

EDTA supplementation in lowering lead blood level – comparison with DMSA

Siwiec Ewa¹, Lubiński Jan²

¹Medycyna Diagnostyczna Pomorskiego Uniwersytetu Medycznego Sp. z o. o.;
ewa.siwiec@pum.edu.pl

²Zakład Genetyki i Patomorfologii Pomorskiego Uniwersytetu Medycznego w Szczecinie;
jan.lubinski@pum.edu.pl

INTRODUCTION: Our previous study showed that DMSA may be used for effective lowering blood lead concentration and does not cause serious adverse effects. Scientific literature indicates other dietary supplements as substances that also may lower blood lead level (BLL).

AIM OF THE STUDY: Results of calcium disodium EDTA supplementation in lowering blood lead level.

STUDY GROUPS

1. women and Pb concentration > 7,5 µg/L, n=38
2. men and Pb concentration > 13,5 µg/L, n=26

RESULTS: After EDTA supplementation the average value of Pb blood concentration in comparison to initial value was lower in both groups. The concentration of lead in urine was higher after EDTA supplementation.

Other dietary supplements – N-acetylcysteine (NAC), chlorella, *Moringa oleifera*, pectins, glutathione – did not have any impact on BLL

CONCLUSIONS: During the study period, we observed decrease in Pb blood concentration after each month of EDTA supplementation and increase in Pb blood level after supplementation free months. The same situation happens when DMSA is supplemented. On the other hand, we did not observe as many adverse effects of EDTA in comparison to DMSA supplementation.