

Improving management of type 1 diabetes in the UK: the Dose Adjustment For Normal Eating (DAFNE) programme as a research test-bed. A mixed-method analysis of the barriers to and facilitators of successful diabetes self-management, a health economic analysis, a cluster randomised controlled trial of different models of delivery of an educational intervention and the potential of insulin pumps and additional educator input to improve outcomes

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Plain English summary

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Plain English summary

Many adults with type 1 diabetes cannot manage their diabetes effectively because they lack the skills to keep their glucose at near-normal levels. The result is an increased risk of premature death and complications because of long-term high glucose levels. This prompted our group to conduct the Dose Adjustment For Normal Eating (DAFNE) trial in 2002, which showed that structured training could help adults to self-manage their glucose more successfully. Over 20,000 people have been trained and the Department of Health have stated that all individuals with diabetes in the UK should be offered structured education.

However, courses do not always work well to help people improve their blood glucose levels. We therefore investigated why some patients benefit more than others and identified barriers that would help us to develop more effective programmes.

We found that courses often fail to help participants make these skills part of their everyday lives and skills were not maintained; DAFNE graduates often needed professional support in a more structured way. We developed a course to be delivered over 1 day per week for 5 weeks and will now offer both approaches to allow more people to be trained. We developed courses to train people to use insulin pumps and to help people whose blood glucose goes too low. We also found that people with diabetes made important contributions to the research but might be more effective if involved earlier.

We now intend to develop the DAFNE programme to help people incorporate skills into their everyday lives more effectively. We will develop more effective professional support and use modern technology to help achieve this.

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