



Consensus document and conclusions

Methodology of dietary surveys, studies on nutrition, physical activity and other lifestyles

Javier Aranceta-Bartrina^{1,2,3}, Gregorio Varela-Moreiras^{4,5}, Lluís Serra-Majem^{6,2,3}, Carmen Pérez-Rodrigo⁷; Rosa Abellana⁸, Ignacio Ara⁹, Victoria Arija¹⁰, Susana Aznar¹¹, José Manuel Ávila⁵, Susana Belmonte¹², Raquel Blasco¹³, Jesús Caldeiro¹⁴, Lourdes Carrillo¹⁵, Dolores Corella^{16,3}, María Luisa López¹⁷, Marta Garaulet¹⁸, Pedro Pablo García-Luna¹⁹, Aquilino García-Perea²⁰, Ángel Gil²¹, Carmen Gómez-Candela²², Marcela González-Gross²³, Susana Granado de la Orden¹², Mercedes López-Pardo²⁴, Ascensión Marcos²⁵, Emilio Martínez de Victoria²¹, Luis Morán²⁶, José María Ordovás²⁷, Rosa M^a Ortega²⁸, Nieves Palacios⁹, Isabel Polanco Allué²², Josep M^a Ramón⁸, Lourdes Ribas², Pilar Riobó²⁹, Gemma Salvador Castell³⁰, Carmen Serrano¹², María Lourdes de Torres³¹, Rafael Urrialde³², and Salvador Zamora¹⁸

¹Departament of Preventive Medicine and Public Health, University of Navarra; ²Spanish Foundation for Nutritional Research, FIN, Barcelona; ³CiberOBN, Instituto de Salud Carlos III, Madrid; ⁴Department of Pharmaceutical and Health Sciences, Faculty of Pharmacy, CEU San Pablo University, Madrid; ⁵Spanish Nutrition Foundation (FEN), Madrid; ⁶Research Institute of Biomedical and Health Sciences, University of Las Palmas de Gran Canaria; ⁷Spanish Society of Community Nutrition (SENC), Spain; ⁸University of Barcelona; ⁹National Sport Council, Madrid; ¹⁰University Rovira i Virgili, Reus; ¹¹University of Castilla-La Mancha, Toledo; ¹²Council for Health; Community of Madrid; ¹³Regional Center for Sports Medicine at the Junta de Castilla y León, Valladolid; ¹⁴IPSOS Spain, Madrid; ¹⁵Spanish Society of Family and Community Medicine, semFYC, Santa Cruz de Tenerife; ¹⁶University of Valencia; ¹⁷Spanish Society of Primary Care Medicine, SEMERGEN, Madrid; ¹⁸University of Murcia; ¹⁹University Hospital Virgen de Rocío, Sevilla; ²⁰General Council of Official Pharmacists Association, CGCOF, Madrid; ²¹University of Granada; ²²La Paz University Hospital, Madrid; ²³Technical University of Madrid; ²⁴Spanish Nurses Association of Dietetic and Nutrition, ADENYD, Córdoba; ²⁵Spanish National Research Council, ICTAN-CSIC, Madrid; ²⁶Andalusian Society for Clinical Nutrition and Dietetics, SANCYD, Sevilla; ²⁷Tufts University, Boston; ²⁸Complutense University of Madrid; ²⁹Jiménez-Díaz Foundation idcsalud, Madrid; ³⁰Government of Catalonia, Barcelona; ³¹Miguel Servet Hospital, Zaragoza; ³²Coca-Cola Iberia Madrid.

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With regard to the Consensus Meeting held in Laguardia (Spain), 17-19 September 2014, we would like to emphasize the high scientific level of the different contributions and the great personal implication of the professional participants, which has provided an extensive update of the methodology and the different factors to be considered when setting up population nutritional studies in our country. We hereby consider a synthesis of the most relevant aspects in the format of a *Consensus Document Laguardia 2015*:

1.—In population studies on nutrition, physical activity and lifestyles it is essential to know

which are the objectives of interest and the available resources, to be able to decide on which valid method or methods are best suited in every circumstance.

2.—There are numerous sources of information on food consumption in Europe and Spain. However, it is necessary to continue working at European level on the standardization of data collection in order to be able to conduct more precise comparative studies and evolution trends analysis, since the development and use of new food products affects these sources to be adapted and include information about characteristics thereof.

3.—Food waste is mostly not considered in the information sources available and data collection in institutions has been largely neglected.

Correspondence: Javier Aranceta
Community Nutrition
PO Box 5199. 48080 Bilbao (Spain).
E-mail: jaranceta@unav.es

4.–All methods of dietary intake assessment have advantages and disadvantages, which must be considered when deciding which is best suited according to aims, population and resources. A combination of more than one method is recommended for nutritional surveillance studies.

5.–New technologies should help improve the quality of the available procedures, their validity and accuracy.

6.–Infant, school aged population, the elderly, groups with special needs, sportspeople and those of low socioeconomic status, among others, require specific methodological approaches according to their characteristics.

7.–Careful protocol design, selection and training of those responsible for the fieldwork, pilot study and use of agreed Food Composition Tables using documented data, updated and representative of the food consumed in the study site, are key points in the process.

8.–Nutritional studies should include measured data on energy expenditure through physical activity, and thus primarily assess energy balance in the study group.

9.–The assessment of physical activity and quantifying of sedentary lifestyle should be performed using the combination of instruments and self-assessment questionnaires that are considered most suitable according to objectives, population and resources. It should be considered that quantifying energy expenditure through physical activity questionnaires can raise certain inaccuracy and an overestimation of results.

10.–Different categorizations of physical activity level should be assessed depending on aspects such as gender, age, socioeconomic status and educational level, among others. Furthermore, the pattern of behaviour should be analysed, including factors such as type, duration, frequency and intensity of physical activity performed.

11.–In all studies including food consumption assessment there are people that under-report or over-report on their food intake. This problem is even more important in certain population groups,

and it should be considered when designing the project and processing the data to relieve its impact on the results.

12.–Food and beverage consumption assessment should consider social aspects related to intake, including “when”, “where”, “what”, “how” and “with who”.

13.–It would be desirable to have validated scales of food insecurity assessment that allow detection of the difficulties that families and individuals can experience or be experiencing to access a varied, sufficient and adequate diet. This section is especially important in disadvantaged environments and in periods of crisis.

14.–The assessment and quantification of physical activity is related to more individual aspects, which makes evaluation more specific than in the case of food consumption surveys.

15.–For the assessment of nutritional status of individuals or populations specific tools are required for use in clinical, healthcare and institutional settings or population level.

16.–Screening instruments may be useful to identify individuals or groups at nutritional risk or malnutrition in Primary Health Care and other care settings. The development of self-assessment tools is also interesting.

17.–Assessing the quality of the diet, nutritional status and different related biomarkers require selecting reference values and standard evaluation criteria.

18.–The measurement of anthropometric data allows the estimation of body composition of an individual, but the complexity of these indicators makes it essential to consider the body mass index, waist circumference and percentage body fat values as a whole and not as single components, allowing for the necessary adjustments according to age group or physiological state. When used in combination the accuracy of weight status classification will be much higher.

19.–Studies that comprehend anthropometric data, food intake, level of physical activity and

other related variables facilitates that these multidisciplinary factors can be addressed globally, and experts from different areas of knowledge of health sciences are involved in determining processes, quantification and assessment of the data.

20.—It is necessary to promote periodically this type of scientific meetings with experts on monographic topics of interest in the field of nutrition,

physical activity and health. The selection of participants should allow a rigorous and multidisciplinary approach, taking care of a physical and human atmosphere that fosters communication, content exchange and discussion. The future challenge is to evaluate the impact of this consensus meeting on improving the quality and comparability of nutrition information in Spain and associated lifestyles.