Personalized approach to correction of bioelement imbalances

Analysis of a bioelement profile or its components (trace element status analysis) may provide essential information on metabolism of the human organism and help to correct a complex of metabolic disturbances. At the same time, there are not strict limits of “norm” for element content in the human organism in general and biosamples in particular. Therefore, when analyzing element status of the human being one cannot use only categories like “increased” or “decreased”. It is strongly recommended to estimate the stages of bioelement imbalances. Such stages should be estimated using the exact population living in the current territory etc. In particular, the first and second stages of imbalances may be indicative of unbalanced nutrition and ecology, and desadaptation, respectively. These types of imbalances require only dietary management whereas drug treatment may result in adverse health effects. The third stage of bioelement imbalance may be associated with “predisease” and reduction of functional reserves of the organism. Depending on the presence of complaints the correction of bioelement status of the organism may be performed using dietary supplements (in the absence of complaints) or through prescription of medicines (presence of non-specific complaints). The fourth stage of bioelement dysbalance is characterized by disease manifestation and requires only pharmacotherapy. Therefore, such personalized approach helps to increase the efficiency of treatment and avoid possible side-effects of medications. We have successfully used this approach for 25 in health management of sportsmen, persons of extreme and dangerous professions, and clinical medicine (child neurology, endocrinology, etc.).

Biography
Anatoly V. Skalny has completed his PhD at the age of 28 years from All-Union Centre for Narcology, Moscow, USSR. He is a vice-president of Trace Element Institute for UNESCO, the chairman of Russian Society of Trace Elements in Medicine, a member of advisory board of Federation of European Societies on Trace Elements and Minerals (FESTEM). He has published more than 200 journal articles, abstracts and book chapters in English. Prof. Skalny is a member of editorial board of Journal of Trace Elements in Medicine and Biology, the leading journal in the field of trace elements science.

skalny3@microelements.ru