ECO 2011 Report Sponsored by WeightWatchers

The 18th European Congress of Obesity was held in the beautiful city of Istanbul, Turkey. In keeping with the fact that Istanbul is the only city in the world to bridge two continents, ECO 2011 represented the ideal meeting place for scientists, policy makers and industry to discuss current research in obesity. The conference included an array of excellent plenary lectures, review sessions and open communications, as well as a number of poster sessions. There was also a highly enjoyable conference dinner, which incorporated a cruise along the Bosphorus River. While there were a large number of stimulating talks at the congress, there were a number that were of particular personal interest and may also be of interest to fellow ASO members.

During the invited review sessions, Dr Ruth Loos from the MRC Epidemiology Unit, Cambridge, provided an interesting and accessible overview of the progress made in the discovery of gene loci associated with obesity related traits, and how these have the potential to increase our understanding of the underlying physiology involved. Importantly, Dr Loos reported recent findings that suggest that the genetic predisposition to obesity can be reduced by around 40% with regular physical activity, based on data from over 20,000 men and women who had taken part in the EPIC-Norfolk study. This again demonstrates the importance of physical activity in tackling obesity. Dr Benjamin Field, Imperial College London, addressed the complex question of how gut hormones (PYY, GLP-1 & CCK) can influence eating behavior and energy expenditure. Dr Field highlighted that while such hormones may one day be viable pharmaceutical targets for the treatment of obesity, a greater understanding of how these gut hormones act is needed before their full potential is realized.

Another highlight was the Energy Balance and Regulation track, in which Dr Rachel Wood from the Queensland University of Technology, Australia, presented data from a 16 week dietary intervention that compared the effects of continuous energy restriction and intermittent energy restriction (alternating between 2 weeks of energy restriction and 2 weeks of maintenance). It was shown that weight loss was greater with the intermittent (-14%) than with continuous energy restriction (-8%). Despite this, the decrease in resting metabolic rate was lower in the intermittent group, suggesting that the additional weight loss seen with the intermittent restriction may have in part been caused by an attenuation of the adaptive thermogenesis associated with continuous restriction.

Dr Graham Finlayson, University of Leeds, gave an interesting talk on the hedonic liking and wanting for food during a 3 month exercise intervention, detailing how these processes can modulate the homeostatic control of meal size. The talk focused on the biological and behavioural processes that underpin the overconsumption of food and weight gain. Dr Finlayson showed that hedonic liking and wanting for food plays an important role in regulating food intake during periods of increased exercise-induced energy expenditure, underlining the importance of measuring both hedonic and homeostatic processes when attempting to understand appetite and weight regulation.

These talks, and many others, made ECO 2011 a very enjoyable and informative conference to attend, and I would like to take this opportunity to The Association for the Study of Obesity and WeightWatchers for the generous provision of a travel bursary.

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