

Goal-orientated physical activity and diabetes care

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Everyday movements, from walking to the car to sitting watching television, influence how we burn fat and store glucose. In the majority of people with type 2 diabetes too little movement causes fat to accumulate in the muscles, preventing glucose uptake and causing blood glucose levels to rise. The physiology is simple, but helping people to become more physically active is not.

Extrapolating from the UK National Fitness Survey (Activity and Health Research, 1992), four out of five adults take inadequate exercise to maximise their health. Just as too few individuals regularly participate in any physical activity, only 31% of UK GPs “always” and 36% “occasionally” encourage physical activity for their patients (Calnan and Williams, 1993).

Barriers

Everybody has their own barriers to becoming physically active – from fear of lycra-clad gym goers to a lack of time. Underlying this is a need for a reward or driver to overcome the barriers. If the benefits of becoming more physically active are not held immediately, then why bother? Indeed, it is known that increasing physical activity alone does not help weight loss (Gilliat-Wimberly et al, 2001), so the immediate reward has to be carefully guided. Irrespective of this, physical activity does help blood glucose

control, prevent heart disease and improve brain function (US Department of Health, 1996). However, this leaves a situation where the benefits of physical activity are difficult for clinical care teams to articulate, and for people with type 2 diabetes to motivate themselves for.

Increasing activity

There are ways to help people to become physically active and receive a shorter-term reward. Goal-orientated physical activity refers to targeting an event or goal some time in the future which requires physical training to complete. The goal for the person with diabetes is the event, rather than prevention of heart disease. The event does not need to be a marathon – it can be a walk, swim, dance or bike ride, for example. There are hundreds of professionally organised physical activity and exercise events organised around the UK every year.

Engaging in these is one way to help people target becoming more active and receive reward for taking part. Of course, the secondary benefits of training and taking part in the event are that blood glucose control will be improved and that their body shape may change. Maybe what we do intuitively for weight loss, targeting a wedding or event for getting into that dress or pair of jeans, could be the same for physical activity? ■

Activity and Health Research (1992) *Allied Dunbar National Fitness Survey: Main Findings*. Sports Council and Health Education Authority, London

Calnan M, Williams S (1993) Coronary heart disease prevention: the role of the general practitioner. *Fam Pract* **10**: 137–51

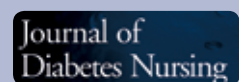
Gilliat-Wimberly M, Manore MM, Woolf K et al (2001) Effects of habitual physical activity on the resting metabolic rates and body compositions of women aged 35 to 50 years. *J Am Diet Assoc* **101**: 1181–8

US Department of Health (1996) *The Surgeon General's Report on Physical Activity and Health*. US Government Printing, Washington DC, US

The IMPROVE™ Control Campaign

The Global Task Force on Glycaemic Control is a group of physicians and specialists in the field of diabetes from around the world that is working in collaboration with Novo Nordisk with the ultimate aim of identifying and developing practical solutions to the global problem of poor glycaemic control in people with diabetes. Since early 2008, the *Journal of Diabetes Nursing* has featured articles and submissions under the banner of IMPROVE™ Control – a global public awareness campaign focused on the need for improved control, as part of the Task Force's work. Throughout 2009, the journal will continue to bring you articles on the barriers to good glycaemic control, and submissions from *you*, our readers, outlining the strategies you have used to help people with diabetes improve their control.

For example, perhaps you have implemented a new educational session in your area that has helped break down barriers to control, or maybe you have set up a new referral pathway that has helped improve HbA_{1c} levels. The *Journal of Diabetes Nursing* would like to help you share your practical solutions for improving control, no matter how big or small, with other nurses working in diabetes. We encourage you to take part in this global initiative by calling 020 7627 1510, or emailing james@sbcommunicationsgroup.com.



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