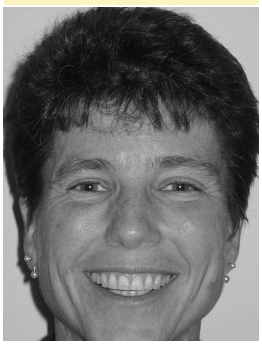
WEIGHT CONTROL



ESTELLE LAMBERT

BSc (Phys Ed), MS (Exercise Physiology), PhD (Physiology)

Professor

Department of Human Biology

Faculty of Health Sciences

University of Cape Town

Estelle Lambert is a member of the UCT/MRC Research Unit for Exercise Science and Sports Medicine. Her areas of research include obesity and metabolism, physical activity and health, early origins of adult disease and the aetiology of fatigue during exercise. She is author or co-author of more than 65 peer-reviewed scientific publications and currently acts as an expert consultant to the World Health Organization on issues related to physical activity guidelines in developing countries.

JULIA H GOEDECKE

BSc (Physiology), BSc (Med) Hons Nutrition and Dietetics, PhD (Exercise Science)

Senior Lecturer

Department of Human Biology

University of Cape Town

Julia Goedecke is a registered dietician who is currently an MRC Career Development Awardee. Her research focuses on understanding the mechanisms underlying the association between obesity and the manifestation of the metabolic syndrome, specifically examining the role of the adipose tissue compartments.

Data from the 1998 South African National Demographic and Health Survey suggest that more than 56% of women and 29% of men are either overweight or obese. There is a host of evidence placing these individuals at increased risk for chronic, non-communicable diseases of lifestyle. However, it is the distribution of the body fat, rather than its quantity, that profoundly influences risk, with accumulation of fat in the abdominal area associated with increased risk of insulin resistance, diabetes, hypertension, dyslipidaemias and atherosclerosis; the cornerstones of the metabolic syndrome. Expert consensus from the World Health Organization concluded that sustained weight loss in overweight and obese persons, even as little as 5 - 10% of body mass reduces the risk of developing these chronic diseases. Therefore, based on the prevalence of overweight and obesity, and the associated health consequences, these individuals are likely to present as patients, with and without chronic illnesses. They will be from all socioeconomic backgrounds, from urban and rural settings, and will be mainly women. For most, the medical practitioner is still the major or most trusted source of health care advice, and yet studies suggest that fewer than 30% of medical practitioners address the issues of overweight with their 'at-risk' patients. Even more distressing is the fact that long-term success rates in persons attempting weight loss are low, with between 70% and 95% reporting relapse.

Weight loss is a complex issue, in which antecedent factors such as genetics and early nutrition weigh heavily; ethnic groupings may impart different influences of genotype and phenotype, and differences in the sociocultural norms may impact on the condition. It is also clear that if the determinants of overweight and associated sequelae are also complex, the range of responses to treatment and the effectiveness of various interventions may be equally so. As clinicians, treatment and prevention are limited by the fact that success is entirely dependent on the patient adhering to a prescribed course of action.

The manuscripts that comprise this volume of *CME* highlight the complexity underlying the various aetiologies of obesity, and the implications of this complexity for weight loss interventions. The general principles regarding weight loss intervention remain. The key factor for successful weight control is an energy deficit, whereas actual food choices may be more important in altering the clinical outcome. There is no one specific diet composition formula that is optimal for all overweight or obese persons. Responses vary widely and are dependent on a combination of genetic, environmental, psychosocial and clinical factors. This may also be true of response to pharmacotherapy, both initially and long-term. Although the prevailing evidence around energy expenditure suggests that individuals may be both 'fit' and 'fat', these factors are interdependent, and for overall, long-term risk reduction, activity levels and body composition are important.

Finally, the clinician needs to be cognisant of ethnic differences in perceptions regarding body image and size, and must consider other sociocultural factors, as well as issues surrounding food security, that may impact on the effectiveness of weight loss interventions.

Clearly, effective and long-term solutions to weight loss remain a challenge. This volume of the journal attempts to shed some light on this complex problem.