

ADDENDUM:

IJEnvH Vol. 6, No. 1, 2012, pp.84–91:

‘Trace metals intake of *Nacella (P) magellanica* from the Beagle Channel, Tierra del Fuego (Patagonia, Argentina)’, *Marcelo Enrique Conti, Jorge Stripeikis, Francesco Botrè and Mabel Beatriz Tudino*

**Trace metals intake of *Nacella (P) magellanica*
from the Beagle Channel, Tierra del Fuego
(Patagonia, Argentina)**

Marcelo Enrique Conti*

Department of Management,
Sapienza University of Rome,
Via del Castro Laurenziano 9,
00161, Rome, Italy
Email: marcelo.conti@uniroma1.it
*Corresponding author

Jorge Stripeikis

INQUIMAE,
Departamento de Química Inorgánica,
Analítica y Química Física,
Facultad de Ciencias Exactas y Naturales,
Universidad de Buenos Aires,
Buenos Aires, Argentina
Email: stripi@qi.fcen.uba.ar

Francesco Botrè

Department of Management,
Sapienza University of Rome,
Via del Castro Laurenziano 9,
00161, Rome, Italy
Email: francesco.botre@uniroma1.it

Mabel Beatriz Tudino

INQUIMAE,
Departamento de Química Inorgánica,
Analítica y Química Física,
Facultad de Ciencias Exactas y Naturales,
Universidad de Buenos Aires,
Buenos Aires, Argentina
Email: tudino@qi.fcen.uba.ar

With respect to cadmium, in 2010 the Joint FAO/WHO Expert Committee on Food Additives (JECFA) reviewed its preceding weekly intake evaluation (i.e. $7 \mu\text{g kg}^{-1}$ body weight) (WHO, 2006) after this paper was finished. The Committee (WHO, 2010) set the cadmium provisional tolerable monthly intake (PTMI) of $25 \mu\text{g kg}^{-1}$ b.w. which implies to a weekly intake of $5.8 \mu\text{g kg}^{-1}$ b.w. Thus, for an average adult (i.e. 65 kg) no more than 377 μg of cadmium per week is recommended. Considering the average concentration of cadmium found for *N. magellanica* samples in the Beagle Channel ($5.42 \mu\text{g g}^{-1}$ whole tissue), the consumption of about 339 g (wet weight) of molluscs should be enough to reach the safety level.

Moreover, the European Safety Food Authority (EFSA) confirmed the tolerable weekly intake (TWI) of cadmium at $2.5 \mu\text{g kg}^{-1}$ b.w. previously established in order to protect some particular population subgroups such as infants, children and vegetarians (EFSA, 2011). Considering the EFSA risk limit, the consumption of about 146 g (w.w.) of molluscs should be enough to reach the safety level.

Taking into account the current consumption of *N. magellanica* in the Beagle Channel, risks should be excluded for cadmium considering FAO/WHO risk limits (WHO, 2010). If we consider the EFSA limits (EFSA, 2011) we can infer that some caution is required for more exposed molluscs consumers' such as children.

Furthermore, the expert committee (WHO, 2010) established that the lead provisional tolerable weekly intake (PTWI) of $25 \mu\text{g kg}^{-1}$ b.w. could no longer be considered health protective and withdrew it. At present, the Committee concluded that it was not possible to set a new PTWI that would be considered to be health protective.

References

- EFSA (2011) 'Panel on Contaminants in the Food Chain (CONTAM). Scientific opinion on tolerable weekly intake for cadmium', *EFSA Journal*, Vol. 9, No. 2, pp.1975–1994.
- WHO (2006) *Evaluation of certain food contaminants. Geneva, Switzerland: Sixty-four report of the Joint FAO/WHO Expert Committee on Food Additives*, WHO technical report series 930.
- WHO (2010) *Evaluation of certain food contaminants. Geneva, Switzerland: Seventy-third report of the Joint FAO/WHO Expert Committee on Food Additives*, WHO technical report series 960. Available online at: http://whqlibdoc.who.int/trs/WHO_TRS_960_eng.pdf