

Certification Examination for Nutrition Support Clinicians



Multiple Disciplines. A Single Standard of Excellence

Candidate Handbook 2020

Application Deadline*	Testing Window
February 19, 2020	March 29, 2020 ASPEN 20 Conference – Tampa, FL
March 18, 2020	May 1 – June 30, 2020
September 2, 2020	October 5 – November 7, 2020

***Applications will not be accepted after this deadline**

Administered by:



1350 Broadway, Suite 800 | New York, NY 10018
www.ptcny.com/contact

TABLE OF CONTENTS

TABLE OF CONTENTS	i
CONTACT INFORMATION.....	ii
ATTENTION CANDIDATES.....	ii
OBJECTIVES OF CERTIFICATION	3
THE CERTIFICATION PROCESS.....	3
ELIGIBILITY REQUIREMENTS – INTERNATIONAL	4
COMPLETION OF APPLICATION	6
EXAMINATION ADMINISTRATION AND SCHEDULING.....	6
EXAMINATION FEES	9
SPECIAL ACCOMMODATIONS	9
PREPARING FOR THE EXAMINATION	10
WHAT TO EXPECT AT THE TESTING CENTER	11
RULES FOR THE EXAMINATION.....	12
REPORT OF RESULTS	13
REQUESTING A HANDSCORE.....	13
CONFIDENTIALITY OF EXAMINATION SCORES	13
REEXAMINATION	13
ATTAINMENT OF REGISTRATION & RECERTIFICATION	14
REVOCATION OF REGISTRATION.....	14
CONTENT OF THE EXAMINATION	15
CONTENT DOMAINS AND TASK STATEMENTS.....	15
SAMPLE EXAMINATION QUESTIONS.....	17
ONLINE PRACTICE	20
REFERENCES.....	21

This Handbook contains necessary information about the Certification Examination for Nutrition Support Clinicians. Please retain it for future reference. Candidates are responsible for reading these instructions carefully. This Handbook is subject to change.

CONTACT INFORMATION

<p>Professional Testing Corporation (PTC) www.ptcny.com (212) 356-0660</p>	<ul style="list-style-type: none"> • Apply for examination • Obtain general application policy and procedure information • Obtain information about testing policies and procedures • Transfer to a new testing period • Request Special Accommodations • Request Hand Score • Question about score reports • Miscellaneous inquiries
<p>Prometric www.prometric.com/NBNSC (800) 741-0934</p>	<ul style="list-style-type: none"> • Schedule test appointment • Reschedule test appointment (within the same testing period) • Cancel test appointment • Find directions to test site • Questions regarding testing sites and appointments
<p>National Board of Nutrition Support Clinicians (NBNSC) http://www.nutritioncare.org/NBNSC (301) 587-6315</p>	<ul style="list-style-type: none"> • Recertification information • Exam preparation information

ATTENTION CANDIDATES

This handbook contains necessary information about the Certification Examination for Nutrition Support Clinicians (CNSC®). It is required reading for those applying for and taking the Examination. All individuals applying for the examination must comply with the policies, procedures, and deadlines in this Handbook and attest to this by signing the Candidate Attestation found on the application. Please retain this handbook for future reference. This handbook is subject to change. See www.ptcny.com for handbook updates.

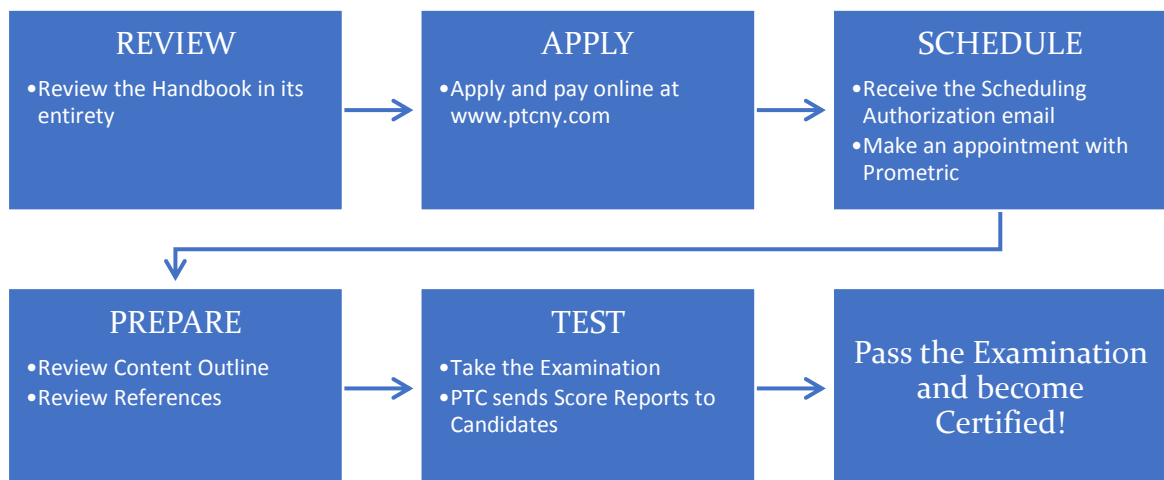
OBJECTIVES OF CERTIFICATION

The National Board of Nutrition Support Certification, Inc. (NBNSC) endorses the concept of voluntary, periodic certification by examination for all nutrition support clinicians. Board certification for nutrition support clinicians is highly valued and provides formal recognition of nutrition support knowledge.

Certification is intended to promote enhanced delivery of safe and effective care of qualified clinicians in nutrition support by:

1. Recognizing formally those individuals who meet eligibility requirements of the National Board of Nutrition Support Certification, Inc. and pass the Certification Examination for Nutrition Support Clinicians.
2. Encouraging continued professional growth in the practice of nutrition support.
3. Establishing and measuring the level of knowledge required for certification by a nutrition support clinician.
4. Providing a standard of minimum knowledge deemed appropriate for clinicians practicing nutrition support, thereby assisting the employer, public, and health care professionals in the assessment of nutrition support clinicians.

THE CERTIFICATION PROCESS



ELIGIBILITY REQUIREMENTS – U.S. & CANADA

Candidates are recommended to have at least two years of experience in nutrition support practice after obtaining professional certification and/or licensure.

1. Candidates must meet one of the following eligibility requirements:

Dietitians

Currently is a Registered Dietitian (RD/RDN) with the Commission on Dietetic Registration (CDR) or the Canadian equivalent.

Registered Nurses/Nurse Practitioners

Currently is licensed as a Registered Nurse (RN), including Nurse Practitioners (NP) in the United States or Canada. A copy of current license must accompany application.

Pharmacists

Currently is registered/licensed as a Pharmacist in the United States or Canada. A copy of current license must accompany application.

Physicians

Currently is licensed as a Doctor of Medicine (MD) or Doctor of Osteopathy (DO) in the United States or Canada. A copy of current license must accompany application.

Physician Assistants

Currently is registered/licensed as a Physician Assistant in the United States or Canada. A copy of current license must accompany application.

2. Completion and filing of an Application for the Certification Examination for Nutrition Support Clinicians.
3. Payment of required fee.

ELIGIBILITY REQUIREMENTS – INTERNATIONAL

Candidates outside of the US and Canada are able to apply and sit for the Certification Examination for Nutrition Support Clinicians. International candidates (except from Canada) must meet the following requirements. Please note: all documentation **MUST** be in English.

Candidates are recommended to have at least two years of experience in nutrition support practice after obtaining professional certification and/or licensure.

1. Candidates must meet one of the following eligibility requirements:

Dietitians

Currently registered/licensed or the equivalent in their country*. A copy of current license or dietetic registration must accompany your application.

Registered Nurses/Nurse Practitioners

Currently is licensed or the equivalent in their country as a nurse or nurse practitioner. A copy of current license must accompany application*.

Pharmacists

Currently is registered/licensed or the equivalent in their country as a Pharmacist. A copy of current license must accompany application*.

Physicians

Currently is licensed or the equivalent in their country as a Doctor of Medicine (MD) or Doctor of Osteopathy (DO). A copy of current license must accompany application*.

Physician Assistants

Currently is registered/licensed or the equivalent in their country as a Physician Assistant. A copy of current license must accompany application*.

*If your country does not issue licenses, etc. a letter, in English and on letterhead, from your confirming your work history and current job description can be submitted.

2. All international candidates must submit a credential evaluation in English¹.
3. Completion and filing of an Application for the Certification Examination for Nutrition Support Clinicians.
4. Payment of required fee.

Please note: International individuals who have previously sat for and successfully passed the Nutrition Support Certification Examination will be eligible to retake the examination without providing the above-mentioned documentation as long as there is no lapse in certification. Should a lapse in certification occur for any reason, then that individual must adhere to the above requirements.

For more information regarding NBNSC's International Candidate Policies please go to:

http://www.nutritioncare.org/NBNSC/Certification/Certification_Policy_For_International_Candidates/.

¹ Credentials must be evaluated by an outside agency. The evaluation must be submitted with the application and must be an original document, not a photocopy. The cost of the evaluation is the responsibility of the individual and is separate from any other fee listed in the Fees section of this handbook. International applications will be reviewed by NBNSC Board members for approval of eligibility. Please see http://www.nutritioncare.org/NBNSC/Certification/Certification_Policy_For_International_Candidates/ for more information.

COMPLETION OF APPLICATION

Step 1 – Complete Application

Go to <http://www.ptcny.com/test-sponsors/NBNSC> to view examination testing periods, application deadlines, and link to the online application. You must complete the examination application in full, **using your name exactly as it appears on your current government issued photo ID such as a driver’s license or a passport**. Applications are not considered complete until all information and payment has been provided. The completed application can be submitted and paid for online. Retain the link to the application and your login information.

Please note, for new applications you will be asked to create a PIN number. This PIN will be used when going into your existing application.

Step 2 – Submit Examination Fee and Application for Review

Receive email from PTC stating that your payment and application has been received.

Step 3 – Receive Scheduling Authorization and Schedule Testing Appointment

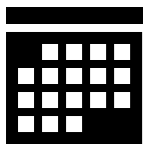
Within eleven (11) weeks prior to the start of the testing period, candidates will receive a Scheduling Authorization from PTC via email from notices@ptcny.com. The Scheduling Authorization includes your PTC Candidate ID number and information on how to set up your examination location, date, and time through Prometric. Retain this document.

You must present your current driver’s license, passport, or U.S. Military ID at the testing center at the time of your examination appointment or you will be refused admission. **The name on the ID must exactly match the name on the Scheduling Authorization.**

EXAMINATION ADMINISTRATION AND SCHEDULING

The Certification Examination for Nutrition Support Clinicians is administered during an established two-week testing window on a daily basis, excluding holidays, at computer-based testing facilities managed by Prometric.

Scheduling Examination Appointments



Approximately eleven (11) weeks prior to the start of the testing window, candidates will be emailed a Scheduling Authorization from **notices@ptcny.com**. Please ensure you enter your correct email address on the application and add the ‘ptcny.com’ domain to your email safe list. If you do not receive a Scheduling Authorization eight (8) weeks prior to the start of your chosen testing window contact the Professional Testing Corporation at (212) 356-0660 or online at www.ptcny.com/contact.

The Scheduling Authorization will indicate how to schedule your examination appointment with Prometric as well as the dates during which testing is available. Appointment times are first-come, first-served, so schedule your appointment as soon as you receive your Scheduling Authorization in order to maximize your chance of testing at your preferred location and on your preferred date. **Candidates who wait until the last minute run the risk of missing out on their preferred date, time, and testing center. Candidates unable to schedule an appointment will forfeit their fees.**

Candidates unable to take the examination during their chosen testing window will need to reapply for the examination and pay a new application fee.

After you make your test appointment, Prometric will send you a confirmation email with the date, time, and location of your exam. Please check this confirmation carefully for the correct date, time, and location. Contact Prometric at (800) 741-0934 if you do not receive this email confirmation or if there is a mistake with your appointment.

Note: International candidates may also schedule, reschedule, or cancel an appointment online at www.prometric.com/NBNSC.

IMPORTANT!

You **MUST** present your current driver's license, passport, or U.S. military ID at the test center. Expired, temporary, or paper driver's licenses will **NOT** be accepted.

The name on your Scheduling Authorization **MUST** exactly match the name on your photo ID.

Fees will not be refunded for exams missed because of invalid ID.

Rescheduling Examination Appointments within a Testing Period

Candidates are able to reschedule their examination appointments within the same testing period as long as the request is submitted within the timeframe described below. Reschedule within the permitted time frame by calling or going to the Prometric website: www.prometric.com/NBNSC.

Time Frame	Reschedule Permitted?	Stipulations
Requests submitted 30 days or more before the original appointment	Yes	None
Requests submitted 29 to 5 days before the original appointment	Yes	Candidate must pay Prometric a rescheduling fee of \$50.
Requests submitted less than 5 days before the original appointment	No	Candidates who do not arrive to test for their appointment will be considered a no-show and all their examinations fees will be forfeited. Candidates will need to reapply and pay fees for a future testing period.

Transferring to a New Testing Period

Candidates unable to take the examination during their scheduled testing period may request a **ONE-TIME** transfer to a future testing period. **There is a transfer fee of \$230.00.** After you have transferred once by paying the \$230.00 fee, you will need to pay the full examination fee in order to transfer a second time; so, ***please plan carefully.***

Please note: requests to transfer to a new testing period must be received within 30 days of your originally scheduled testing period.

Candidates wishing to transfer to a new testing period need to follow the steps below.

1. Go to <http://secure.ptcny.com/apply>.
2. Click “Start New Application.”
3. Choose NBNSC-CNSC® in the first drop-down menu; then choose the new examination period in the second drop down menu and fill out the rest of the information on the page.
4. Fill out the application making sure you answer yes to the question asking if you are transferring.
5. When you have finished the application, click “Submit Transfer Request.”
6. PTC Support will send you an email letting you know your transfer application was approved and that you can log back into your application and pay the one-time \$230.00 transfer fee.

Call 212-356-0660 if you have any questions regarding the transfer process.

If candidates are unable to attend the examination on the date for which they registered and elect not to transfer to another testing period the application will be closed and all fees will be forfeited. There will be no refund of fees.

The transfer fee is based on costs and is not punitive in nature. The transfer fee must be paid at the time the request is approved. The candidate is responsible for contacting Prometric and canceling the original examination appointment, if one was made.

Exams may only be transferred to a new testing period once; please plan carefully.

Please note: Transferring your Examination only refers to instances when a candidate is unable to take their exam during a testing period for which they have already applied. Candidates who did not pass their examination and are retaking the examination need to pay the full Examination Fee.



Failing to Report for an Examination

If you fail to report for an examination, you will forfeit all fees paid to take the examination. A completed application form and examination fee are required to reapply for the examination.

EXAMINATION FEES

Fee Type	Amount	Details
Application Fee – ASPEN Members	US \$330.00	<ul style="list-style-type: none"> • Non-refundable • Non-transferable • Includes testing center fees
Application Fee – Non-members	US \$430.00	
Rescheduling Fee (29-5 days prior to scheduled appointment; see page 8)	US \$50.00	<ul style="list-style-type: none"> • Applies to candidates who need to move their appointment within their current testing period • Payable directly to Prometric • Reschedule with Prometric online or over the phone
Transfer Fee (For candidates moving to a new testing period; see page 9)	US \$230.00	<ul style="list-style-type: none"> • Applies to candidates who need to move to a new testing period • Must submit new application & fee to PTC

All fees are non-refundable and non-transferable.



There will be no refund of fees. **Please be advised: Prometric does not have the authority to grant transfers to another testing period or refunds. All requests must be made through PTC.**

NOVA Members

Active members of the Nurses Organization of Veterans Affairs (NOVA) may sit for the Certification Examination for Nutrition Support Clinicians at a rate that is \$50 less than the non-ASPEN member rate.

Active NOVA members, at the time of application submission should submit documentation of active NOVA membership with their application. Active NOVA members who are also ASPEN members may not combine the discounts, only one discounted application fee may be used, either the ASPEN member fee or the discount for NOVA members.

SPECIAL ACCOMMODATIONS

NBNSC and PTC support the intent of and comply with the Americans with Disabilities Act (ADA). PTC will take steps reasonably necessary to make certification accessible to persons with disabilities covered under the ADA. According to the ADA, an individual with a disability is a person who has a physical or mental impairment that substantially limits a major life activity (such as seeing, hearing, learning, reading, concentrating, walking) or a major bodily function (such as neurological, endocrine, or digestive system). The information you provide and any documentation regarding your disability and special test accommodations will be held in strict confidence.

All approved testing accommodations must maintain the psychometric nature and security of the examination. Accommodations that fundamentally alter the nature or security of the exam will not be granted.

Special testing arrangements may be made upon receipt of the Application, examination fee, and a completed and signed Request for Special Needs Accommodations Form, available from www.ptcny.com/PDF/PTC_SpecialAccommodationRequestForm.pdf or by calling PTC at (212) 356-0660.

This Form must be uploaded with the online application no later than 8 weeks prior to the start of your chosen testing window. Candidates who do not submit their Special Accommodations Form with their application may not be able to test during their chosen testing period and therefore be subject to rescheduling or transfer fees.

Only those requests made and received on the official Request for Special Needs Accommodations Form will be reviewed. Letters from doctors and other healthcare professionals must be accompanied by the official Form and will not be accepted without the Form. All requests must be made at the time of application. Accommodations cannot be added to an existing exam appointment.

PREPARING FOR THE EXAMINATION

- Check your government issued photo ID (driver's license, passport or U.S. Military ID) when you make your examination appointment. Is it expired? Does the name on your ID match the name on your Scheduling Authorization email? Proctors at the Prometric testing center will refuse admission to candidates with expired IDs, IDs with names that do not match their records, and temporary paper IDs. Candidates will be marked as no-shows and will forfeit their exam fees.
- Check your PTC Scheduling Authorization email and Appointment Confirmation email from Prometric to make sure everything is accurate (i.e. your name, exam name, appointment date, time and location).
- Make yourself familiar with the location of your chosen testing site and any requirements they may have for parking and check the weather and traffic conditions before you leave for the testing center. Make sure you give yourself plenty of time to arrive as late arrival may prevent you from testing.
- In the event of inclement weather, check the Prometric website for site closures: <https://www.prometric.com/closures>.
- Prometric's website provides information on what you can expect on your test day, including a walkthrough of check in and security procedures: www.prometric.com.
- This Handbook provides the Content Outline for the Examination and references. Use these to help you start studying for the examination.
- Review What to Expect at the Test Center and Rules for the Examination on the next pages before your appointment.

WHAT TO EXPECT AT THE TESTING CENTER

PTC has partnered with Prometric Testing Centers to deliver examinations to candidates. Here is what you can expect when you arrive at your Prometric Testing Center.

- Candidate Check-In
 - Candidates will be asked to present their IDs
 - Candidates will be asked to empty and turn out their pockets
 - Candidates will be “wanded” or asked to walk through a metal detector
 - Inspection of eyeglasses, jewelry, and other accessories will be conducted. Jewelry other than wedding and engagement rings is prohibited.
 - Religious headwear may be worn into the testing room; however, it may be subject to inspection by a testing center administrator before entry into the testing room is permitted.
 - Prometric provides lockers for candidates to store their purses, mobile phones, jackets, food, drinks and medical supplies.

- During the Exam
 - No breaks are scheduled during the exam. Candidates who must leave the testing room to take a break will not be given extra time on the exam
 - Accessing mobile phones or study materials during the examination is prohibited
 - Smoking is prohibited at the testing center
 - All examinations are monitored and may be recorded in both audio and video format

Please keep in mind: other exams will be administered at the same time as your examination. Therefore, examinees may hear ambient noises such as typing, coughing, or people entering and exiting the testing room that cannot be avoided. Prometric is unable to provide a completely noise-free environment. However, headphones may be requested to minimize impact.

Please see [Prometric's website](#) for more information about what to expect on testing day.

RULES FOR THE EXAMINATION

Please read the information below carefully. You are responsible for adhering to the examination rules while at the testing center.

- ⇒ You must present your current driver's license, passport, or US Military ID at the testing center. Candidates without valid ID will NOT be permitted to test. Temporary or paper copies of your ID will not be accepted.
- ⇒ Electronic devices that can be used to record, transmit, receive, or play back audio, photographic, text, or video content, including but not limited to, cell phones, laptop computers, tablets, Bluetooth devices; wearable technology (such as smart watches), MP3 players (such as iPods), pagers, cameras, and voice recorders are NOT permitted to be used and cannot be taken in the examination room. Prometric provides lockers for your personal items.
- ⇒ No papers, books, or reference materials may be taken into or removed from the testing room.
- ⇒ No questions concerning content of the examination may be asked during the examination session. The candidate should read carefully the directions that are provided on screen at the beginning of the examination session.
- ⇒ Candidates are prohibited from leaving the testing room while their examination is in session, with the sole exception of going to the restroom.
- ⇒ Bulky clothing, such as sweatshirts (hoodies), jackets, coats, and hats (except hats worn for religious reasons), and most types of jewelry may not be worn while taking the examination. Proctors will ask you to remove such items and place them in your locker. Please see [Prometric's statement on Test Center Security](#) for more information.
- ⇒ All watches and "Fitbit" type devices cannot be worn during the examination.
- ⇒ Food/beverages are not permitted inside the testing room. Leave these items in your assigned locker.



Contact PTC at (212) 356-0660 or www.ptcny.com/contact with any questions about the Examination Rules.

Violation of any of the rules listed above may lead to forfeiture of fees, dismissal from the testing room, and cancellation of your test scores.

REPORT OF RESULTS

Candidates will be notified by PTC via email when their score reports are available online. Score reports will be available approximately four weeks after the close of the testing period. Scores on the major areas of the examination and on the total examination will be reported. Examination scores cannot be provided verbally over the phone. Score Reports will be available online only for 30 days. Be sure to save a copy of your score report in your permanent files. Successful candidates will also receive certificates from the NBNSC.

Scoring Process

The passing score for the CNSC® Examination is determined using the modified Angoff technique. This technique is a criterion referenced methodology where a panel of subject matter experts carefully evaluate each item on the examination and estimate the probability that each individual question will be answered correctly by a minimally competent/just qualified candidate. The recommended passing score is then reviewed and approved by NBNSC. Once the passing score is set, this standard is upheld for all future forms of the examination. To ensure fairness and consistency across examination forms, a statistical process called equating is used to account for any slight variations in difficulty level across forms. Scores on the CNSC® Examination are reported using scaled scoring, which converts the candidates' raw score (i.e., total number of correct questions) onto a consistent and standardized scale. Scaled scores allow candidate scores to be comparable from one exam form to the next. The scale range for the examination is 200 to 800 with a passing point of 500.

REQUESTING A HANDSCORE

Candidates who fail the examination may request a hand scoring of their data file. Hand scoring is a manual check of the data file by the testing service to determine if there have been any errors in scoring. Although the probability of such an error is extremely remote, this service is available. Requests for hand scoring must be received by PTC no later than 90 days after the date of the examination by completing and returning the Request of Handscore form on www.ptcny.com with payment of \$25. Candidates who fail the examination will not be permitted to see the examination questions. For reasons of test security, no candidate is allowed to review the examination or any of its items.

To ensure correct reporting of results, PTC automatically performs handscores of examinations of candidates who score within 3 points of passing as a quality control measure. Thus, it is extremely doubtful that any examination results will change from "fail" to "pass" through handscoring.

CONFIDENTIALITY OF EXAMINATION SCORES

NBNSC will release the individual test scores ONLY to the individual candidate. Any questions concerning test results should be referred to NBNSC or PTC.

REEXAMINATION

The Certification Examination for Nutrition Support Clinicians may be taken as often as desired, upon filing of a new Application and fee. There is no limit to the number of times the examination may be repeated.

ATTAINMENT OF REGISTRATION & RECERTIFICATION

Eligible candidates who pass the Certification Examination for Nutrition Support Clinicians are entitled to use the registered designation CNSC® after their names and will receive certificates from the NBNSC. A registry of Certified Nutrition Support Clinicians will be maintained by the NBNSC and may be reported in publications.

Nutrition support clinician certification is recognized for a period of five years at which time the candidate must retake and pass the Certification Examination for Nutrition Support Clinicians in order to retain certification.

The purpose of requiring recertification renewal is to measure continued competent and knowledgeable nutrition support practice. Certification demonstrates to your patients, colleagues, and employers that you have the skills necessary to provide the best care possible.

Should an individual with a current CNSC® credential opt to take the certification examination early, all maintenance of the CNSC® credential will be based upon when the individual took the certification examination.

- Scenario 1: Certificant A is currently certified as a CNSC® from October 2011 – October 2016. Certificant A wants to become recertified and opts to take the certification examination in April 2016 instead of October 2016. Certificant A successfully passes the certification examination, then the certification period is April 2016 – April 2021.
- Scenario 2: Certificant A is currently credentialed as a CNSC® from October 2011 – October 2016. Certificant A wants to become recertified and opts to take the certification examination in April 2016 instead of October 2016. Certificant A is unsuccessful in passing the certification examination. Upon receiving the exam results Certificant A is no longer a CNSC® and cannot use the credential until the certification examination is again taken and successfully passed. In summary anytime the certification examination is taken and not passed, certification lapses.

REVOCAION OF CERTIFICATION

Registration will be revoked for any of the following reasons:

1. Falsification of Application.
2. Revocation of current healthcare credential or license for a reason indicative to the NBNSC of insufficient knowledge.
3. Misrepresentation of certification status.

The Appeals Committee of the NBNSC provides the appeal mechanism for challenging revocation of Board Certification. It is the responsibility of the individual to initiate this process.

CONTENT OF THE EXAMINATION

The Certification Examination for Nutrition Support Clinicians is a computer-based examination composed of a maximum of 250 multiple-choice, objective questions with a total testing time of four (4) hours. The content for the examination is described in the Content Outline on the next page.

The questions for the examination are obtained from individuals with expertise in electrodiagnostic technology and are reviewed for construction, accuracy, and appropriateness by the NBNSC. NBNSC, with the advice and assistance of the Professional Testing Corporation, prepares the examination.

The Certification Examination for Nutrition Support Clinicians will be weighted in approximately the following manner:

I.	Nutrition Assessment	32%
II.	Clinical Management	55%
III.	Process Management	3%
IV.	Professional Practice	10%

CONTENT DOMAINS AND TASK STATEMENTS

I. Nutrition Assessment
A. Screening
T1. Identify patients with malnutrition.
T2. Identify patients with risk factors for developing malnutrition.
B. Evaluation
T3. Review patient history.
T4. Review patient current clinical status.
T5. Review diet, medication, and supplements for potential impact on nutritional status.
T6. Evaluate anthropometric data.
T7. Identify potential or existing nutrition support access sites.
T8. Perform nutrition-focused physical exam.
T9. Evaluate patient for potential complications of initiating nutrition support therapy.
T10. Determine fluid, nutrient, and electrolyte intake from all sources.
T11. Determine fluid, electrolyte, macronutrient, and micronutrient requirements for nutrition support therapy.
T12. Evaluate psychosocial, economic, developmental, functional, behavioral, and quality of life factors.
T13. Evaluate indication for, timing, and route of administration for nutrition support therapy.
T14. Determine etiology, degree, and type of malnutrition.
T15. Determine nutritional diagnosis.
T16. Assess patient and caregiver capabilities and limitations related to nutrition support therapy.
II. Clinical Management
A. Initiation
T17. Recommend administration route and access for nutrition support therapy.

T18. Recommend formulation, rate, and/or volume of nutrition support therapy.
T19. Recommend use of pharmacologic adjunctive agents.
T20. Recommend cost-effective and safety strategies in the provision of nutrition support therapy.
T21. Recommend short-term nutrition support therapy goals.
T22. Recommend long-term nutrition support therapy goals.
T23. Recommend diagnostic tests, procedures, or consultations that may modify the nutrition support plan.
T24. Recommend laboratory tests that may modify the nutrition support plan.
T25. Recommend regimen for initiation, advancement, and discontinuation for nutrition support therapy.
<i>B. Monitoring</i>
T26. Verify position of nutrition access device.
T27. Evaluate tolerance of nutrition support therapy.
T28. Evaluate fluid status.
T29. Monitor compliance with nutrition support therapy plan.
T30. Monitor for complications of nutrition support therapy.
T31. Evaluate laboratory test results to assess adequacy and tolerance of nutrition support therapy.
T32. Monitor nutritional and metabolic response to nutrition support therapy.
T33. Evaluate status of nutrition access device.
T34. Assess nutrition support therapy for safety concerns.
T35. Monitor for drug-nutrient interaction.
T36. Monitor for enteral or parenteral formula stability.
<i>C. Modification of Therapy</i>
T37. Modify nutrition support therapy based on changes in patient clinical status and medical plan of care.
T38. Manage complications related to nutrition support therapy.
T39. Reevaluate nutrition support therapy goals.
T40. Reevaluate adjunctive drug therapy.
T41. Transition or discontinue nutrition support therapy.
T42. Transition patient from one care setting to another.
T43. Educate patient and/or caregiver on nutrition support therapy management.
III. Process Management
T44. Develop or update policies and procedures to guide patient care.
T45. Implement current guidelines and standards of practice in the provision of nutrition support therapy.
T46. Develop or update patient education materials.
T47. Utilize a continuous process improvement model to evaluate nutrition care.
IV. Professional Practice
T48. Apply ethical principles in the application of nutrition support therapy.
T49. Provide nutrition support therapy in compliance with legal and regulatory standards.
T50. Evaluate scientific literature according to evidence-based guidelines.
T51. Apply principles of evidence-based practice in provision of nutrition support therapy.

SAMPLE EXAMINATION QUESTIONS

In the following questions, choose the one best answer.

1. In a patient receiving intravenous fat emulsion, which of the following levels should be monitored?
 1. Serum glucose
 2. Serum ammonia
 3. Serum cholesterol
 4. Serum triglyceride

2. Increased acetate supplementation in parenteral nutrition is most likely to be required in
 1. respiratory failure.
 2. intractable diarrhea.
 3. prolonged vomiting.
 4. furosemide treatment.

3. Dermatitis and alopecia are symptoms of
 1. hypophosphatemia.
 2. magnesium deficiency.
 3. vitamin A deficiency.
 4. essential fatty acid deficiency.

4. A 58-year-old patient has acute renal failure following abdominal aortic aneurysm repair. Dialysis is planned. If the patient's BUN is 90 mg/dL and creatinine 8 mg/dL, the most appropriate enteral formula for this patient would provide
 1. 0.5 g protein/kg/day mainly as essential amino acids.
 2. 1 g protein/kg/day mainly as essential amino acids.
 3. 0.5 g protein/kg/day as both essential and nonessential amino acids.
 4. 1 g protein/kg/day with both essential and nonessential amino acids.

5. Complaints of altered taste and smell are common symptoms of deficiency of which trace element?
 1. Zinc
 2. Copper
 3. Selenium
 4. Chromium

6. Indirect calorimetry provides a measure of
1. basal metabolic rate.
 2. past 24-hour dietary intake.
 3. energy expenditure.
 4. calorie needs for weight gain.
-
7. Which of the following is most appropriate during transition from central parenteral nutrition support to enteral nutrition support?
1. Dextrose should be infused peripherally to avoid hypoglycemia
 2. Transition to enteral nutrition should be discontinued if diarrhea develops
 3. Some parenteral nutrition should be maintained until the patient has demonstrated tolerance to enteral nutrition
 4. Central venous access should be discontinued as soon as the patient's nutritional requirements are met by a combination of enteral and peripheral parenteral support
-
8. During parenteral nutrition, the infusion of large amounts of dextrose increases electrolyte requirements for
1. sodium and potassium.
 2. sodium and phosphorus.
 3. potassium and chloride.
 4. potassium and phosphorus.
-
9. Metabolic consequences of the refeeding syndrome include
1. hyperkalemia.
 2. hypoglycemia.
 3. hypermagnesemia.
 4. hypophosphatemia.
-
10. An 85-year-old man receiving tube feeding due to dysphagia develops increased stooling and has a temperature of 38.3° C. Which of the following should be done?
1. Obtain stool cultures
 2. Decrease water flushes
 3. Begin diphenoxylate/atropine
 4. Change to a fluid-restricted tube feeding formula
-
11. Which of the following is a metabolic adaptation to simple starvation?
1. Decrease in urinary nitrogen losses
 2. Increase in hepatic glucose production
 3. Decrease in utilization of body fat stores
 4. Increase in cerebral glucose utilization

12. The small bowel usually has an absorption capacity of approximately

1. 400 mL/day.
 2. 1 L/day.
 3. 2 L/day.
 4. 9 12 L/day.
-

ANSWER KEY	
Q	A
1	4
2	2
3	4
4	4
5	1
6	3
7	3
8	4
9	4
10	1
11	1
12	4

ONLINE PRACTICE

WHAT IS IT: A practice test consisting of 50 questions with a testing time of 2 hours taken over the internet

WHY TAKE IT: To experience taking a computerized exam, to review an example of the type of content included in the Certification Examination for Nutrition Support Clinicians, and to learn more about question format, style, and level of difficulty

SCORE REPORT: After completing the online practice test, you will receive an instant score report showing test performance in each of the content areas. The score report does not provide correct answers or indicate which questions were answered correctly and incorrectly

NOTE: The online practice test is an optional tool candidates may use as they prepare for the certification examination. While the practice test may help candidates identify areas of strengths and weakness, it should not be used as the only means to determine candidate preparedness or readiness to test. Since the practice test is NOT intended to be a study guide nor the sole source of preparation for the actual certification examination, candidates are NOT provided with the answer key, rationales for each question, nor notification of which specific items were answered correctly or incorrectly.

Though the specific questions that are on the practice test will not appear on the actual certification examination, it allows candidates to become familiar with the style of questions that may be asked. The instant score report received after practice test submission shows overall test performance as well as performance in each of the content areas. Candidates may find this information useful in determining future study needs. Once the practice test is scored, candidates cannot return to the test to review the questions. Performance on the practice test does not guarantee similar performance on the actual certification examination.

The PTC Online Testing System does not demonstrate the testing software used during the certification examinations. Those who purchase the online practice test should be aware that they will use a different testing platform when they take certification examinations at designated proctored testing centers.

The practice test is not a requirement for certification eligibility nor does it contribute in any way to success on the certification examination. There are many ways candidates should prepare for the certification examination. Candidates should use a variety of resources and consider their own education and experiences. Review the content outline and reference materials listed in the handbook for additional exam-related information.

FEE: \$70 by credit card

APPLY: Go to <https://secure.ptcny.com/webtest/> and select Online Practice for Nutrition Support Clinicians

FURTHER INFO: Visit www.ptcny.com or call Professional Testing Corporation at 212-356-0660

REFERENCES

The following references may be of some help in preparing for the examination. The list does not attempt to include all acceptable references nor is it suggested that the Certification Examination for Nutrition Support Clinicians is necessarily based on these references. The NBNSC does not endorse any reference or resource as an official study guide for the certification exam.

Practice Recommendations, Clinical Guidelines and Standards for Nutrition Support:

http://www.nutritioncare.org/guidelines_and_clinical_resources/

American Society for Parenteral and Enteral Nutrition (ASPEN) Board of Directors and Clinical Practice Committee. Definition of Terms, Styles, and Conventions Used in ASPEN Board of Directors-Approved Documents. American Society for Parenteral and Enteral Nutrition.

http://www.nutritioncare.org/guidelines_and_clinical_resources/

Ayers P, Guenter P, Holcombe B, Plogsted S. ASPEN Parenteral Nutrition Handbook, 2nd Edition. Silver Spring, MD: ASPEN, 2014

Ayers P, Adams S, Boullata J, et al. ASPEN Parenteral Nutrition Safety Consensus Recommendations. JPEN J Parenter Enteral Nutr, March 2014; vol. 38, 3: pp. 296-333.

Boullata J, Carney L, Guenter P. ASPEN Enteral Nutrition Handbook. Silver Spring, MD: ASPEN, 2010.

Boullata, J, Carrera A, Harvey, L, et al. ASPEN Safe Practices for Enteral Nutrition Therapy. JPEN J Parenter Enteral Nutr, 2017; vol 41, 1: pp 15-103.

Corkins M.R. et al. (Eds.) The ASPEN Pediatric Nutrition Support Core Curriculum, 2nd Edition. Silver Spring, MD: ASPEN, 2015.

Corkins M.R. et al. (Eds.) The ASPEN Pediatric Nutrition Support Handbook, 2nd Edition. Silver Spring, MD: ASPEN, 2015.

Mueller, C. et al. (Eds.) The ASPEN Adult Nutrition Support Core Curriculum, 3rd Edition. Silver Spring, MD: ASPEN, 2017.

Ross AC, Caballero B, Cousins RJ, Tucker KL, and Ziegler TR, (Eds.) Modern Nutrition in Health and Disease, 11th edition. Lippincott Williams & Wilkins, 2012.

Schäfer, R.W. Parks, K.C.H. Fearon, D.N. Lobo, N. Demartines, M. Braga O. Ljungqvist, C.H.C. Dejong. Guidelines for perioperative care for pancreaticoduodenectomy: Enhanced Recovery After Surgery (ERAS) Society recommendations. Clinical Nutrition 31 (2012) 817-830.

J. Nygren, J. Thacker, F. Carli, K.C.H. Fearon, S. Norderval, D.N. Lobo, O. Ljungqvist, M. Soop, J. Ramirez. Guidelines for perioperative care in elective rectal/pelvic surgery: Enhanced Recovery After Surgery (ERAS) Society recommendations. Clinical Nutrition 31 (2012) 801-816

U.O. Gustafsson, M.J. Scott, W. Schwenke, et al. Guidelines for perioperative care in elective colonic surgery: Enhanced Recovery After Surgery (ERAS) Society recommendations. Clinical Nutrition 31 (2012) 783-800

Ultimate Authority

If it appears that an answer to an exam question may vary depending on the reference used the following policy will be followed:

- 1) The ASPEN Practice Guidelines and Standards and Practice papers will be considered the final authority when questions of answers are raised. These papers are available at no charge on the ASPEN website: http://www.nutritioncare.org/guidelines_and_clinical_resources/
- 2) If the NBNSC determines that a guideline or standard from another organization differs from those published by ASPEN, it will only be considered authoritative if it is a peer reviewed document from a recognized organization and has been published after the publication date of the ASPEN document it disagrees with.
- 3) In the event that a question's answer is challenged the question and answer will be reviewed by the exam chairperson, the chairperson of the Executive board and, if necessary, by a third person with special knowledge of the field.

PTC19086