EDITORIAL

Moving Forward In Research

The Ministry of Science, Technology and Innovations (MOSTI) has "opened its door" to the first batch of research applications under the Ninth Malaysia Plan (1996-2010). As MOSTI is the country's major funding agency with billions of ringgit to be dispensed for research and development in science and technology over the next 5 years, the on-going surge of applications is not surprising, especially since funding has been put on hold for the past 10 months or so while the Ninth Malaysia Plan was being completed. The E Science Fund of MOSTI, which replaces its predecessor, the Intensification of Research Priority Areas (IRPA), accords high priority to selected fields including biotechnology, advance material, renewable energy, information and communication technology and nanotechnology. MOSTI also encourages projects with commercial potential. Thus, disciplines including nutrition that do not fit into those preferred areas have to compete intensely for the E Science Fund.

Nutrition researchers in effect need to be creative and build on innovative partner-ships with other disciplines in order to turn this challenge into research opportunities. Projects that included intervention components to ameliorate problems were more successful in the past than those that were aimed at only assessing problems. Whilst interventions are undoubtedly essential, assessing problems also merits financial support. There are fundamental nutrition issues in the country for which we lack up-to-date data. What is the current status regarding deficiency of nutrients such as vitamin D, vitamin A, vitamin B12, folate, zinc and selenium? What are the consumption levels of nutrients such as sodium, potassium, calcium, dietary fiber, folate, fluoride and fats (including trans fats, omega-3 and omega-6 fatty acids)? What are the nutrients and non-nutrients derived from supplements? Knowledge on the dietary and blood status of key nutrients has important implications for health promotion and management of diseases that are prevalent in the population. It is hoped that under the Ninth Malaysia Plan, the funding agency will confer greater support than in the past for nutrition research that are aimed at assessing nutritional status of significant macro- and micro-nutrients among Malaysians.

Nutritionists also have opportunities to seek financial support for research with industry (e.g. food, equipment, pharmaceuticals, health care), non-governmental organizations and other agencies, besides from government agencies. However, it should be realized that collaborations with agencies such as the industry can engender both potential and real conflicts that may affect a researcher's opinion or might not allow for impartial objective decisions. It is crucial therefore that as researchers, we are alert to situations that may impair our objectivity in making decisions as scientists or academicians. In this context, the definition of conflict of interest in research settings is quoted from the Association of American Medical Colleges (AAMC)¹

Assoc Amer Med Coll. Guidelines for dealing with faculty conflicts of commitment and conflicts of interest in research. Feb 1990. http://www.aamc.org/research. Accessed June 2006.

"The term individual financial conflict of interest in science refers to situations in which financial considerations may compromise, or have the appearance of compromising, an investigator's professional judgment in conducting or reporting research. The bias such conflicts may conceivably impart not only affects collection, analysis, and interpretation of data, but also the hiring of staff, procurement of materials, sharing of results, choice of protocol, involvement of human participants, and the use of statistical methods".

Conflict of interest not only involves personal economic gain but also other forms of rewarding arrangement for the researcher or member of his/her family. Those interested to know of examples of potential conflict of interest can refer to reputable professional societies that have established useful guidelines. Besides AAMC, NASPAGHAN² also has an enlightening policy on conflict of interest and relationships with industry and other organizations. The Code of Ethics of the American Dietetics Association (ADA)³ is also of relevance in the present discourse. In making decisions with potential conflict of interest, researchers should always be mindful of their roles in "furthering scientific knowledge, presenting substantial information without personal bias, recognizing and exercising professional judgment, making referrals as appropriate, providing information to enable clients to make their own informed decisions, and providing services with objectivity".⁴

It is essential for researchers to openly disclose any real or potential conflicts of interest in order to avoid any misunderstanding. In submitting articles for publications, researchers should also inform of "any financial arrangements, organizational affiliations, or other relationships that may constitute a conflict of interest regarding the subject matter of the manuscript. This policy is in compliance with the uniform requirements for manuscripts of the International Committee of Medical Journal Editors"

A final note for all in moving forward with research is to remember always that integrity and intellectual honesty are of supreme importance. Misconduct in research takes many forms. Fabrication of data is committing misconduct in research. Intentionally reporting misleading or selective information is falsification of data, another type of misconduct. Failure to acknowledge the work of others including plagiarism constitutes misconduct too. Serious misconduct in scientific investigations may be tantamount to a crime that brings shame not only to the researcher himself/herself but also to his/her institution and country.

Khor Geok Lin Universiti Putra Malaysia

North American Society for Pediatric Gastroenterology, Hepatology and Nutrition.

Code of Ethics for the Profession of Dietetics. J Am Diet Assoc 1999; 99:109-113.
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Uniform Requirements for Manuscripts Submitted to Biomedical journals http://www.icmje.org/index.html. Accessed in June, 2006.