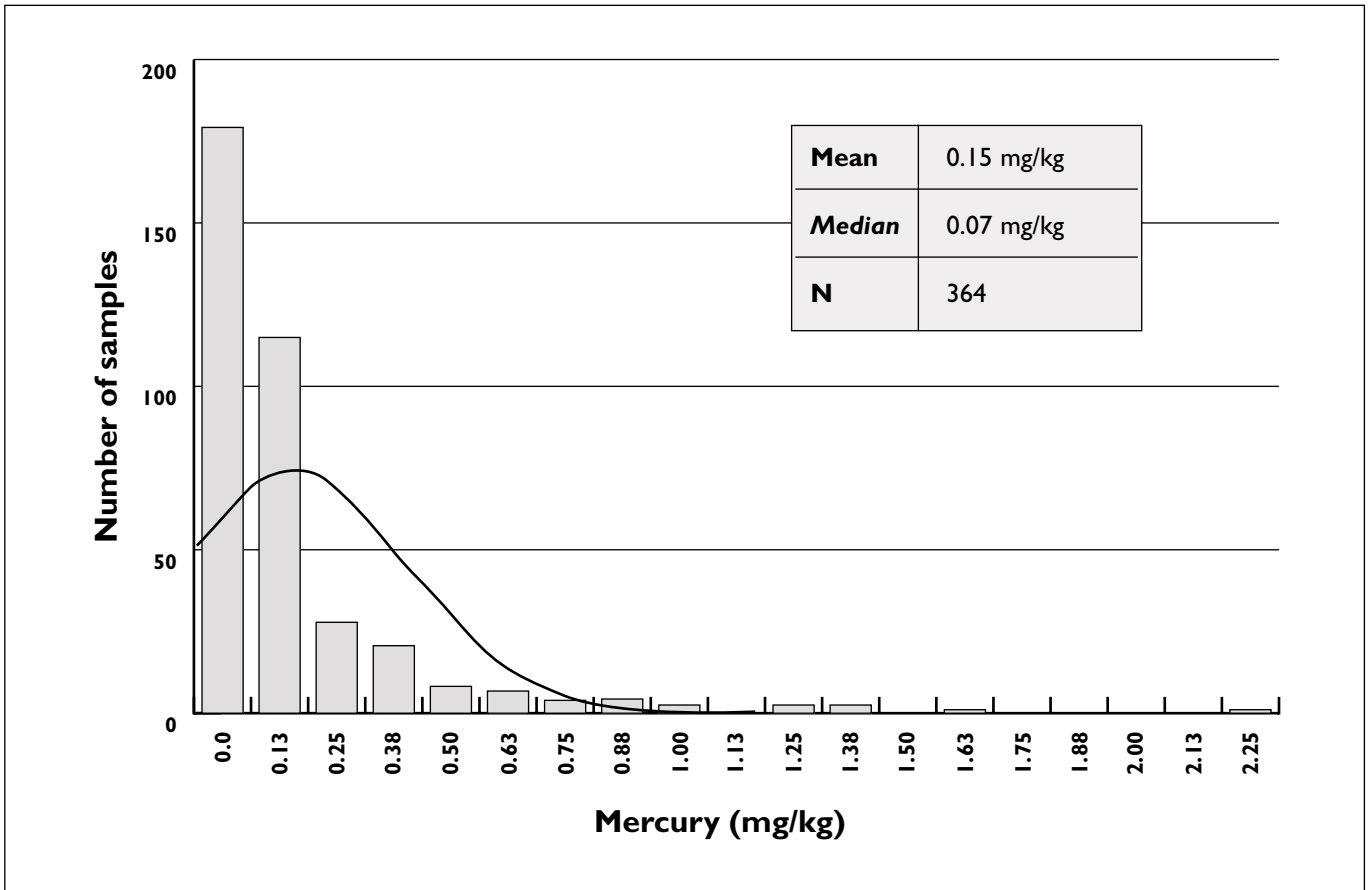


# 13

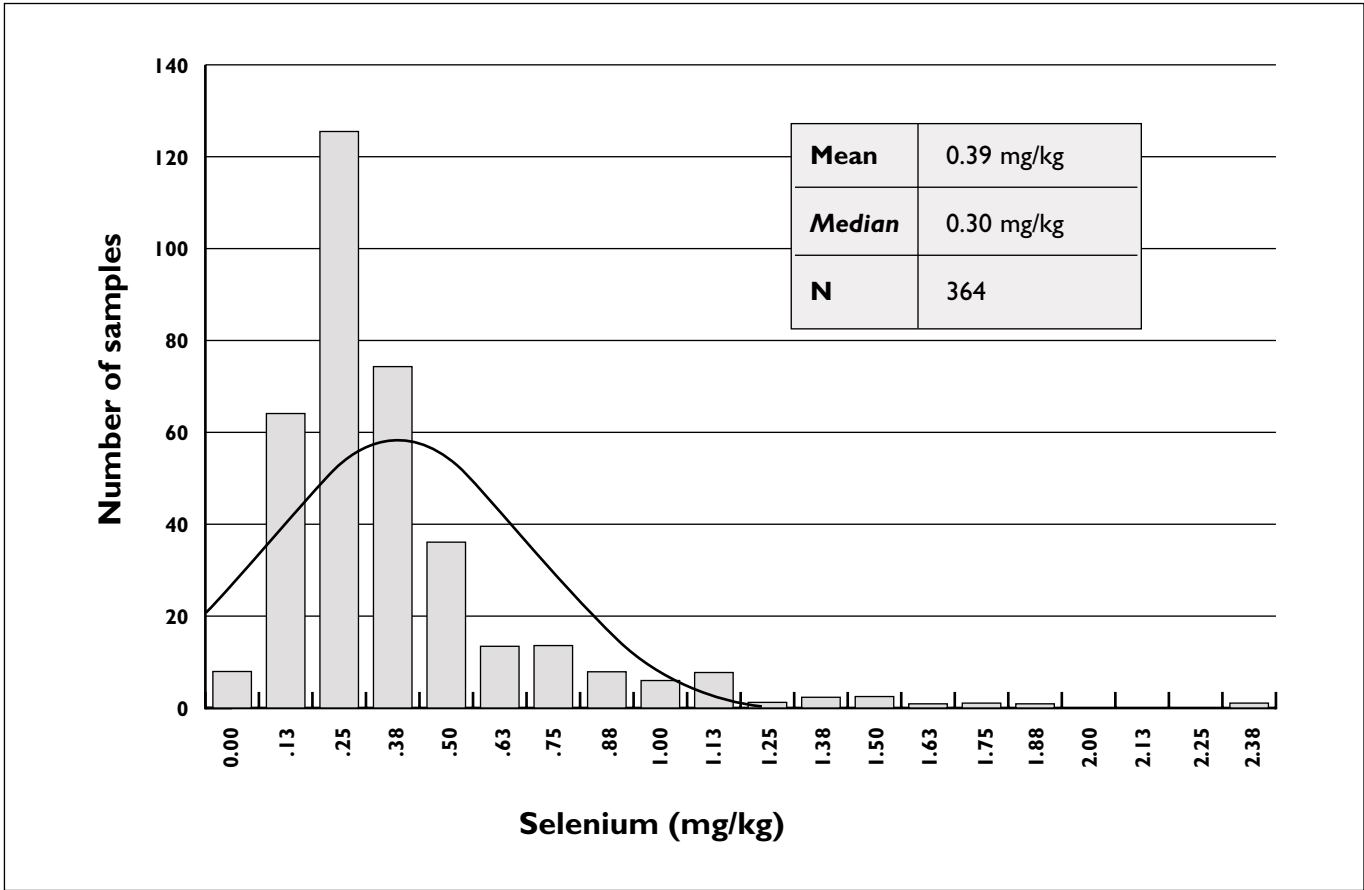
## Appendix 5

### Distribution curves of selected metals



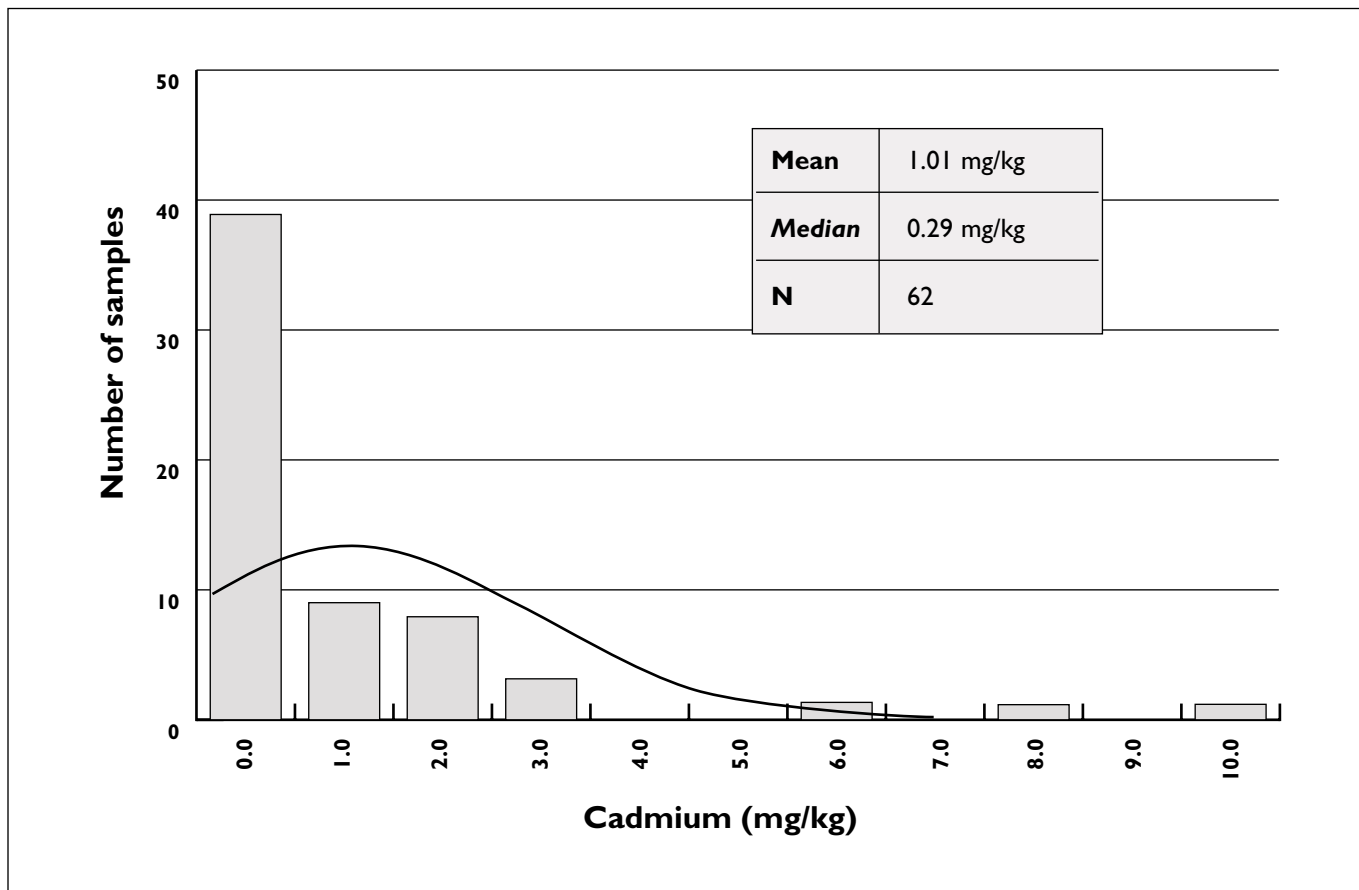
**Figure 8** Distribution of mercury concentrations in fin fish

# Distribution curves of selected metals



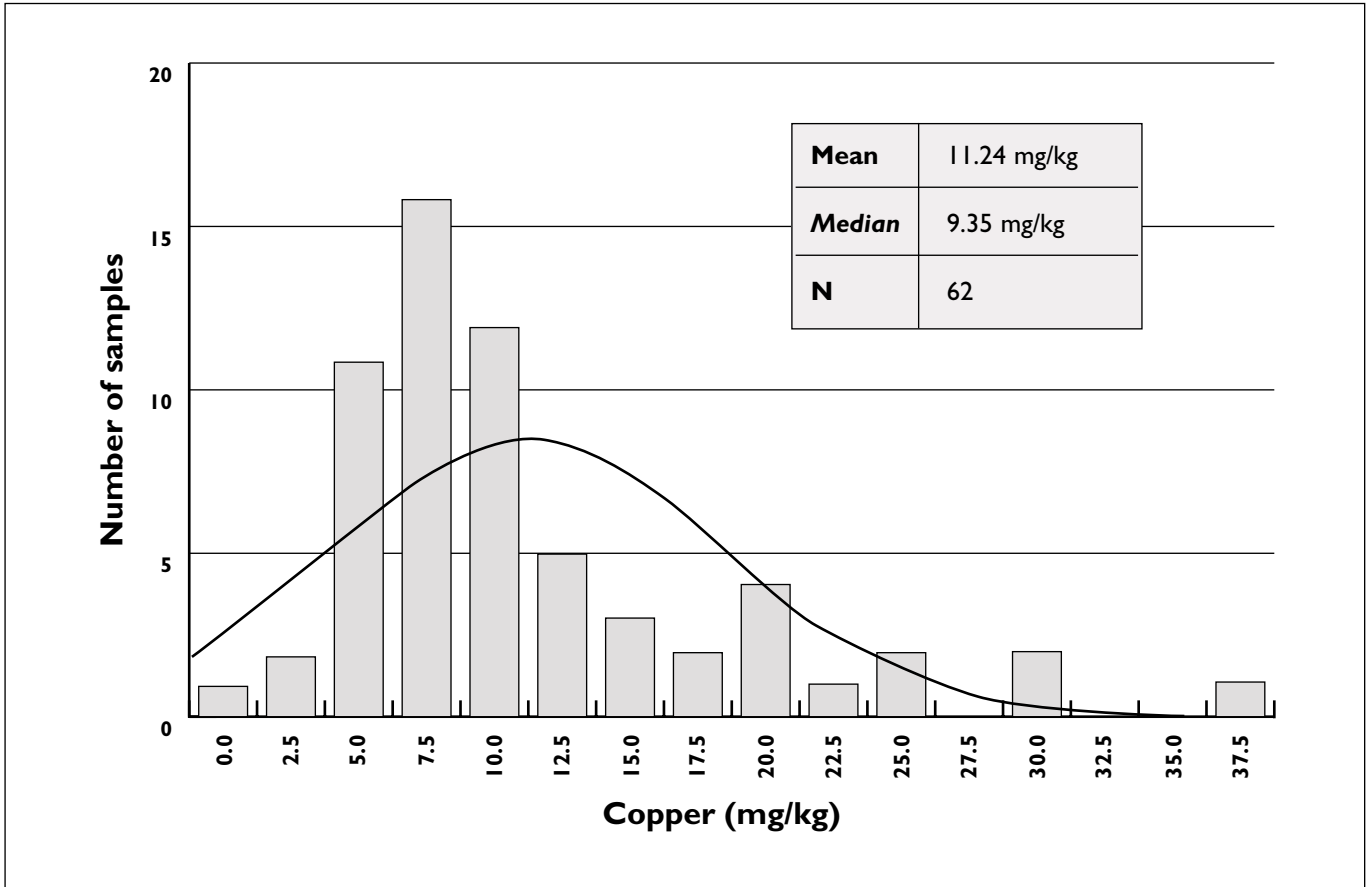
**Figure 9** Distribution of selenium concentrations in fin fish

## Distribution curves of selected metals



**Figure 10** Distribution of cadmium concentrations in crustaceans

## Distribution curves of selected metals

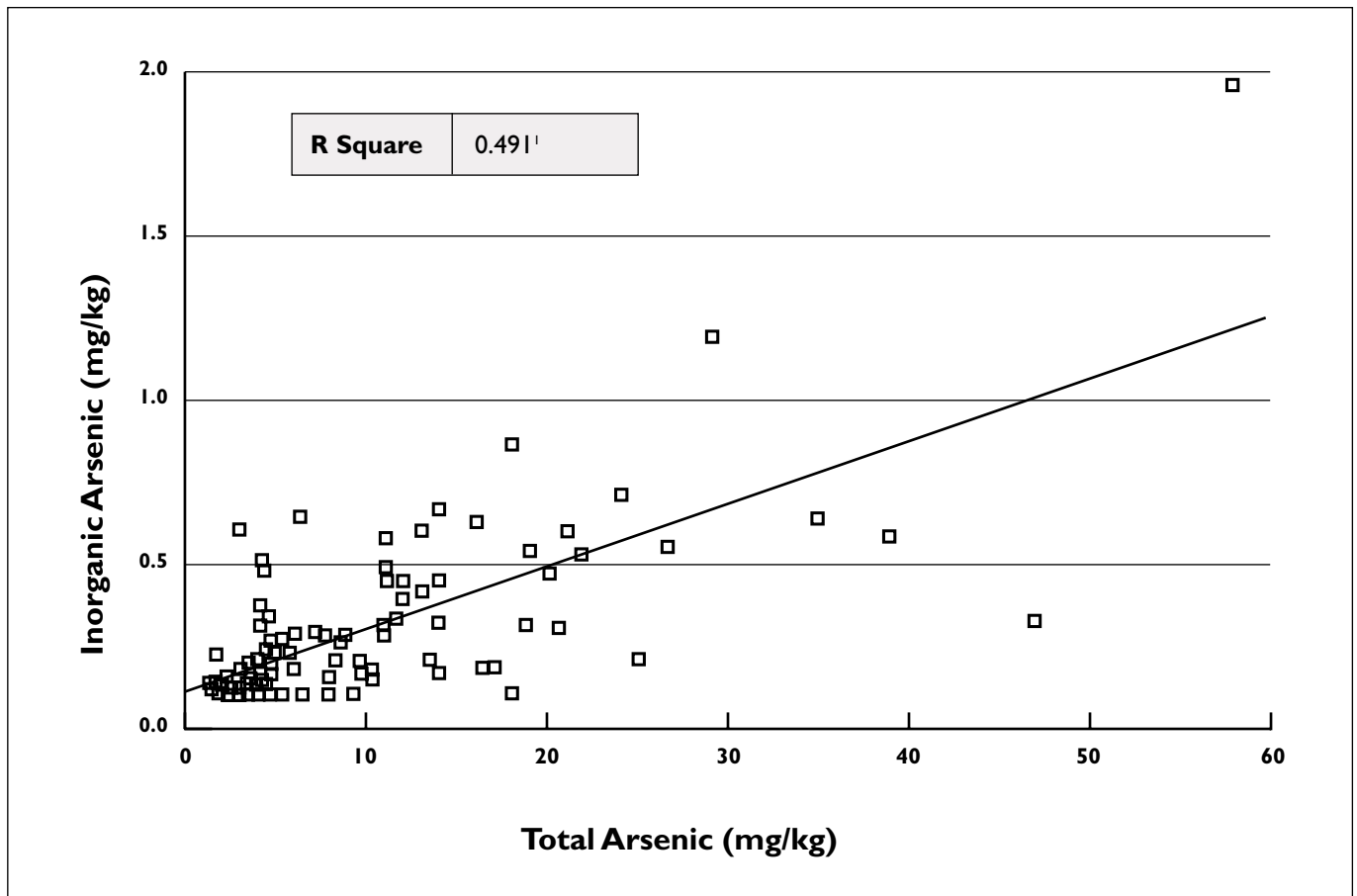


**Figure 11** Distribution of copper concentrations in crustaceans

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## Inorganic arsenic as a proportion of total arsenic

A regression analysis shows that the concentration of inorganic arsenic is approximately 2% of total arsenic for the 93 samples analysed for both.



Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std Error	Beta		
(Constant)	.111	.029		3.822	.000
Total Arsenic (mg/kg)	1.903E-02	.002	.700	9.351	.000

Figure 12 Regression equation to predict inorganic arsenic from total arsenic in fish

<sup>a</sup> Dependent Variable: inorganic arsenic (mg/kg)

<sup>1</sup> R Square for fin fish = 0.67, for crustaceans 0.28 and for molluscs 0.22

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## Appendix 7

### Proposed generally expected levels

The Australia New Zealand Food Authority (1999b) is proposing the abolition of the maximum permitted concentrations for copper and selenium in fin fish, crustaceans and molluscs, and mercury and lead in crustaceans and molluscs. The Authority is instead proposing voluntary standards known as generally expected levels (GELs).

The median and 90th percentile levels found in this survey are compared with proposed GELs in the table below.

Maximum permitted concentrations will remain for mercury and lead in fin fish and inorganic arsenic in fin fish, crustaceans and molluscs. The MPC for inorganic arsenic in fin fish and crustaceans may be increased to 2 mg/kg from the current 1 mg/kg.

Metal	Food	Proposed GEL (mg/kg)		Levels found in the NSW survey (mg/kg)	
		median	90 <sup>th</sup> percentile	median	90 <sup>th</sup> percentile
Copper	fin fish	0.5	2	0.00	0.70
	crustaceans	10	20	9.35	21.70
	molluscs	5	40	3.70	25.20
Mercury	crustaceans	0.05	0.2	0.02	0.07
	molluscs	0.02	0.1	0.02	0.04
Selenium	fin fish	0.5	2	0.39	0.78
	crustaceans	0.5	1	0.38	1.06
	molluscs	0.5	1	0.31	0.69

**Table 11** Metal levels in NSW fish compared with proposed GELs

