

## Abstract

# Is Taurine Concentration in Urine a Significant Indicator of Fish Consumption among Polish Postmenopausal Women? Data from a Pilot Study <sup>†</sup>

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**Abstract:** Background and Objectives: Taurine is a marker of fish and seafood intake. It is also suggested that its increased excretion in the urine is inversely associated with mortality from cardiovascular diseases. This study aimed to assess taurine concentration in Polish postmenopausal women's urine and whether higher urinary taurine excretion is associated with higher fish intake in the aimed population. Methods: Thirty-three postmenopausal women, with an average BMI of 26.7 kg/m<sup>2</sup>, were asked for three days to record their dietary information concerning fish (including shellfish) intake, and twenty-four-hour urinary taurine excretion was measured using the high-performance liquid chromatography (HPLC) method. Anthropometric parameters were also evaluated. All data are presented as mean ± standard error of the mean. Results: The study population was divided into two groups according to the median taurine/creatinine ratio (Tau/Cr), with the cut-off value of 46.8 µmol/mmol. A significantly lower ( $p < 0001$ ) concentration of taurine in the 24 h urine samples was observed in the group with a low Tau/Cr ratio ( $231.3 \pm 35.5$  µmol/day) in comparison to the high Tau/Cr ratio group ( $612.7 \pm 48.8$  µmol/day). Postmenopausal women with a higher Tau/Cr ratio daily consumed more fish ( $60.2 \pm 11.9$  g) and eggs ( $25.0 \pm 4.5$  g) compared to the group with a low Tau/Cr ratio ( $16.2 \pm 5.3$  g vs.  $11.1 \pm 4.6$  g, respectively). Discussion: higher 24 h urinary Tau/Cr ratio can be related to higher fish intake in Polish postmenopausal women.

**Keywords:** taurine; postmenopausal women; fish intake



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