

# Diabetes information in symbols

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## Background

NICE recommend structured education for people living with diabetes (1). Much education involves the use of documents, which require literacy by the person with diabetes, in order for the education to be effective (2). However, the use of symbol based documents for education has been shown to be effective, particularly for those with learning difficulties or literacy or language difficulties (3). The population of people who live with diabetes includes all these groups.

There are already many symbol languages and systems (3, 4) which use different approaches to the creation and development of symbols. We developed symbols for concepts and words related to diabetes, in order that diabetes related literature might be translated into symbols and used for the benefit of people who live with diabetes but have difficulties in reading English.

It is anticipated that symbol-based versions of materials used in diabetes care and diabetes education will be of value to some people who live with diabetes, especially those who have difficulties in reading or learning. Such materials would enhance the ability of people to live with diabetes and self-manage their condition. At present there is very little such material available.

We anticipate that the symbols developed for these documents can also be successfully used in producing symbol-based versions of other documents relevant to diabetes, for example research questionnaire measures, signage, patient information leaflets or educational material used during consultations.

The processes used in identifying, developing, testing and refining the symbols used are reported here.

## Method

Members of The Warwick Diabetes Care Research User Group (5) worked with the professional symbol designer, Cate Detheridge of Widgit Software Ltd (6), to develop an initial set of candidate symbols for diabetes-related words and phrases. These were tested for guessability (can a person guess the meaning of a symbol alone) and learnability (can a person remember the correct answers in the guessability test) (eg 7). The tests were done at a meeting of the Coventry Diabetes UK Voluntary group and in the waiting room at a diabetes clinic. Over 50 people who live with diabetes were involved in the tests. The results from these tests were used to select symbols which were easily recognisable and easy to remember. The final versions of the symbols were shown again to the Warwick Diabetes Care Research User Group (by email) for their approval.

## **Discussion**

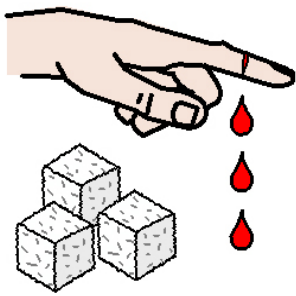
Having developed and tested the symbols, we used them to make symbol-based versions of well-established documents used in structured education in diabetes (8). The materials comprise laminated A4 sheets each covering specific diabetes issues related to the letters of the alphabet A to F. For example, for A the issue is advice, for B it is blood pressure, for F it is feet.

The symbols and the alphabet strategy education cards are available free of charge on the website of widgit.com.

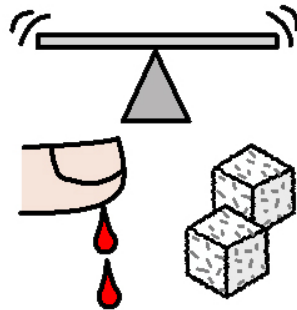
## References

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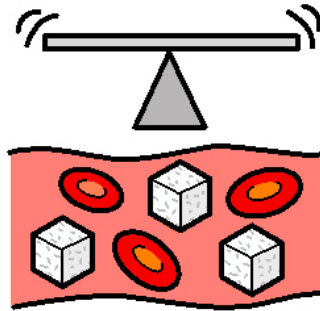
Sample symbols



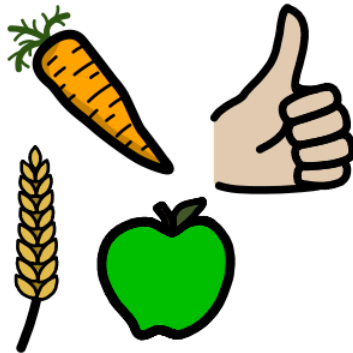
blood sugar



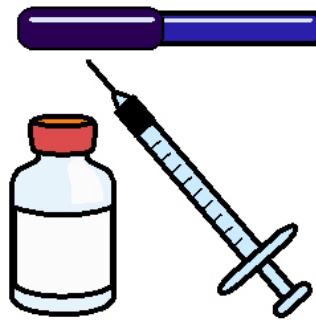
diabetes



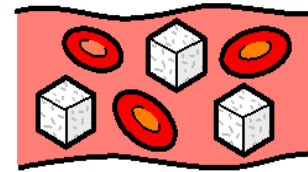
diabetes



healthy eating



insulin



blood sugar