

**Title: Characteristics, methodological quality and risk of bias in studies published as systematic reviews/meta-analyses on the effects of nutritional/dietary interventions in cancer prevention – a systematic methodological survey**

**Reasons for choosing research topic:** Systematic reviews (SR) are type of medical literature review which aim to answer focused research question on the basis of available evidence (primary studies), which is identified, selected, appraised and synthesized in a clearly defined and systematic way, while metaanalysis (MA) is a method for summing up the results of single studies. Since systematic review is usually based on already published data, inappropriate approach to study search, assessment, selection, synthesis and analysis of data from primary studies may influence the observed results, introducing systematic distortion (bias), therefore they may be misleading. Following methodological guidelines in the process of systematic review development may help such error (bias). However it has been shown, that many of such studies in several medical/health sciences field is not performed according to the recommended methods. Therefore it is very important to inform the users of studies published as SR/MA how believable are results of such studies and if they were carried out with an appropriate approach and to make recommendations on improving future research in this field.

**Main objective:** The main aim of this research is to evaluate the methodology (quality) of research published as SR/MA assessing nutritional/dietary interventions in cancer prevention and to explore associations between characteristics (such as funding) of SR/MA and their quality. In addition the project will identify which nutritional/dietary interventions have not been assessed using SR/MA and will formulate the recommendations on the methods for future SR/MA in this field.

**Research to be carried out:** The project will be realized in two main phases. At the beginning all nutritional/dietary interventions studied in cancer prevention will be identified. This information will be used for searching for studies published as SR/MA in this field. The second phase will follow standard methods of systematic reviews, including search for studies in medical databases and selection of studies performed by two reviewers independently according to clearly defined inclusion criteria (to make the process more objective). Specially designed form will be used for data collection from studies. Methodological quality of SR/MA will be assessed using currently available and published tools. Collected data will be summarized and analyzed. Analysis of the associations between studies' characteristics and their quality will be performed.