

## Prevalence of and contributing factors to dyslipidaemia in low-income women aged 18-90 years in the peri-urban Vaal region

**To the Editor:** This letter is in reference to the article, *Prevalence of and contributing factors to dyslipidaemia in low-income women aged 18-90 years in the peri-urban Vaal region* by Wilna Oldewage-Theron and Abdulkadir Egal [S Afr J Clin Nutr. 2013;26(1):23-28]. In this study, dyslipidaemia was characterised as having one or more abnormal serum lipid [total cholesterol (TC), triglycerides (TGs), low-density lipoprotein (LDL), or high-density lipoprotein (HDL)] concentrations. This included serum TGs of  $\geq 2.26$  mmol/l and serum TC of  $\geq 6.2$  mmol/l. These values seem to have been obtained from the cut-off points defined by the National Cholesterol Education Program (NCEP) Adult Treatment Panel (ATP) II report that was released in 1993.<sup>1</sup> However, abnormal TG and TC concentrations are defined as  $\geq 1.7$  mmol/l and 5.2 mmol/l, respectively, by the American Association of Clinical Endocrinologists,<sup>2</sup> NCEP ATP III<sup>3</sup> guidelines and the Mayo Clinic.<sup>4</sup> The ATP III guidelines were released by the NCEP in 2002. The TCs, LDL and HDL concentrations used in the article were applied as described in the ATP III guidelines.<sup>3</sup>

The South African Dyslipidaemia Guideline Consensus Statement 2012, a joint statement from the South African Heart Association and the Lipid and Atherosclerosis Society of Southern Africa, is based on the updated 2011 dyslipidaemia guidelines of the European Society of Cardiology (ESC) and the European Atherosclerosis Society (EAS).<sup>5</sup> The EAS/ESC guidelines also recommend a TG cut-off of 1.7 mmol/l,<sup>6</sup> but the cut-off for TC is established based on different risk factors, as determined by the Framingham risk score. The 2003 ESC guidelines recommend a TC and LDL cut-off of 5 mmol/l and 3 mmol/l, respectively, for individuals in the low-risk group; and TC and LDL of 4.5 mmol/l and 2.5 mmol/l, respectively, for high-risk patients.<sup>7,8</sup>

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## Letter shows interest in article content

**To the Editor:** Thank you very much for sending us the letter regarding our article. This shows an interest in the article content. We agree with the writer of the letter that we used the National Cholesterol Education Program Adult Treatment Panel III guidelines of 2002, published in 2003. We have also noted the South African Dyslipidaemia Guideline Consensus Statement 2012 that we will use for future studies.

The data collection for this article was carried out prior to the publication of the South African guideline, and we did not apply the Framingham Risk Score questionnaire to determine whether or not the group was low or high risk. This will be performed in future so that the South African cut-off points can be used as stipulated for the low- or high-risk group.

**Wilna Oldewage-Theron**, PhD, RD(SA), Director  
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## The necessity of a balanced diet to prevent the emergence of lifestyle disorders

Recent decades have revealed a massive increase in the incidence of lifestyle disorders. Worldwide, of the reported 57-million deaths in 2008, 36 million (63%) were due to noncommunicable diseases (NCDs).<sup>1</sup> Ensuring the amalgamation of a healthy diet with an active lifestyle can have a major impact on health by reducing the risk of NCDs, such as heart disease, hypertension, strokes, diabetes mellitus, cancer and obesity.<sup>2</sup> Excessive consumption of energy-dense food that is rich in saturated fats, so-called junk food, and unhealthy dietary practices are major attributable factors to the observed rise in lifestyle disorders.<sup>2,3</sup>

A balanced diet is defined as one that contains a variety of food in such quantities and proportions that the need for energy, carbohydrates, proteins, vitamins, minerals, fats and other nutrients is adequately met to maintain health, vitality and general well-being.<sup>4</sup> In an interventional study to assess the effect of an in-patient treatment programme that comprised regular exercise and a balanced diet, it was documented that the consumption of a balanced diet could induce changes in body composition and improve insulin sensitivity in obese adolescents.<sup>5</sup> Nevertheless, following a study that examined the understanding of Japanese workers as to what "eating a balanced diet" comprised, it was concluded that interpretations of "eating a balanced diet" were varied. Thus, nutrition professionals should rephrase their advice so that it can be more clearly reflected in daily life practices.<sup>6</sup>

It would appear that formulating and effectively executing the definition of "eating a balanced diet" is a unique challenge for nutrition practitioners. The complexity of advocating a balanced diet to different groups of people (patients with diabetes and renal disease, adolescents, vegetarians, and antenatal and lactating mothers) in order to bring about a substantial decline in suffering and deaths owing to lifestyle disorders may be insufficiently appreciated.<sup>2,7</sup> Affording greater specificity to the this strategy

should facilitate and safeguard health by creating an enabling environment that will ensure sustainable actions at individual, family, community, national and international level, which if implemented simultaneously should reduce the burden of disease and death rates attributable to unhealthy dietary practices.<sup>7</sup>

To delay the onset of lifestyle disorders, the following measures should be implemented:

- Sustained political commitment.
- Multisectoral involvement.
- The active participation of different stakeholders, including nongovernmental organisations.
- Conducting awareness campaigns which target the general population in order to increase understanding of the influence of diet on health.
- Community involvement.
- Training sessions for outreach workers and paramedical workers.
- Customised dietary plans, based on the complex interaction of personal choices, social norms, economic constraints and environmental factors.<sup>4,7</sup>

Further broad-scale, community-based studies should be planned to obtain scientific evidence and a better understanding of what different groups of people understand by the term “a balanced diet” in order to improve longevity and the outcome of lifestyle disorders.<sup>3,7</sup>

To conclude, no single food can take care of all the essential nutrients that the body requires to stay healthy. Thus, consuming a diet that

is diverse within the context of individual affordability is of extreme significance for the maintenance of health and a reduction in the incidence of lifestyle disorders.

#### Conflict of interest

There is no conflict of interest to be declared.

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## NSSA newsbits

Prof Carin Napier was re-elected as chairperson of the Eastern branch of Nutrition Society of South Africa (NSSA) for 2013-2014. Lenore Spies is the treasurer; Christine Broadhurst, the secretary; and Thobe Dlamuka, Heleen Grobbelaar, Christelle Crickmore and Justine Casey, the other committee members.

The Academy of Science of South Africa (ASSAf) launched a published report, *A consensus study on improved nutritional assessment of micronutrients, July 2013* on Wednesday, 14 August 2013 in Johannesburg. The launch formed part of the InterAcademy Medical Panel (IAMP) conference gala dinner. Six key micronutrients (vitamin A, vitamin D, folate, selenium, iron and zinc), which have been shown to contribute to the malnutrition micronutrient malnutrition” in South Africa, were selected for an in-depth study. The national study panel members were Profs John Pettifor (chair), Este Vorster, Ali Dhansay,

Wieland Gevers, Salome Kruger, Xikombiso Mbhenyane, Barry Mendelow and Dr Namukolo Covic. The international panel members were Profs Tola Atinmo, Jack Metz and Michael Zimmermann. The report is freely available on the ASSAf website at <http://www.assaf.co.za/>

Prof Demetre Labadarios of the Human Sciences Research Council also presented the results from the South African National Health And Nutrition Examination Survey 2012 (SANHANES-1) that pertain to noncommunicable diseases at the IAMP Scientific Conference and General Assembly. The high prevalence of obesity in women, the consumption of food that is high in fat and sugar in a significant segment of the population, regular snacking while drinking alcohol and low levels of fitness in adults were of concern.

The next Association for Dietetics in South Africa (ADSA)/NSSA Nutrition Congress will be held from 17-19 September 2014 at the Birchwood Conference Centre, Johannesburg. NSSA members are invited to highlight topics that they wish to be included in the scientific programme by e-mailing Kim Upton at [admin@easternsun.co.za](mailto:admin@easternsun.co.za) by 30 August. Access to the official congress website will be via [www.nutritioncongress.co.za](http://www.nutritioncongress.co.za)