Selenium status in Ukraine: food for thoughts

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Selenium is shown to be an essential component of at least 25 selenoproteins participating in regulation of many physiological processes in human body. However, in many European countries Se deficiency is a common cause of concern and finding a solution for this global problem is of great importance for health professionals and scientists. In this relation Ukrainian situation is very complex. From the analysis of available data and our own research it is clear that Se status of Ukrainian population is suboptimal and needs to be improved. Indeed Se level in feed ingredients produced in Ukraine is quite low being in most cases below 0.1 ppm. Similarly, the level of selenium in plasma of volunteers living in the Kiev area of Ukraine (0.055-0.081 μg /ml) was also low reflecting Se inadequacy in the diet of Ukrainian population. There are several ways of solving this problem, including usage of Se supplements. However, it seems reasonable to suggest that production of Se-enriched food, including Seeggs. Se-meat and Se-milk, could be a valuable option for Ukraine. Indeed, this technology is already tested and first Se-eggs and Se-chicken products are sold in Ukrainian supermarkets and it is just a matter of time when consumer accept this approach and these products will find their way from niche market to main stream.