

**THE CANADIAN DIABETES EDUCATOR
CERTIFICATION BOARD**

**EXAMINATION
HANDBOOK
2010**

**For Initial Certification
OR
Certification Maintenance by Examination**



**APPLICATION DEADLINE
FEBRUARY 1, 2010**

**EXAMINATION DATE
SATURDAY, MAY 29, 2010**

The Canadian Diabetes Educator Certification Board (CDECB) is responsible for the development and administration of the certification program for Certified Diabetes Educators in Canada. The Canadian Diabetes Educator Certification Board is independent and separate from all other diabetes-related organizations and associations.

MANDATE

To develop, administer, and regulate an examination process leading to national certification for eligible diabetes educators in Canada.

MISSION

To provide a process whereby eligible health professionals in Canada can become certified, maintain their certification, and be recognized as diabetes education specialists promoting the national standards of care for individuals affected by diabetes.

CDE® and EAD® are registered marks of the Canadian Diabetes Educator Certification Board, the use of this mark is under licence.

This Handbook, which replaces all previous editions, contains information about the CDECB 2010 Certified Diabetes Educator Examination process. Applicants are responsible for utilizing the most current Handbook/Application and familiarizing themselves with its contents.

The CDECB is not responsible for any misunderstanding by applicants of the information contained herein, or for misinformation obtained from other sources.

Correspondence or inquiries may be directed to:

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The Co-ordinator's position respects the variety of time zones within Canada. Inquiries will be answered within a reasonable period of time. E Mail is the preferred method of communication.

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THE CANADIAN DIABETES EDUCATOR CERTIFICATION BOARD EXAMINATION HANDBOOK

1. GENERAL INFORMATION

- 1.1 The certification process for diabetes educators is designed for eligible health professionals who are currently practising in diabetes education in Canada.
- 1.3 The examination is administered annually, on the Saturday following the Victoria Day holiday in May.
- 1.4 Since the examination is set each year in January/February, it may include questions on material published up to and including January/February in the year of the examination administration.
- 1.5 Although individual practices may vary, the examination is based upon published clinical guidelines and standards of practice.
- 1.6 A French-speaking invigilator may not be on site for the examination; however the written invigilator instructions will be available in French.
- 1.7 The examination is used to make a dichotomous decision: the candidate (a) possesses, or (b) does not possess the knowledge, abilities and skills required by a diabetes educator to practice safely and effectively.

2. DEFINITIONS

- 2.1 **Applicant**
is an individual who has applied, but has not yet been accepted, to write the examination
- 2.2 **Candidate**
is an individual who has been accepted to write the examination
- 2.3 **Certification**
is a process by which a non-government agency or an association verifies that a professional has met a predetermined standard of current proficiency and excellence in a speciality area
- 2.4 **Criterion-Referenced Assessment**
means an assessment against a standard of performance identified as the minimal standard acceptable; it discriminates between candidates who meet the standard and those that do not. It does not assess how far above or below a candidate performs in relation to the standard.

2.5 Diabetes Education

means education, diabetes-management advice or care to one or more of the following:

- those at risk for diabetes,
- those with prediabetes,
- those with diabetes,

their families, or health professionals, utilizing the competencies set out in **APPENDIX A**

2.6 Diabetes Educator

is a health professional, committed to excellence in diabetes education, who has a sound knowledge base in diabetes care/management and education processes, as well as good communication skills

2.7 Diabetes Educator Certification

IS

- recognition of experience and excellence in diabetes education
- verification that an individual possesses the knowledge, abilities and skill required by a diabetes educator to practice safely and effectively
- voluntary
- multidisciplinary

IS NOT

- equivalent to licensure or registration with a professional regulatory body
- assurance of professional competence as defined by professional regulatory bodies
- permission to practice outside the scope of one's profession

2.8 Initial Certification

means obtaining CDE® status for the first time

2.9 Regulatory Body

means the legislative body which regulates the practice of those professions eligible for diabetes certification in Canada. It is the body which has the authority to grant or revoke professional licenses to practice. Some examples of regulatory bodies are: College of Registered Nurses of Manitoba, Nova Scotia Dietetic Association, College of Dietitians of Ontario, Saskatchewan Registered Nurses Association, , and Ontario College of Pharmacists. The following are not regulatory bodies: Dietitians of Canada, Registered Nurses Association of Ontario, Canadian Nurses Association, Ontario Pharmacists' Association.

3. **ELIGIBILITY CRITERIA**

There will **NOT** be any exceptions regarding eligibility criteria.: (Refer to **APPENDIX B**)

3.1 FOR INITIAL CERTIFICATION:

Individuals who have not previously taken or passed the CDE® examination or whose CDE® credentials have lapsed must meet **ALL** of the following requirements:

1. Be registered with a regulatory body in Canada as a health professional
2. A minimum of 800 hours of practice in diabetes education
3. The minimum of 800 hours of practice in diabetes education must be completed within a 3 year period immediately prior to the February 1, application deadline.
4. **ALL** of the above must be attained while the individual is registered with a regulatory body in Canada as a health professional

3.2 **FOR CERTIFICATION MAINTENANCE**

1. *REGISTRATION WITH AN ELIGIBLE PROFESSIONAL REGULATORY BODY*
Be registered with a regulatory body in Canada as a health professional;
2. *Have current CDE® status.*

4. **FEES**

- 4.1 **TOTAL FEE** **\$ 450.00**
- 4.2 Fees may be paid by VISA /Mastercard, or cheque/money order payable to CDECB. Receipts will be issued; duplicate receipts will be issued upon payment of a \$10.00 fee.
- 4.3 Insufficient fund cheques returned to the CDECB are subject to a \$25.00 penalty. Repayment of an insufficient fund cheque and the penalty must be made by a certified cheque or money order. Individuals are not permitted to write the examination until and unless all fees due have been paid in full.
- 4.4 Ineligible applicants will be refunded \$350.00.

5. APPLICATION PROCESS

- 5.1 FORM SUBMISSION:** A completed **Application Form (Schedule 2)**, together with the **TOTAL fee of \$450.00**, must be submitted to the CDECB, **postmarked no later than FEBRUARY 1, 2010**. *Applications postmarked after this date will NOT be accepted and will be returned, without exception.* Applications will not be processed until the total fee is paid.
Applicants wishing immediate acknowledgement of receipt of Application by the CDECB are requested to utilize a confirmed delivery service. (*ie; Express Post, Courier*).Applicants should only submit one application form. Applicants who submit more than one Application Form may experience duplicate Visa Charges. Expenses incurred as a result of duplicate applications will be the responsibility of the Applicant.
- 5.2** Complete, accurate information must be provided on the application form. Incomplete forms will be rejected and returned.
- 5.3 LANGUAGE:** Applicants must indicate on their application form the language (English or French) in which they will write the examination. Only the English or French version of the examination will be provided. Language preference may not be changed once the application has been processed.
- 5.4 SELF EMPLOYED:** Self-employed applicants for initial certification must submit two completed CDECB Letters of Reference: one from a Certified Diabetes Educator, and one from a health professional who refers clients to the applicant for diabetes education. A copy of this form is available from the CDECB and online at www.cdec.ca.
- 5.5 CREDENTIALING PROCESS:** Applications for initial certification are subject to credentialing: a random audit process by which the professional diabetes-related experience of an applicant is confirmed by an independent third party. Applications for certification maintenance are not subject to credentialing.
- 5.6 APPLICATION CONFIRMATION AND RECEIPT:** The Application Confirmation and Receipt document will be forwarded by March 15.

6. SPECIAL ACCOMMODATION

6.1 FOR CANDIDATES WITH DISABILITIES

Applicants with a disability who require special accommodation to take the examination must notify the CDECB in writing at the time of application. Notification shall be on the letterhead of and be signed by a professional familiar with the disability (e.g. physician, psychologist, rehabilitation counsellor, special educator) and describe the specific disability as well as the special accommodation requested. All reasonable efforts will be undertaken by the CDECB to provide the special accommodation.

6.2 FOR RELIGIOUS REASONS

Applicants who, for religious reasons, are unable to write the examination on the scheduled date must submit, with their application, an original letter on letterhead from a religious institution official (Minister, Priest, Rabbi, or Pastor etc.) confirming that the applicant's religious convictions prevent him/her from writing the examination on the scheduled date.

6.3 UNDERTAKING

Candidates who write the examination on an alternate date for religious reasons and, where applicable, candidates for whom a special accommodation has been arranged, will be required to sign an undertaking to the effect that they will not disclose or discuss any aspect of the examination.

7. EXAMINATION SITES

7.1 The examination is administered at the designated examination sites in Canada listed in **Appendix C**. Applicants must indicate their preferred examination site on their application.

7.2 Applicants who wish to write the examination at a non-designated site in Canada must so indicate on their application form and pay a non-designated-site fee of \$150.00 at the time of application. Applicants are not to make site arrangements. The CDECB office will do this.

7.3 Applicants who wish to write the examination at a non-designated site outside Canada must so indicate on their application form and pay a non-designated-site fee of \$225.00 at the time of application. They will also be responsible for all costs associated with administering the examination outside Canada.

7.4 Arrangements for administering the examination at a non-designated examination site will be made by the CDECB after confirming that the non-designated examination site is suitable for the writing of an examination and that the security of the examination will be maintained.

8. NOTIFICATION OF ELIGIBILITY TO WRITE THE EXAMINATION

8.1 All applicants who are being credentialed will be notified in writing of their (in)eligibility to write the examination by April 15. Applicants who are randomly selected for credentialing should continue to prepare for the examination.

8.2 There will be a \$10.00 charge for issuing a duplicate copy of an eligibility letter.

9. DEFERRAL OF WRITING THE EXAMINATION

9.1 Candidates writing the examination for initial certification may, one time only, defer writing the examination until the next examination administration.

9.2 A candidate who wishes to defer writing the examination must provide written notice to the CDECB of intention to defer writing the examination, postmarked at least 45 days prior to the examination date, and pay a \$50.00 deferral fee.

9.3 If a candidate does not give the required 45-day deferral notice, the candidate will be registered to write the examination and all fees will be applied to the examination administration for which the candidate was registered.

9.4 Candidates who are writing the examination for purposes of certification maintenance may not defer writing the examination.

10. WITHDRAWAL FROM WRITING THE EXAMINATION

10.1 A candidate who wishes to withdraw from writing the examination will be eligible for a \$200.00 refund provided written notice of intention not to write the examination, postmarked at least 45 days prior to the examination date, is given to the CDECB.

10.2 If a candidate does not write the examination as scheduled and has not given the required 45-day withdrawal notice, no refund will be given, and any monies paid by the candidate shall be forfeited to the CDECB.

10.3 If a candidate withdraws from writing the examination more than once, no refund will be given for the second or subsequent withdrawals.

11. CANDIDATES UNABLE TO WRITE THE EXAMINATION DUE TO COMPELLING REASONS

Candidates who are unable to write the examination due to compelling reasons (e.g. health-related emergency) may request a refund of \$350.00. The request, clearly stating the circumstances under which the candidate was unable to write the examination and appropriate supporting documentation (e.g. physician's medical certificate) must be submitted to the CDECB within 30 calendar days following the examination administration. Such refunds are subject to CDECB approval. Candidates may exercise the option to defer to the following year at no cost provided sufficient documentation is supplied.

12. PREPARING FOR THE EXAMINATION

Since the examination questions reflect the multidisciplinary nature of diabetes care and management, a review of the competencies in Appendix A is necessary to prepare for the examination.

The CDECB does not endorse any course or educational events related to diabetes care/education, or purporting to be designed to prepare individuals to write the examination. Participation in these educational sessions is not an assurance or guarantee that a passing mark will be achieved on the examination.

Although the examination is not based on any book or group of articles, the resources in **APPENDIX D** may be useful. *These are suggestions only; the examination is not specifically based on material contained in these resources.* The following may also be helpful:

12.1 SAMPLE EXAMINATION QUESTIONS

All candidates registered to write the examination will receive a set of 10 sample examination questions with their eligibility letter.

12.2 PRACTICE EXAMINATION QUESTIONS

A booklet of 25 practice examination questions, with correct responses and references as well as the competency being tested, is available from the CDECB office at a cost of \$30.00, which includes shipping and handling.

12.3 LEARNING OPPORTUNITIES

- Web sites of professional organizations (CDA, ADA, AADE)
- Diabetes Educator Section (DES) chapter meetings
- Study groups and consultation with other diabetes educators
- Literature reviews
- Continuing education sessions

13. THE EXAMINATION

A Testing Consultant that specializes in certification examination processes provides professional consultation and direction throughout the development, administration and evaluation of the examination.

13.1 FORMAT

All examination questions are presented in a multiple-choice format, which eliminates subjective marking. *The examination consists of 140 questions* An additional twenty-five (25) “pilot” questions, which are being tested for statistical reliability, are also included, for a total of 165 questions. In order to statistically validate a larger number of questions, there may be more than one version of the examination, with only the “pilot” questions being different.

Each question tests one of three levels of cognitive ability:

Knowledge/Comprehension – (approximately 25% of questions)

This level combines the ability to recall previously learned material and to understand its meaning. It includes such mental abilities as knowing and understanding definitions, facts, and principles (e.g., knowing the effect of diabetes medications).

Application - (approximately 50% of questions)

This level refers to the ability to apply knowledge and learning to new or practical situations. It includes applying rules, methods, principles, and diabetes education theories in providing care to clients (e.g., applying diabetes management principles to the care of clients, applying education theory in an education class).

Critical Thinking - (approximately 25% of questions)

This level deals with higher-level thinking processes. It includes the ability to judge the relevance of data, to deal with abstractions, and to solve diabetes education problems (e.g., identifying priorities of care, evaluating the effectiveness of diabetes-education actions).

Each question tests one of the competencies in Appendix A. The competencies are grouped according to their relative importance and relative frequency in the day-to-day practice of a diabetes educator, as follows:

Group 1-A: Competencies which are more critical / more frequently performed – (average number of questions per exam ~56)

Group 1-B: Competencies which are more critical / less frequently performed (average number of questions per exam ~42)

Group **2-A**: Competencies which are less critical / more frequently performed (average number of questions per exam ~28)

Group **2-B**: Competencies which are less critical / less frequently performed - (average number of questions per exam ~14)

Questions are designed to provide a cross-section of situations representing Canadian diabetes-educator practice in terms of type of diabetes, as well as client age and gender. Cultural issues are integrated into the examination without introducing stereotypes.

13.2 EXAMINATION DEVELOPMENT

The complete examination process is depicted in **APPENDIX E**.

13.2.1 QUESTION DEVELOPMENT

The Item Writing Committee of the CDECB develops valid, reliable multiple-choice questions for the examination. This committee of Certified Diabetes Educators, whose members represent a variety of the professions eligible for certification, receives in-depth training and direction from the Testing Consultant.

13.2.2 QUESTION REVIEW

Three independent Item Appraisers, who are Certified Diabetes Educators working in various Canadian sites, review each question for accuracy, clarity and applicability to current diabetes education practice.

The CDECB's Examination Review Committee, comprised of Certified Diabetes Educators representing a variety of professions eligible for diabetes certification and various geographical locations, also reviews the examination for accuracy, clarity and applicability to current diabetes education practice, having regard to the comments of the Item Appraisers.

13.2.3 FRENCH TRANSLATION AND REVIEW PROCESS

The examination is professionally translated. The CDECB's French Review Committee, a group of bilingual (French/English) Certified Diabetes Educators, reviews the translated version of the examination to confirm its accuracy, and the accuracy of the terminology. Special consideration is also given to ensure the word count in the French examination is as close as possible to the English version.

13.2.4 SETTING THE PASS SCORE

The pass score is set individually for each examination using the *Modified Angoff Method*, which has a proven record of fairness and defensibility. This extensively used reliable method distinguishes between candidates who possess or do not possess the knowledge, abilities and skills required by a diabetes educator to practice safely and effectively. It takes into consideration the expected performance of a competent diabetes educator with at least 800 hours experience in diabetes education, as well as the content and difficulty of each question.

The *Modified Angoff Method* requires judges (members of the Examination Review Committee) to rate each question in the examination in terms of a candidate who performs at a level bordering between acceptable and unacceptable performance. Once all judges have rated each item in the examination, the ratings are collated and tabulated. The mean rating is calculated for each item and then for the total examination. The result is the percentage mark expected to be achieved by a candidate with the knowledge, abilities and skills to practice safely and effectively.

A major advantage to this methodology is that the determined pass mark is based on the content of the examination and not on group performance.

13.3 EXAMINATION ADMINISTRATION – SATURDAY, MAY 29, 2010

The following schedule will be observed at all examination sites:

0830h - 0855h	Registration for Examination
0900h - 1230h	Examination
1230h – 1245h	Post-Examination Survey (optional)

The following items will be required:

- Examination Site Direction Letter
- Photo identification
- Black lead HB pencils
- A good eraser

The following items are permitted:

- Drinking water
- Snacks; however a quiet atmosphere must be maintained during the examination administration.

THE FOLLOWING ITEMS ARE NOT PERMITTED:

Books, notes, scrap paper, computers, calculators, or other aids.

Cellular telephones, pagers, PDAs, etc. must be turned off.

13.4 EXAMINATION ANSWER SHEET

Answers are recorded on a computer answer sheet. To avoid errors during the marking process:

- Use *black lead HB pencil only*, not pen
- Make *dark marks that fill the space completely*
- *Erase cleanly* any answers that are changed
- *Make no stray marks* on the answer sheet

13.5 TIPS FOR ANSWERING MULTIPLE-CHOICE QUESTIONS

There is only one correct response and three incorrect responses to each question.

Use *only* the information given in the question. Do not assume additional information, circumstances, or possibilities. Do not “read into” the question. Do not make a question more difficult or complicated than it is.

- Read the entire question carefully. Determine what the question is asking;
- Try to imagine the correct answer; then select the response that comes closest to the answer you imagined;
- Eliminate known incorrect responses;
- If no response seems correct, reread the question (an important detail may have been overlooked), eliminate responses known to be incorrect, and make a reasonable guess;
- Answer each question; incorrect answers are not penalized;
- Record each answer before proceeding to the next question.

Candidates sometimes make errors in an examination that are related to writing examinations and not related to a lack of diabetes education knowledge or skills. Some of the most common errors are:

- Missed important information in the case text;
- Misread the stem of the question;
- Failed to pick out important key words in the stem of the question;
- Did not relate the question to information in the case text;
- Made assumptions in the case text/question;
- Focused on insignificant details and missed key issues;

- Selected more than one answer;
- Incorrectly transferred selected answer to computer answer sheet;
- Switched answer selected;
- Skipped a question and did not make this skip on the computer answer sheet;

13.6 DISQUALIFICATION FROM THE EXAMINATION

13.6.1 Candidates may be disqualified from the examination for refusing to follow the invigilator's instructions.

13.6.2 Candidates will be disqualified from the examination for cheating. Cheating can include, but is not limited to, any one or more of the following:

- a) Posing as another candidate
- b) Bringing study materials/aids to the desk
- c) Attempting to observe another candidate's work
- d) Seeking or giving assistance to another candidate
- e) Communicating, by any means, with another candidate during the examination
- f) Attempting to remove examination materials from the examination site

13.6.3 Candidates will not receive a refund of total fees should the candidate become disqualified from the examination.

14. EXAMINATION RESULTS

14.1 STATISTICAL ANALYSIS

Following the examination, each question is analysed statistically. Those questions that did not discriminate well between successful and unsuccessful candidates are removed and are not calculated in candidates' scores.

14.2 NOTIFICATION

Examination results will be released only to individual candidates in writing, delivered by Canada Post regular delivery mail, within six to eight weeks after the examination administration. Examinations will not be returned to candidates.

14.3 EXAMINATION SCORES

Since this is a criterion-referenced assessment in which all candidates are compared to a single criterion – the minimal standard acceptable, the result is a Pass/Fail. *A grade score will not be given.*

Examination computer answer sheets with marks close to the passing mark are hand scored prior to release of the examination results.

14.4 PERFORMANCE PROFILE

A performance profile will be provided to those candidates who were not successful, as an aid for further learning and development. The information provided is based on two different classifications of the content of the examination: cognitive levels and competency categories. The profile illustrates the percentage of questions answered correctly compared to the average performance of all candidates who wrote the examination, for each of these classifications.

14.5 RE-WRITE

Candidates who do not pass the examination may apply to rewrite it by filing a new application and paying the required total fee.

There is no limit to the number of times the examination may be rewritten.

15. APPEALS

15.1 It is only possible to appeal examination results based on irregularities in the examination process. **The examination questions or mark cannot be appealed.**

15.2 An appeal must be lodged within 30 calendar days of the release of examination results, by sending to the CDECB a notice detailing the nature of the appeal and an appeal fee of \$75.00. This fee will be refunded if the appeal is successful. The CDECB will acknowledge receipt of the appeal notice within 15 calendar days of its receipt and will forward a complete description of the appeal process with the acknowledgement letter.

16. CERTIFICATION

16.1 Candidates who pass the Certified Diabetes Educator Examination are permitted to use the designation “Certified Diabetes Educator” (CDE) / “Éducateur Agréé en Diabète” (ÉAD) or “Éducatrice Agréé en Diabète” (ÉAD). **CDE® and EAD® are registered marks of the Canadian Diabetes Educator Certification Board, the use of this mark is under licence.**

16.2 Certification status is valid for a period of 5 years. *The expiry date is set out on the certificate.*

16.3 *The CDE/ÉAD credential may not be used after certification has expired.*

- 16.4** Successful candidates will receive a certificate from the CDECB. The name on the certificate will be printed exactly as the candidate's name appears on the application form, and as confirmed by the CDECB in the eligibility letter. There will be a \$25.00 charge for issuing a certificate in a name other than the name that was on the application form and confirmed in the eligibility letter.
- 16.5** There will be a \$25.00 fee for a duplicate copy of a certificate.
- 16.6** Successful candidates for initial certification will also receive a certification pin. Replacement pins are available from the CDECB for \$10.00.

17. CERTIFICATION MAINTENANCE

- 17.1** To maintain certification, Certified Diabetes Educators must, prior to the expiration date on the certificate, (1) write and pass the examination or (2) have their Certification Maintenance Credit Portfolio approved by the CDECB. The Credit Portfolio process is detailed in the CDECB's Certification Maintenance "How To Guide" available at www.cdec.ca or from the CDECB office
- 17.2** If a candidate writing the examination for the purpose of certification maintenance withdraws from writing the examination his/her certification will expire on the original expiry date.
- 17.3** If a person's certification has expired prior to applying for certification maintenance, the person must again meet all eligibility requirements for initial certification.

18. REVOCAION OF CERTIFICATION

Certification will be revoked for any of the following infractions:

- Falsification of application information
- Revocation, suspension or other disciplinary action by the individual's professional regulatory body
- Validated unethical practice of diabetes education
- Giving or receiving assistance during the examination
- Posing as another candidate during the examination
- Having another person write the examination for a registered candidate
- Communicating, by any means, with another candidate during the examination
- Unauthorized removing or attempting to remove examination information or materials from an examination site
- Breach of a confidentiality undertaking

APPENDIX A

CERTIFIED DIABETES EDUCATOR EXAMINATION COMPETENCIES

COMPETENCY NUMBER	COMPETENCY ** The term “Diabetes” shall include “Prediabetes”, where applicable**	COMPETENCY GROUP
1.0 Pathophysiology		
1.A	Describes the basic pathophysiology of diabetes including characteristic signs and symptoms.	1-A
1.B	Distinguishes between the major types of diabetes in terms of etiology, prevention, defining characteristics and incidence, and prevalence.	2-A
1.C	Identifies normal and abnormal blood glucose ranges in fasting and post-prandial states.	1-A
1.D	Describes the effect of insulin and the counter-regulatory hormones.	1-A
1.E	Describes the effects of nutrition and exercise on blood glucose.	1-A
1.F	Identifies the risk factors which contribute significantly to the microvascular, macrovascular and neurological complications of diabetes.	1-A
1.G	Identifies the appropriate responses to a client’s questions concerning the genetic transmission of diabetes.	2-B
1.H	Identifies the effects of hormonal changes at different life stages on blood glucose levels.	2-B
1.I	Identifies the diagnostic criteria for all types of diabetes.	2-A

2.0 Nutrition		
2.A	Assesses nutrition education needs.	1-A
2.B	Identifies appropriate nutrition strategies for persons with diabetes.	1-A
2.C	Plans individualized nutrition strategies to accommodate life cycle stages, socio-economic and other lifestyle factors (e.g. shift work, physical activity, travel, alcohol and delayed meals).	1-A
2.D	Plans nutrition strategies to accommodate nutritional needs for persons with diabetes who also have secondary complications.	1-B
2.E	Describes the following nutritional issues in relation to diabetes management: glycemic index, nutrient values of food, fats, fibre, and artificial sweeteners.	2-A

2.F	Describes the rationale and use of the <i>CDA's Beyond the Basics: Meal Planning for Healthy Eating, Diabetes Prevention and Management</i> .	2-B
2.G	Estimates the food choice value of foods based on nutrition information provided.	2-B
2.H	Describes the rationale for and the use of the "carbohydrate counting" method.	2-A
2.I	Identifies nutrition strategies to manage "sick days".	1-B
3.0 Self-Care Management		
3.1 Medications		
3.1.A	Describes different types of oral medications used to treat diabetes in terms of action, sources, indications for use, side effects, safe administration and precautions.	1-A
3.1.B	Describes different types of insulin in terms of action, sources, indications for use, side effects, safe administration and precautions.	1-A
3.1.C	Describes the rationale for common insulin regimens.	1-A
3.1.D	Describes various insulin delivery systems and their advantages or disadvantages.	2-A
3.1.E	Identifies factors that affect subcutaneous insulin absorption.	1-B
3.1.F	States current recommendations for the care and storage of insulin during everyday use and travel.	1-B
3.1.G	Understands responses to situations in which an insulin adjustment is recommended.	1-A
3.1.H	Identifies the effects of prescription medications commonly used by people with diabetes.	1-B
3.1.I	Identifies the effects of non prescription remedies commonly used by people with diabetes.	1-B

3.2 Hypoglycemia		
3.2.A	Describes hypoglycemia in terms of signs, symptoms, causes, treatment and prevention.	1-A
3.2.B	Identifies hypoglycemia unawareness in terms of presenting symptoms, potential causes, diagnostic methods and treatment plan.	1-A
3.2.C	Recognizes a potential Somogyi effect and dawn phenomenon and describes appropriate interventions.	1-B
3.2.D	Describes how to alter the treatment plan to prevent or respond to hypoglycemia.	1-A
3.2.E	Provides information on MedicAlert identification.	2-B

3.3 Activity		
3.3.A	Describes the benefits and risks related to various types of physical activity for individuals with type 1 and type 2 diabetes and identifies strategies to deal safely with physical activity.	1-A
3.3.B	States the potential effect(s) of physical activity on blood glucose levels, in euglycemic, hypoglycemic and hyperglycemic states.	1-A

3.4 Urine Monitoring		
3.4.A	Describes the clinical recommendations of urine testing for ketones and microalbuminuria.	1-B

3.5 Blood Glucose Monitoring		
3.5.A	Describes the purpose, potential benefits and appropriate scheduling of SMBG.	1-A
3.5.B	Describes the purpose and methods of quality control for SMBG.	2-A
3.5.C	Describes the factors contributing to variances and acceptable levels of variance, between SMBG and laboratory results.	2-B
3.5.D	States the definition, interpretation, purpose and recommended frequency of A1C testing.	2-A
3.5.E	Given case situations with blood glucose levels, medication doses, meal plan and activity levels, analyzes the relationship between them, identifies the need for alteration(s) and recommends an appropriate course of action.	1-A
3.5.F	Describes acceptable protocols for the use of blood testing devices used outside of home or health-care institutions (e.g. daycare settings).	2-B

3.6 Hyperglycemia		
3.6.A	Differentiates between hyperglycemia, diabetic ketoacidosis and hyperosmolar hyperglycemic state (HHS) in terms of pathophysiology, etiology, progression in signs and symptoms and intervention and prevention.	1-B
3.6.B	Identifies appropriate self care action to take during a period of concurrent illness.	1-B

3.7 Foot Care		
3.7.A	Describes presenting symptoms, potential causes, diagnostic methods and treatment plans related to problems that may be present with feet.	1-B
3.7.B	Describes strategies to prevent foot problems.	1-B

3.8 Safety		
3.8.A	Provides information on safe disposal of “sharps”.	2-A
3.8.B	Discusses infection control issues related to diabetes equipment.	2-A

3.9 Research		
3.9.A	Discusses the findings and implications of current major research to practice	2-B

4.0 Psychosocial / Lifestyle		
4.A	Assess the relationship between social and socio-economic support systems, environment and daily living with diabetes.	2-A
4.B	Identifies potential psychosocial strengths and barriers to diabetes self-care.	2-A
4.C	Identifies the impact of diabetes on life events, including interpersonal relationships, vocation, education and recreation.	2-A
4.D	Differentiates between characteristics of normal grieving and depression (related to diabetes) requiring psychological consultation/intervention.	1-B
4.E	Uses communication strategies to promote therapeutic interaction.	2-A
4.F	Discusses potential effects of substance abuse on diabetes self-care.	1-B
4.G	Identifies potential destabilizing effects of stress on blood glucose and approaches to self care.	2-A
4.H	Describes possible alterations in sexual function, contributing factors and potential interventions.	2-B
4.I	Describes strategies and information that can be used to facilitate decision-making for contraception.	2-B
4.J	Discusses the impact of cultural background and beliefs on adaptation to diabetes and self care practices.	2-B
4.K	Identifies psychological disturbances and devises educational plans for individuals with these disturbances.	2-B
4.L	Identifies possible feelings or attitudes held by the person with diabetes at various stages in the life cycle and describes appropriate interventions.	2-A
4.M	Identifies strategies for facilitating behaviour change.	2-A

5.0 Special Situations		
5.A	Identifies aspects of assessment, education and management that are unique to the elderly.	1-B
5.B	Devises an educational plan for a person with psychomotor/sensory deficits and diabetes.	2-B
5.C	Identifies aspects of assessment, education and management that are unique to children and/or adolescents with diabetes.	1-B
5.D	Identifies aspects of assessment, education and management that are unique to pregnant women with type 1, type 2 or gestational diabetes.	1-B
5.E	Identifies conditions in which diabetes may be a secondary complication.	2-B
5.F	Describes the potential chronic complications of diabetes in terms of pathophysiology, associated risk factors, frequency, recommendations for screening, prevention, management and education.	1-A
5.G	Outlines activities to facilitate safe travel.	1-B
5.H	Describes the principles and application of intensive diabetes management.	1-B
5.I	Describes strategies for dealing with preparation for surgery or diagnostic tests.	1-B

6.0 Education Theory		
6.A	Applies principles of learning to the development of teaching plans.	2-A
6.B	Adapts educational strategies based on principles of motivation for learning.	2-A
6.C	Applies principles of education.	2-A
6.D	Acknowledges and plans activities for people with different learning styles.	2-A
6.E	Identifies principles of program development.	2-B
6.F	Identifies appropriate use, advantages and disadvantages of various teaching methods and tools.	2-B
6.G	Differentiates between cognitive, affective and psychomotor behavioural objectives.	2-B
6.H	Defines components of a quality improvement process for diabetes education.	2-B
6.I	Describes the Standards for Diabetes Education in Canada and applies them in program development.	2-B
6.J	Describes the components of the Transtheoretical Model of Behaviour Change and applies this model in developing teaching / counselling strategies	2-B

APPENDIX B

FLOW SHEET TO DETERMINE ELIGIBILITY FOR INITIAL CERTIFICATION

STEP ONE: REGISTRATION WITH A PROFESSIONAL REGULATORY BODY

I am registered with a regulatory body in Canada as a health professional



Yes

Proceed to next step



No

Ineligible to write exam at this time



STEP TWO: EXPERIENCE IN DIABETES EDUCATION

I have worked at least 800 hours in diabetes education within a period of not more than three years prior to applying to write the examination, while registered as a member of a regulatory body in Canada as a health professional. i.e. I have provided education, diabetes-management advice or care to one or more of the following:

- those at risk for diabetes,
 - those with prediabetes,
 - those with diabetes,
- their families, or health professionals utilizing the competencies set out in **APPENDIX A**



Yes

Proceed to next step



No

Ineligible to write exam at this time



Complete Examination Application Form – Schedule 2

APPENDIX C

DESIGNATED EXAMINATION SITES

Newfoundland / Labrador	Corner Brook Grand Falls Windsor Happy Valley Goose Bay St. John's	Sir Wilfred Grenfell College College of the North Atlantic College of Goosebay Centre for Nursing Studies
Prince Edward Island	Charlottetown	University of Prince Edward Island
Nova Scotia	Antigonish Halifax Sydney	St. Francis Xavier University Dalhousie University University College of Cape Breton
New Brunswick	Campbellton Fredericton Moncton	Campbellton Community College University of New Brunswick New Brunswick Community College
Québec	Sherbrooke Montréal Québec	Champlain College Concordia University Laval University
Ontario	Barrie Brampton Hamilton Kingston London Newmarket Oshawa Ottawa Peterborough Sudbury Thunder Bay South Porcupine Toronto Waterloo or Kitchener Windsor	Georgian College Sheridan College Hamilton Health Sciences Corp.or McMaster University St Lawrence College University of Western Ontario York Region Administration Centre Durham College Carleton University Sir Sanford Fleming College Laurentian University Lakehead University Contact North - Northern College University of Toronto University of Waterloo University of Windsor
Manitoba	Brandon Thompson Winnipeg	Brandon University University College of the North University of Manitoba
Saskatchewan	Regina Saskatoon	University of Regina University of Saskatchewan
Alberta	Calgary Edmonton Lethbridge	University of Calgary University of Alberta University of Lethbridge

British Columbia	Kamloops Kelowna Prince George Terrace Vancouver Victoria	Thompson Rivers University Okanogan College University of Northern B.C. Northwest Community College Langara College University of Victoria
Yukon	Whitehorse	Yukon College
Northwest Territories	Fort Smith Yellowknife	Aurora College Aurora College
Nunavut	Iqaluit	Nunavut Arctic College

The CDECB reserves the right to make site changes. All reporting sites will be outlined on the Examination Site Notice received by the eligible candidates in May.

APPENDIX D

RESOURCE LIST

These resources are suggestions only. The examination is not specifically based on this list. It should be noted that although foreign texts/references are a valuable resource and can be useful, the examination is based on Canadian standards. To obtain any of the resources, contact the professional association or company that publishes them, not the CDECB office. ISBN are provided to assist you in locating the appropriate document.

Publications:

The Canadian Diabetes Association (www.diabetes.ca):

National Office

Industrial Alliance Building, 1400 -522 University Ave., Toronto, ON, M5G 2R5

(800) 226-8464

(416) 363-3393 [fax] <http://www.diabetes.ca>

1. 2008 Clinical Practice Guidelines
2. Standards for Diabetes Education in Canada 2005
3. Publications: Canadian Journal of Diabetes
Canadian Diabetes
The Diabetes Communicator
4. Position Statements
5. Educational Materials (as listed at <http://www.diabetes.ca/for-professionals/resources/>)
6. Building Competency in Diabetes Education: The Essentials (2004)
7. Beyond the Basics; Beyond the Basics Resource
8. 2008 Clinical Practice Guidelines Tool Kit
9. Practical Diabetes Management: Clinical support for Family Care Physicians (2004). ISBN 1-55231-014-0
10. Practical Diabetes Management for Pharmacists: Educational Support for Practicing Pharmacists (2005). ISBN 1-55232-016-7

Textbooks:

Beaser RS & Campbell AP The Joslin Guide to Diabetes: A Program for Managing your Treatment Completely Revised & Updated 2nd Edition. Simon & Schuster
ISBN 978-0-7432-5784-8

Belton A., Simpson N (2003) The How To of Patient Education Published in Canada
ISBN 0-9698119-1-8 (www3.sympatico.ca/rn.simpson/bookorder.html)

Bolderman KM (2002) Putting your Patients on the Pump American Diabetes Association, Alexandria VA ISBN 1-58040-148-1

Canadian Pharmacists Association, Compendium of Pharmaceuticals and Specialties, 2009.
ISBN: 978-1-894402-41-5

Davidson, John K. (Ed) (2000). Clinical Diabetes Mellitus: A Problem Oriented Approach. 3rd Edit. New York: Thieme ISBN 0-86577-840-X

Daneman, Denis, Frank Marcia, Perlman Kusiel,(2002). When a Child has Diabetes. Key Porter Books, ISBN 1-55263-443-1

Gerstein HC, Haynes RB (2001). Evidence-Based Diabetes Care. Hamilton, Decker Inc. ISBN 1-55009-124-7

Gray, J. (2000). Therapeutic Choices (3rd ed.). Canadian Pharmaceutical Association ISBN 0-919115-89-6

Haire Joshu, D. (Ed) (1996). Management of Diabetes Mellitus Perspectives of Care Across the Lifespan. 2nd Edit. St. Louis; Mosby ISBN 0-8151-4223-4

Hotel Dieu Diabetes Day -Care Unit(CHUM) Understanding Your Diabetes And Live a Healthy Life Rogers Media. ISBN 978-2-922260-20-8

Kahn, C.R. & Weir, G.C. (Editors). (2002) Joslin's Diabetes Mellitus, (14th Edition) Lippincott Williams & Wilkins. ISBN 0781727960

LeRoith, D, Taylor SI, Olefsky JM (2000) Diabetes Mellitus A Fundamental and Clinical Text (2nd Edition). Lippincott, Williams & Wilkens. ISBN 07817-2058-3

Redman, B.K. (2001). The Process of Patient Education (9th Edition), Mosby-Year Book. ISBN 0323012795

Walsy, John PA, Roberts R. (2000) Pumping Insulin: Everything you need for success with an Insulin Pump 3rd Edition Torrey Pines Press, San Diego, Ca ISBN 1-884804-

Walsh, John et al (2003) Using Insulin : Everything you need for success with Insulin Torrey Pines Press, San Diego, Ca ISBN 1-884804-85-4

Other:

Healthy Eating is in Store for You™ (www.healthyeatingisinstore.ca)

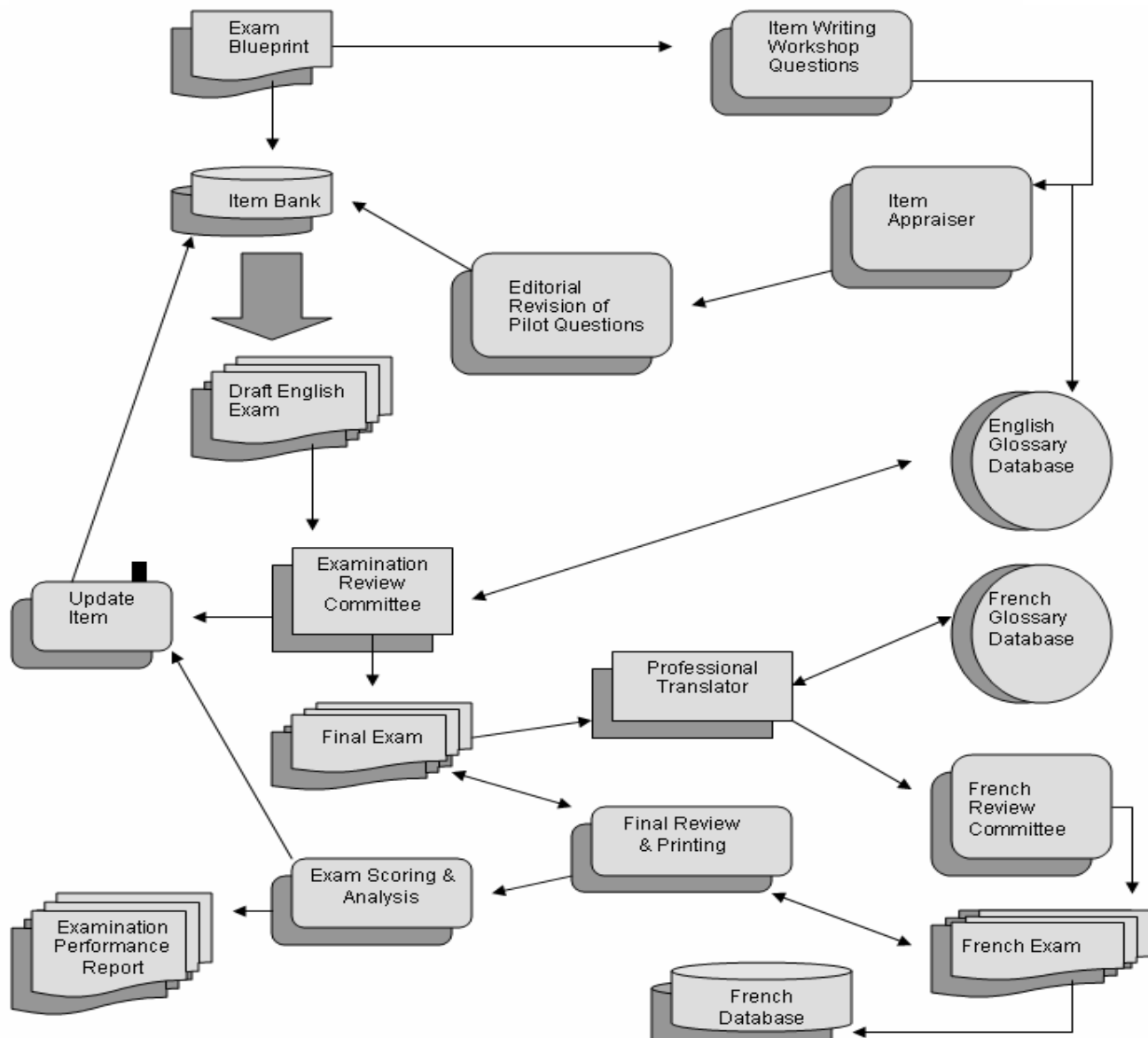
Health Canada Publications (www.hc-sc.gc.ca)

The American Association of Diabetes Educators (www.aadenet.org):
The Art and Science of Diabetes Self-Management Education

The American Diabetes Association (www.diabetes.org):

APPENDIX E

CDECB Exam Process



SCHEDULE 1

APPLICATION CHECK LIST

- I am eligible to write the examination (Refer to Section 3 and Appendix B)
- I have completed all required sections of the Application Form (Schedule 2)
 - Personal information
 - Preferred site to write the examination
 - Preferred language in which to write the examination
 - Dated and signed the application form
- I have enclosed a photocopy of proof of current registration with my professional regulatory body (Dietitians of Canada is not a regulatory body)
- I have enclosed a cheque, money order or VISA number for the application and examination fees
 - (Optional) Enclosed fee for Practice Examination Question Booklet
 - (Optional) Enclosed fee for Non-Designated Examination Site.

Initial Certification only:

- I have completed the section “Experience in Diabetes Education”, including Supervisor’s name(s) and contact number(s)

Self-Employed - Initial Certification only:

- I have enclosed two completed CDECB Letters of Reference

This form is intended for Candidate use only and is not required with application to the CDECB Office.

SCHEDULE 2

CDECB EXAMINATION APPLICATION FORM – May 29, 2010

PLEASE PRINT CLEARLY.

The CDECB reserves the right not to process applications where the following information is not provided or legible.

Personal Information (Enter name as you wish it to appear on your certificate)

First Name _____ Initial _____ Surname _____

Previous Name _____

Address _____ City _____

Province _____ Postal Code _____

Phone Home: (_____) _____ Work: (_____) _____ EXT _____

Fax: (_____) _____

Email: _____

Site Preference (Check one)

Preferred Designated Site (Appendix C)

Institution: _____ City: _____

OR (provide information do not make arrangements as site, proctor, etc must meet the requirements of the CDECB)

Non-Designated Site:

Name of Educational Institution _____

Contact _____

Phone Number (_____) _____

Address _____

Preferred Language in which to write the examination (Check one)

English French

Professional Status

Pharmacist Physician Physiotherapist Registered Dietitian

Registered Nurse Registered Psychologist Registered Social Worker

Other: _____

Regulatory Body: _____

Number: _____

(You *must* include a photocopy of proof of current registration with your Regulatory Body)

Certification Status

Are you writing the examination for: (check those that apply)

- Initial Certification
- Certification Maintenance > Last year certified _____ CTFNno: _____
- Re-write > Date previously written _____

Diabetes Education Work Setting (check all that apply)

- Hospital inpatient Hospital outpatient Community-based Pharmaceutical Co.
- Independent practice Other _____

How long have you worked in diabetes education? (check one)

- 1 year 2 years 3 – 4 years 5 – 10 years 10 – 20 years > 20 years

EXPERIENCE IN DIABETES EDUCATION (Complete for initial certification only)

- Please complete the table below, giving detailed information to show that you meet the criteria of having worked at least 800 hours in diabetes education within a period of not more than 3 years prior to applying to write the examination, while registered as a member of a regulatory body in Canada as a health professional.
- Copy form as needed or add additional pages

Month/Year	Location/Nature of Diabetes Education provided	No. hours per week	No. of weeks	Total hours of activity

Please list the name and telephone number(s) of the supervisor(s) whom you would like contacted to verify your employment and diabetes education experience. If you had more than one supervisor over the past three years, indicate which employment corresponds to which supervisor. Copy form as needed.

Supervisor’s Name and Title signature not required	Supervisor’s Name and Title signature not required
Work Telephone Number	Work Telephone Number
Home Telephone Number	Home Telephone Number

If you are self-employed and do not have a supervisor to verify your eligibility, you must submit two completed CDECB Letters of Reference with this application. See website for standard form.

The information you provide is subject to verification. Your certification will be revoked if it is discovered you did not meet the eligibility criteria at the time of application.

PAYMENT

TOTAL FEES FOR THE EXAMINATION - DUE WITH APPLICATION..... \$ 450.00

(Optional) CDECB Practice Examination Question Booklet \$ 30.00 _____

(Optional) Non-Designated-Site Fee (in Canada).....\$ 150.00 _____

(Optional) Non-Designated-Site Fee (outside Canada).....\$ 225.00 _____

TOTAL AMOUNT ENCLOSED.....\$ _____

Payment options see below:

I hereby confirm that all information provided by me is correct. I understand and agree to abide by all CDECB policies pertaining to its Certified Diabetes Educator Examination process, as described in the most recent Examination Handbook.

The CDECB reserves the right to confirm/publish the names of those with certification status. If you do not wish this information released, you must notify the CDECB office in writing.

The CDECB may distribute materials from third parties such as educational organizations and industry, who wish to promote special events and/or inform diabetes educators of new products and resources for diabetes management. Prior to such distribution, the CDECB reviews all materials to ensure they would be relevant to the practice of diabetes education. If you prefer not to receive these mailings, please advise the CDECB Co-ordinator in writing.

Date: _____ Applicant's Signature _____

CDECB office will NOT confirm receipt of documents received by mail, fax or courier. Retain transmission receipts, mail /courier receipts as proof of on time submission. Applications are processed in order received and timing depends upon volume.

Send Application and Payment POSTMARKED NO LATER THAN FEBRUARY 1, 2010 to:

**Co-ordinator
Canadian Diabetes Educator Certification Board
2878 King Street
Caledon, Ontario
L7C 0R3
scan and E Mail: cdecb@sympatico.ca**

PAYMENT OPTIONS: - Please DO NOT SEND CASH

1. Cheque or money order payable to CDECB (NSF charge of \$25.00)

[] **Visa** [] **Master Card** Credit Card Number _____

Expiry Date: _____

Cardholder's Name: _____

Signature: _____