

International Diabetes Federation
Consultative Section on Diabetes Education

Diabetes education modules

Educational resources
supporting the content of
the International Curriculum
for Diabetes Health
Professional Education



International Diabetes Federation



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The mission of the International Diabetes Federation is to promote diabetes care, prevention and a cure worldwide.

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An urgent need exists for health professionals around the world to have access to first-class professional education in diabetes and gain recognition for their training and commitment. In 2002, the IDF Consultative Section on Diabetes Education (DECS) developed the *International Curriculum for Diabetes Health Professional Education* as a first step towards implementing a model of diabetes care that is supported by skilled multidisciplinary teams. Initial evaluation of the *Curriculum* was positive. However, feedback from some IDF Regions reflected concerns that without content to support the *Curriculum*, the development and delivery of a diabetes health professional education programme would be difficult.

Foreword

In response, we developed this CD-ROM- and paper-based resource. It contains more than 800 slides with detailed speaker notes to accompany the module outlines and objectives contained in the *Curriculum*. With this resource we hope that diabetes healthcare professionals anywhere in the world can teach other health professionals about diabetes care using consistent, evidence-based research and information.

DECS has also developed and promoted the opportunity for IDF Member Associations and local healthcare professionals to host the IDF Multidisciplinary Diabetes Care Education Programme. Based on the IDF *Curriculum*, the Programme uses the resources described in this prospectus.

As Chair of DECS and a Vice-President of IDF, it is my sincere hope that these educational resources will enable increased numbers of healthcare providers to establish programmes to enhance the knowledge and skills of their colleagues. Only then, backed by sufficiently large numbers of diabetes-aware, skilled health professionals, will we be able to face the demands of the global diabetes epidemic.

I would like to extend my most sincere thanks to Anne Belton for coordinating this project, as well as the small but very dedicated multidisciplinary team who spent many hours writing and revising each module. I also wish to thank Catherine Regniers and the IDF staff for their expert editorial and professional support.

Marg McGill

IDF Vice-President

Chair, IDF Consultative Section on Diabetes Education

As the number of people with diabetes increases, so does the need for diabetes-aware skilled healthcare providers. But in most countries, there is an increasing shortage of healthcare personnel – a global deficit of nearly 2.5 million doctors and nurses, according to WHO. Indeed, the gap between the available health resources and our healthcare requirements is set to widen: as ongoing large-scale rural-urban migration and industrialization continue to drive the current epidemic of obesity and overweight, diabetes has become one of the major obstacles to good health and well-being worldwide.

Foreword

Without action to respond to this urgent need, already vulnerable and underserved people will suffer the devastating impact of the growing shortcomings in healthcare worldwide. Over the past decade, the IDF Consultative Section on Diabetes Education has developed and consolidated its response, publishing the *International Standards for Diabetes Education*, the *International Curriculum for Diabetes Health Professional Education* and this comprehensive package of resources.

These modules, which complement the content of the *Curriculum*, are the result of joint efforts by highly committed members of the diabetes community worldwide – a truly global achievement. Using the material, the development and delivery of comprehensive professional diabetes education programmes will be greatly enhanced. The work of the members of the IDF Consultative Section on Diabetes Education in developing these tools is to be commended and the use of the *Curriculum* modules encouraged throughout the world.

Pierre Lefèbvre
IDF President, 2003-2006

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Pilot programmes:

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The modules were designed to reflect and support the six sections of the *International Curriculum for Diabetes Health Professional Education*. The supporting material presented in this package is divided into five sections.

Overview of the modules

- **Section 1** consists of four modules that provide an overview of the pathophysiology and classification of diabetes, the role of the healthcare professional, psychological issues and behavioural change, and teaching and learning.
 - **Section 2** consists of six modules. Four of these address nutritional issues: aims and principles; nutritional assessment; nutritional education; the nutritional needs of people with diabetes. Another module is devoted to physical activity and another to self-management.
 - **Section 3** consists of three modules covering blood glucose-lowering medicines, insulin therapy, and an overview of complementary therapies.
 - **Section 4** consists of two modules devoted to hypoglycaemia, managing sick days, and diabetic ketoacidosis and hyperosmolar hyperglycaemic state.
 - **Section 5** contains four modules focusing on diabetic retinopathy; macrovascular disease; diabetic nephropathy; and diabetic neuropathy, which includes foot assessment, wound healing and foot education.
 - **A final section** provides information on group work and case studies to assist course providers in the consistent and appropriate delivery of the information.
- Each module contains activity slides and a series of questions and answers that can be used during the presentation as part of an evaluation or as the basis for assessment to award a certificate of attendance. These activities should be planned in conjunction with Module 1-7 of the *Curriculum* that addresses evaluation.
- Course facilitators will need to undertake some preliminary work to ensure that they are familiar with the content and, where relevant, adapt it to meet local needs.

The IDF Consultative Section on Diabetes Education has made every attempt to ensure that the content of the modules reflects evidence-based practice.

Tips and recommendations

It is preferred that the modules are taught by a range of health professionals including each of the members of the diabetes team.

The sessions should be interactive between the educators and with the participants. Nurses and dietitians, for example, can share the teaching of nutrition issues, and nurses or dietitians can teach the more clinical modules on pathophysiology and long-term complications that are traditionally taught by physicians. In this way, the educators will reflect in practice the concept of the integrated diabetes team, whose members are equal and active and respected by other team members, have excellent clinical knowledge, and promote and support self-management.

For maximum benefit, the slides should be discussed openly and provide practical examples which reflect local and cultural diversity.

There are several ways in which this programme could be used:

- to prepare a course or workshop for healthcare professionals who

wish to enhance their diabetes knowledge

- for self-study
- in the undergraduate training of healthcare professionals.

Given that the sections are based on modules in the *International Curriculum for Diabetes Health Professional Education*, the objectives for each section are not repeated in this programme; you are asked to refer to the *Curriculum* for specific objectives. The appropriate module(s) is indicated on the first slide of each presentation.

Slides have been prepared with speaker notes and instructions to the educator in the 'Notes page' view.

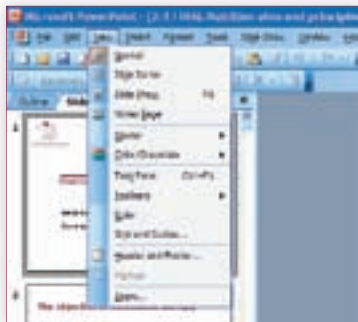
The slides may be presented either as transparencies (overheads, acetates) using an overhead projector; or from the computer using a data projector. If no projection device is available, the material can be printed and posted on a wall.

Slides can be printed as handouts (three to a page) for the student, which allows room to take notes.

Viewing

The modules can be viewed in several formats in PowerPoint.

Click on 'View' for several options:



- **Normal** shows the slide, the notes under the slide, and an outline of the slides to the left side of the screen. To view the notes, it might be necessary to click on the frame at the lower edge of the slide and drag upwards.
- **Slide Sorter** shows all the slides in the module on one frame. The slides can be made larger or smaller by changing the % on the 'Standard Toolbar'. In this view, the notes under the slides are not visible.
- **Notes Page** shows each slide and the notes below as one page.
- **Slide Show** makes each slide fill the screen. To return to the

'Normal' view, the mouse should be moved over the lower left hand corner of the screen, where an arrow will be displayed. Click on the arrow and then click on 'End show'. The 'Escape' button on the keyboard serves the same purpose. This is the format to use when projecting the slides.

Printing

There are several options for printing the slides.

Click on 'File', then 'Print'.



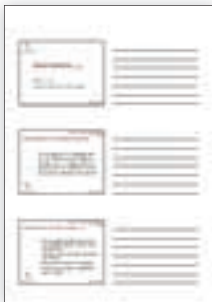
The 'All slides' option should be selected – or specific slides in the 'Print range' section. The program also offers the option of viewing the slides in colour, greyscale or black and white.

Printing options:

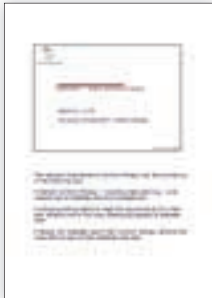
- **Slides only:** under 'Print what...' scroll down to 'Slides'.



- **Handouts:** three or six slides to the left of the page: under 'Print what...' select 'Handouts'. Select '3 or 6 per page'. The handouts will not appear with notes under the slides.



- **Notes page:** prints one slide with notes on each page.



- **Outline view:** prints the text from each slide, with several slides per page. The notes will not be included.



Another way to print the slides with the notes is to export the module to Microsoft Word. To do this, click 'File', then 'Send to', then 'Microsoft Word'. A screen will appear giving format options. Once the format is chosen, click on 'OK'. In a few minutes, all the slides and notes will appear in a Word document. Printing the slides and notes in this format saves paper.

Multiple-choice questions

Five multiple choice questions are included at the end of most of the modules. These questions can be used as a review at the end of a session or as part of a formal examination at the end of a course. When using these as an examination, the questions should be moved to a separate folder before handouts are made.

Success in answering these questions does not infer certification or any sort of qualification granted by IDF.

Sample programme

Most programmes are conducted over a one- to two-year period. After the first three- or five-day course, participants complete a project of their choosing in their own communities. The projects might involve, for example, teaching other healthcare professionals, setting up a specialized clinic, introducing a new strategy/procedure into their current work or developing an awareness programme for the community.

After one year, the students return. The projects are displayed as posters and a 3-day advanced programme conducted. At the end of this programme, the students are awarded an IDF Certificate of Recognition.

A five-day basic course

Day one

Time	Topic
08:30 - 09:00	Introduction Getting to know you Outline of the course
09:00 - 10:30	Teaching and learning principles
	Break
10:45 - 12:00	Diagnosis, types of diabetes Cost of diabetes
12:00 - 13:00	Self-management Target blood glucose Monitoring Other assessment procedures
	Lunch
14:00 - 15:00	Hands-on with meters, syringes and pens ▪ insulin injection techniques ▪ glucose testing techniques
15:00 - 16:30	Work in small groups ▪ practice teaching

Day two

Time	Topic
08:45 - 09:00	Welcome and housekeeping
09:00 - 10:00	Hypoglycaemia
10:00 - 11:00	DKA/HHS and sick days
	Break
11:30 - 13:00	Work in small groups ■ hypoglycaemia ■ sick days
	Lunch
14:00 - 15:30	Nutrition therapy
15:45 - 17:00	Work in small groups ■ managing type 2 diabetes with nutrition and physical activity

Day three

08:45 - 09:00	Welcome and housekeeping
09:00 - 09:45	Exercise
09:45 - 11:00	Glucose-lowering medicines
	Break
11:15 - 13:00	Work in small groups ■ managing type 2 diabetes with medication, nutrition and physical activity
	Lunch
14:00 - 15:30	Insulin
	Break
15:45 - 17:00	Work in small groups ■ starting with bedtime insulin and oral medication ■ case studies with insulin, start dose and adjusting for control

Day four

08:45 - 09:00	Welcome and housekeeping
09:00 - 11:00	Neuropathy and foot disease
	Break
11:15 - 13:00	Hands on foot care – conducting a foot assessment
	Lunch
14:00 - 15:30	Long-term complications ■ retinopathy ■ nephropathy ■ prevention strategies and screening
16:00 - 17:00	More about nutrition ■ carbohydrate counting ■ weight loss

Day five

Time	Topic
08:45 - 09:00	Welcome and housekeeping
09:00 - 10:30	Cardiovascular disease
	Break
10:45 - 12:00	Work in small groups ■ complications management
12:00 - 13:00	The role of the healthcare professional in diabetes education and management
	Lunch
14:00 - 15:00	Evaluation and wrap up, closing ceremony

A three-day basic course

Day one

08:00 - 08:30	Introduction Outline of the course
08:30 - 09:30	Diagnosis, types of diabetes Cost of diabetes
09:30 - 10:45	Self-management Target blood glucose Monitoring Other assessment procedures
	Break
11:00 - 12:30	Teaching and learning principles Evaluation
12:30 - 13:00	Hands-on with syringes, pens and meters ■ insulin injection techniques ■ glucose testing techniques
	Lunch
14:00 - 15:00	Work in small groups ■ practice teaching
15:00 - 15:45	Hypoglycaemia
	Break
16:00 - 17:00	DKA/HHS and sick days
17:00 - 18:00	Work in small groups ■ hypoglycaemia ■ sick days

Day two

Time	Topic
08:00 - 08:15	Welcome and housekeeping
08:15 - 09:45	Nutrition therapy
09:45 - 10:30	Work in small groups ■ managing type 2 diabetes with nutrition and physical activity
	Break
10:45 - 11:15	Work in small groups continues
11:15 - 12:00	Exercise
12:00 - 13:00	Glucose-lowering medicines
	Lunch
14:00 - 15:00	Work in small groups ■ managing type 2 diabetes with medication, nutrition and physical activity
15:00 - 15:45	Insulin ■ types ■ combinations ■ care ■ adjustment
	Break
16:00 - 16:30	Insulin (continued)
16:30 - 17:30	Work in small groups ■ starting with bedtime insulin and oral medication ■ case studies with insulin, start dose and adjusting for control

Day three

08:00 - 08:15	Welcome and housekeeping
08:15 - 10:15	Neuropathy and foot disease
10:15 - 11:15	Hands on foot care – foot assessment
	Break
11:30 - 13:00	Long-term complications ■ retinopathy ■ nephropathy ■ prevention strategies and screening
	Lunch
14:00 - 15:30	Cardiovascular disease
	Break
15:45 - 16:30	Work in small groups ■ complications management
16:30 - 17:00	Evaluation and wind up

A three-day advanced course

This programme should be adjusted to meet the needs of students. The following is an example from one region.

Day one

Time	Topic
08:30 - 09:00	Welcome, introduction and outline of 3 days
09:00 - 10:00	Working with insulin Understanding basal/bolus insulin Adjustments for day-to-day activities
	Break
10:15 - 12:00	Role of the non-medical healthcare diabetes professional ▪ status of the non-medical professional ▪ scope of practice ▪ forming an association
	Lunch
13:30 - 16:30	Nutrition Carbohydrate counting Practical advice for nurses

Day two

08:30 - 09:00	Introduction
09:00 - 12:00	Foot care
	Lunch
13:00 - 16:00	Teaching How to prepare a lecture Setting up your education intervention Using PowerPoint – making visuals

Day three

08:30 - 09:00	Opening
09:00 - 12:00	Models for behavioural change/ building communication skills
	Lunch
13:30 - 15:30	Case studies in managing diabetes
15:30 - 16:30	Evaluation and graduation

This publication and the CD-ROM containing the modules are available from:

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It is also available from the IDF website at www.idf.org or it can be ordered from the online bookshop at www.idf.org/bookshop.

For further information on these modules or on the work on the Consultative Section on Diabetes Education, please contact the IDF Executive Office at communications@idf.org

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