

Thank you for your interest in sitting for the American Clinical Board of Nutrition examination. We are pleased to provide you with this basic edition of the **Candidate's Handbook**.

The **full version of the Candidate's Handbook** is available for purchase by calling ACBN headquarters at (540) 635-8844. The MI version consisting of approximately 100 pages provides a detailed "walk through" of all aspects of the ACBN, its history, examination development and aspects of the examination itself. The MI version contains all the Bylaws, Policies and Procedures and forms necessary for you to fill out and return. These forms are available on the internet at the ACBN website [www.acbn.org](http://www.acbn.org) at no charge.

# **Candidate's Handbook**

## **General Information**

### **American Clinical Board of Nutrition**

The American Clinical Board of Nutrition (ACBN) is a national agency that certifies qualified health care providers seeking Board Certification in nutrition. The ACBN is accredited by the National Commission for Certifying Agencies (NCCA), a division of the National Organization for Competency Assurance (NOCA). The ACBN adheres to a number of rigorous criteria regarding the **conduct** of its credentialing program. All ACBN examinations are constructed and administered in accordance with methodologies recognized by psychometric and credentialing communities.

### **Purpose of the Certification Examination**

The **two** (2) part ACBN examination is intended to evaluate the competence of qualified health care providers in the field of clinical nutrition. The test addresses current areas defined and validated by subject-matter experts, educators and individuals working in their respective fields.

### **Reasons for Testing**

The ACBN examination is given to protect and assure the public that providers who hold a diplomate certificate in nutrition and certified by the ACBN, have attained a superior level of knowledge, skill, and professionalism in the practice of clinical nutrition.

To assure the public and patients that they have access to an effective health care service in the practice of **nutrition**.

To be able to quantify the knowledge retained by the certificate **holder(s)** from their education in the principles of clinical nutrition and to modify educational deficiencies brought out by the examination process.

To be able to set the certificate **holder(s)** apart from their peers in the healing professions in terms of their knowledge and use of the principles of current concepts in clinical nutrition.

By means of an examination the recommendations for educational processes and subject materials can regularly be improved and kept current with new and developing concepts.

## **Examination Development**

### **Examination Committee**

Examinations are developed by the Examination Committee (also referred to as the Examining Committee) of the American Clinical Board of Nutrition. Examination Committee members are subject matter experts who are responsible for constructing examinations within their disciplines. In addition to generating and updating specifications on which the examination is based, the Examination Committee writes test questions for the two part written examination and case histories. Test questions and elements of the case histories and written exam submitted by instructors, **subject-matter** experts, practitioners and others are **evaluated** by the Examination Committee. The Examination Committee also determines certification requirements and addresses standard setting issues. After construction by the Examination Committee, examinations are subsequently reviewed and approved by the ACBN governing board.

### **Competency Outline/Role Delineation Studies**

The American Clinical Board of Nutrition administers "competency-based" certification examinations. A **competency-based testing strategy** involves assessing whether or

not examinees possess the skills and knowledge required for successful performance in a **particular** job role.

The first step in the development of this type of test is to define the work role by listing the areas in which a certificant must be competent. Such a list may include a variety of aspects addressing knowledge of procedures, knowledge of theories, and application of theories in addition to a number of other knowledge and skill-related statements. In the development of the ACBN examination, the American Clinical Board of Nutrition currently uses the company **Castle Worldwide** in the development, distribution, psychometric evaluation and publication of a Field Study and Delineation Report. Test items developed by subject matter experts represent the consensus of experts regarding the composition of the respective work role. Test items are circulated to a random sampling of Diplomates with the American Clinical Board of Nutrition. These items are then classified into several dimensions. Once the number of questions exceeds the number of questions allowable on a particular test, examinations containing only a sample of the items are used. However, during test construction, the items are drawn from the bank in such a way as to ensure that **representative** samples of competencies are assessed. All test items are reviewed by **Castle Worldwide** to be psychometrically and grammatically correct. A **complete review of the role delineation study for the ACBN examination is available upon** request.

## **Examination Format and Content**

### **Examination Format**

**The ACBN examination consists of two parts:**

1. **Case Histories:** The candidate must write three (3) case histories on actual patients they have seen, from entrance history to follow-up and release. The criteria, methodology and format for writing case histories are a part of the 300 hour clinical nutrition educational program taught in the schools. This is a post graduate program and must be completed three months prior to sitting for the examination.

2. Written **Examination**: The ACBN written examination consists of **two** parts of 75 multiple choice questions in each part for a total of 150 questions. There is only one right answer for each question.

### **Examination Content: What is covered on the examination**

The general content outline for the certification examination is presented in a subsequent section of this manual. The percentages of questions indicated for each content area is explained in the Delineation Report.

All candidates are examined utilizing the same form of the comprehensive examination. No equivalent forms of the examination are needed.

### **Subjects Covered on the ACBN Examination Include**

1. The Biochemistry and Physiology of Nutrition.
2. The Nutrients and their Characteristics, Functions, and Metabolism.
3. The Diagnostic Evaluation in Clinical Nutrition.
4. Nutritional Considerations in Clinical Geriatrics.
5. Nutrition in Infancy, Adolescence, Pregnancy, and Lactation.
6. Dietary and Nutritional Aspects, and the General Management of General Disease:
  - a. Oral Cavity
  - b. G.I. Tract
  - c. Cardiovascular – Pulmonary Disease
  - d. Urogenital System
  - e. Diabetes **Mellitus** and Hypoglycemia
  - f. Musculo – Skeletal Disorders
  - g. Fever and Infections
  - h. Blood Disorders
  - i. Disorders of the Endocrine System and Metabolism
  - j. Trauma
7. Nutrition and the Physiology of Stress
8. Dietary and Nutritional Aspects and Management of Neurological and **Neuropsychiatric** Disorders

9. Nutrient – Nutrient and Drug – Nutrient **Interactions** and Reactions
10. Radiographic and Advanced Imaging Diagnosis of Common Metabolic Disorders
11. Herbs, Botanicals, and **Homeopathy**
12. Longevity and Nutrition
13. How to Perform and Write Research Papers

### **Topics Covered on the ACBN Examination**

1. Nutritional consultation, case history & physical examination including anthropomorphic measurements.
2. Nutritionally related biochemistry, physiology & pathology to include carbohydrates, proteins, fats, energy metabolism, vitamins, minerals, trace elements, and water.
3. Diagnostic evaluation in clinical nutrition, including functional laboratory analysis by blood, stool, saliva, hair, urine, special studies and radiography
4. Geriatrics – anti-aging, longevity and degenerative diseases.
5. Pediatric nutrition, pregnancy, and lactation.
6. Female nutrition including **menarche** through menopause. This is also to include male nutrition including prostate and **urological** problems.
7. **G.I.** nutrition including paraenteral nutrition.
8. Renal nutrition and male specific problems.
9. Endocrine and metabolic disorders, including **stress**.
10. Sports nutrition including trauma.
11. Muxulo-skeletal disorders and syndromes.
12. Neurological and psychiatric disorders including neurotransmitters and neuromodulators.
13. Herbs, botanicals, and homeopathy, nutrient-nutrient, drug-nutrient, and **herb-drug** interactions and reactions.
14. How to write a **scientific paper/case** history for publication and perform literature searches.
15. Allergies and immunological disorders including **HIV/AIDS** and infections.
16. Cardiovascular and pulmonary nutrition.
17. **Bariatrics** including obesity, weight loss and eating disorders.
18. Nutritional considerations in cancer.

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19. Psychology of nutrition, food preparation and public issues.
20. Cultural, religious, and ethnic dietary concerns.

## Examination Performance Standards

### Cut Scores

To determine the cut score or 'passing grade' for the ACBN examination, each examination element is reviewed independently by qualified experts in the field and through Castle Worldwide's psychometricians and grammarians.

Item raters begin by identifying which answer choices the minimally – competent health care provider should be able to eliminate as clearly incorrect. The number of remaining answer choices determines the probability of choosing the correct answer. The average of all reviewers' judgments determines the **minimum** passing level for each text item.

The odds of answering an item **incorrectly** can be thought as the item's difficulty. Each item has its own difficulty. After the Examining **Committee** has reviewed each item, including which of the four (4) responses to each item the minimally-competent examinee should be able to perceive as incorrect, the judge's ratings are pooled to obtain the minimum passing level. The minimum passing level settings for both parts of the ACBN examination are then totaled to determine the minimum passing **level** for the entire examination.

All ACBN examinations consist of **two** parts, the writing of three (3) case histories and the 150 question written examination.

**A cut score report is provided at the end of this manual.**

## Passing the Examination and Re-examination

The minimum **passing score** for the **case histories** is 30 out of a maximum of 40 points.

The minimum **passing grade for the written multiple choice examination is 99** out of a **maximum** of 150 points.

A candidate who **has** failed one or more parts of the **ACBN** examination may **elect** to be retested. In **order** to retake any **one** of the **two** parts of **the ACBN** examination; writing of 3 case histories\* or the **150 written multiple choice** test, a candidate must submit, in writing, a request to do so accompanied with **check** payable to the **ACBN** in the amount of \$300 for each part they wish to retake.

A candidate **may** retake any part of the **ACBN** examination within three (3) years of **the** initial, **formal** application s u b m i t . A candidate **may elect** to retake any part of **the** exam three times.

At **the discretion** of the Board, a request to sit for any **portion** of the **ACBN** examination a fourth time **may** be considered. To be considered a fourth and final **time**, the **candidate** must **provide evidence** of having had a **preceptorship** by a diplomate **acceptable** to the Board for a period of not less than **one** year, and upon the **recommendation** of **the** preceptor.

If a candidate should fail a fourth attempt to **successfully** pass the **ACBN** examination, it will be necessary for them to submit to **taking** the entire examination, as well as providing **satisfactory** evidence of completing and **additional** one - hundred (100) hours of further education in the area of nutrition prescribed by the Board.

## Examination Administration

### Application

The **formal application** to sit for the **ACBN** examination may be obtained online at [www.acbn.org](http://www.acbn.org). or by **calling** ACBN headquarters at (540) 635-8844. An **application** is

provided at the end of this manual. Please be sure to fill out all requested information carefully and legibly.

## **Authorization to Test**

### **Qualifications to Test**

All applicants interested in sitting for the ACBN examination must:

1. Be a licensed professional health care provider who has successfully completed 300 clock hours of specialized postgraduate training in nutrition from a college, university, institution, foundation, or agency holding status **with** an accrediting agency recognized by the U.S. Department of Education, or an agency having a reciprocal agreement with the recognized agency **OR** a health care provider who has completed a 300 clock hour residency program from a college, university, institution, foundation or agency holding status with an accrediting agency recognized by the U.S. Department of Education, or an agency having a reciprocal agreement with the recognized agency.
  - A. Residency programs must be approved by the Board.
  - B. Residency programs must file with the Board, the **number of hours** of teaching experience, research and training that is performed by the candidate.
  - C. A syllabus of the residency program must be submitted to the Board.
2. Candidates must write a nutrition oriented article or paper acceptable by the Board for publication in Board approved journals, such, but not limited to:
  - J. Nutritional Perspectives*
  - Journal of Nutrition*
  - JMPT*
  - Am. J. Clinical Nutrition*
  - J. Chiropractic Medicine*
  - Nutrition Reviews*
3. Candidates must have had a minimum of two (2) years practice experience in nutrition prior to sitting for the ACBN examination.

Once a candidate's application is complete and has been officially approved by the ACBN Examination Committee' an authorization letter will be sent to the candidate.

4. Applicant's Right of Appeal. An applicant deemed ineligible to sit for the ACBN examination may appeal the Boards **determination** (See Policies and Procedures XIV – Grievances, Discipline and Appeals.

### **Identification**

Each candidate authorized to sit for the ACBN examination will receive in their authorization letter, a four **(4)** digit personal identification number (PIN). This number is to be used on all tests, forms and test results. During the actual examination, name badges will be provided and worn by the candidates for the proctor's ability to identify each person authorized to be in the room. The name badge will not have the candidate's PIN number, but will supply the candidate's name and picture for identification purposes only.

Candidates arriving at the examination site, prior to receiving their name badge and before entering the examination room, must present to the proctors at least 2 forms of identification; one of these must bear a recent photo. Candidates must present one of the following as the primary form of identification: Passport, **photo-bearing** driver's license with signature, photo-bearing employee identification card, or military identification. The secondary form of identification may include any of the above or a credit card. Examinees not providing acceptable identification will be refused admission to test and will be required to pay a re-examination fee and **reschedule** another testing appointment.

### **Cost of Examination**

Each candidate must submit, as part of the formal application, a non - refundable fee of \$995 payable to the ACBN using a certified check.

### **Setting a Date and location for the Examination**

A minimum of **6** candidates must be ready to sit for the ACBN examination before a date and location is announced. The Board will make every effort to place the

location of the examination that is closest to the majority of candidates applying to sit for the examination. The date of an examination will be within four (4) months after having had the minimum number of candidates apply to sit.

### **The Day of the Examination**

Examinations are administered as scheduled in advance with the ACBN. Candidates are responsible for their **airfare/transportation**, lodging and food **during** this time. **Air/ground** and hotel arrangements should be made with the ACBN **travel agency: Trump Travel (800) @ 937-3878**.

All personal belongings, including but not limited to: overcoats, purses, handbags, backpacks, cameras, tape recorders, cell phones will be left with the proctors before entering the examination room.

If it becomes necessary for the examinee to be excused to a restroom, he or she will be escorted by a proctor to and from the restroom.

No visitors are permitted in the examination room.

All cell phones will be turned off.

### **Promptness**

Examinees are advised to be at the test administration site at least 30 minutes prior to the scheduled examination time to allow for check-in. Examinees **arriving** late may be refused admittance by the ACBN proctors. Should this occur, the candidate will be required to pay a re-examination fee and reschedule **another** testing appointment.

## **Important Information for all examinees**

### **Questionable Test – Taking Behavior**

Proctors have been given specific instructions regarding questionable test – taking behavior, or “cheating”. Such behavior includes, but not limited to: examinees copying from one another, examinees speaking to one another during the test administration, or copying from notes.

If a proctor is witness to such behavior, they have been instructed that to avoid any disruption to the decorum, the examinee **will** be allowed to **finish** that part of the examination. Once the exam part is **completed**, the proctor **will** immediately gather up all test materials from the examinee in question and advise them of the infraction. That part of the examination will not be graded. Those examinees should then contact ACBN headquarters to schedule another examination administration.

### **Score Cancellation**

The American Clinical Board of Nutrition reserves the right to cancel any examination score if, in the opinion of the Board, there is any reason to question the score's validity. The Board also retains the right to investigate instances of examinee misconduct.

Score cancellation circumstances may include, but are not necessarily limited to the following cases of misconduct; copying from notes, copying from others, speaking to other during test administration, giving assistance to other examinees, or removing test materials from the administration room. If the Board should exercise the right of cancellation, the **examinee(s)** will be offered the opportunity to retake the exam **at** the next scheduled testing. All required fees will be in force.

The Executive Board member of the ACBN overseeing the examination proceedings, acting under authority of the Board, renders decisions regarding score cancellations. **Significant score increases upon retesting may also be investigated to ensure the authenticity of results.**

## **Special Accommodations**

The American Clinical Board of Nutrition is committed to ensuring that no individual is deprived of the opportunity to take the examination solely by reason of disability and adheres to the standards of the **Americans with Disabilities Act of 1990**. Special accommodations may be provided for candidates with documented disabilities. Candidates requesting special **provisions** must state their needs in writing as shown on the formal application form. Requests should include, but are not **limited** to: documentation of the disability, accommodations requested for the examination and descriptions of past accommodations provided in other cases.

Whenever possible, the ACBN office will determine applicant eligibility for special provisions. Candidates should allow the ACBN reasonable time to review the request, and if warranted, make provisions to provide an accommodation. The examination proctors **will** be notified if special considerations are granted.

## **Necessity to Bring Own Interpreter if Language other than English**

All ACBN examinations, materials, and supporting documentation are in English. A candidate who is Board eligible to sit for the ACBN examination, or a certificant who is required or wishes to retake any part of the ACBN examination and does not know the English language, Must provide for an interpreter.

The interpreter will be selected by the ACBN. The candidate or certificant requesting an interpreter will be responsible for any and all fees for securing an interpreter, include their **airfare/transportation**, hotel, food, as well as a fee for their services.

## **Examination Results**

### **Scoring Procedures**

Following scoring of the examination, examinees will receive a letter notifying them of **their examination performance**. **Passing examinees receive a letter** indicating the passing score on the examination. Candidates who have failed will

receive a letter advising them that they have been unsuccessful in one or more parts of the examination. Unsuccessful candidates will be provided information regarding the parts of the examination in which they received low scores. Unsuccessful candidates may consider these areas of weakness in preparation for retesting.

### **Processing Time**

Examination results are made available **6 – 8** weeks upon completion of the computer based and hand written examination.

### **Posting of Scores**

While the examinees will receive a letter notifying them of their examination results, these same results will also be posted on the **ACBN website**, using only the examinee's confidential **PIN** number for identification. This is necessary for all **ACBN** stakeholders to view.

### **Score Verification and Rescoring By Hand**

Examinees receiving failing scores may request rescoring of the answer sheet that they completed. Rescoring requests must be **submitted** in writing to **ACBN** headquarters accompanied by a **\$50.00** rescoring fee. Upon receipt of a written request and required fee, the examinee's answer **sheet(s)** will be graded by hand. The **ACBN** will notify of the hand scoring results. Rescoring requests must be received no later than **60** days following the original release of results for the particular examination or part thereof. requests received after **60** days will not be honored. Similarly, requests for hand scoring of prior examinations **will** not be honored [unless they were administered less than **60** days prior to the request].

The **ACBN** does not encourage examinees with close to passing to request hand scoring. **Quality control procedures are performed during the time of initial** scoring. These control procedures include the hand scoring of a sample answer sheet to

verify the corrections of the machine scored key. Therefore, it is highly unlikely that examination results will change from fail to pass if rescored by hand.

### **Results Appeals Procedures**

Candidates receiving a validated failing grade have the right to appeal. An unsuccessful candidate wishing to review an examination must file a written request with the ACBN within 60 days after the original release of test performance results, or within 30 days after the release of hand scoring results, whichever comes last. Reviews may be held at a Board recommended location. However, the requesting examinee will be required to pay for any and all travel, lodgings, food or other expenses incurred by the ACBN for the review process.

If the examinee requests their personal appearance at the review, they may do so at their own expense. They may not be accompanied by any other person other than the ACBN examining committee member. Prior to the review, the examinee will be asked to present photo identification: driver's license, employee identification card, passport, etc. The examinee will receive a copy of the test in question and a copy of his/her answer sheet.

In the presence of the examining committee member, the candidate may review the examination for a maximum of one (1) hour unless more time is specifically requested. The examining committee member can not defend the examination, attempt to answer any questions, or refute any question(s) during the review process. The candidate will be provided with a review form on which to offer comments, questions, or claims of error contained in the examination. The review form will be presented to the entire examining committee for review and comment and will be retained at ACBN headquarters.

Although bound reference books will be permitted, tape recorders and other reproduction devices are prohibited in the review room. The candidate will be permitted to write only on the review form, and will not be allowed to remove anything from the area. The candidate will be required to sign an agreement to this effect prior to the review. Should it be necessary for the candidate to leave the review area at any time, all materials will be collected and returned to the candidate upon their return.

Reexamination will not be permitted within 30 days of the date upon which a review took place.

## **Maintenance of Examination Quality and Test Security**

### **Collection and Review of Statistical Indices**

After each answer sheet is scored, statistical reports are generated that show how each question in the test performed. The results of these analyses are reviewed by the examining committee who makes the final determination regarding the suitability of a particular question and the answer to that question for future tests.

### **Test Security**

All examination materials, including draft materials, electronic forms, reports, answer sheets and data analyses files will be retained in a secure location and inventoried in detail.

All validation materials, including the **production** of job analysis data, content specifications, examination blueprints, and source documents are retained, inventoried and **controlled** with limited access in a secure location.

Personnel of the Board, identified Board members and consultants will have access to the assessment instruments and associated data.

Documentation logs will be kept, outlining who is assessing which materials on specific dates and times.

All assessment materials, test materials, answer sheets, blueprints and source documents will have control numbers for quality control **and security**.

Electronic **information** will be backed up routinely and all efforts to safeguard electronic data, such as fire walls will be used. **Electronic** data will be maintained indefinitely while **printed material** will be shredded **after seven (7) years**.

**Personnel** of the Board, identified Board members and **consultants** must sign a confidentiality form prior to securing any test or candidate **information**.

All candidates are assigned a four digit personal identification number (PIN) to ensure test and **identification** security.

All examinations will be sealed by the **examiner(s) responsible for** the exam; to be broken only by **those** same examiners **responsible** for administering the exam and by affixing their signature, attest to **the security** of the examination.

## **Applying to Take the ACBN Examination**

### **Filing an Application**

Requests for applications should be made to:

ACBN Headquarters  
c/o Ms. Bonnie Sealock, Correspondence Secretary  
6855 Browntown Road  
Front Royal, VA 22630

Voice: (540) 635 8844  
Fax: (540) 635 3669  
Email: [conacbn@shentel.net](mailto:conacbn@shentel.net)

Applications can be downloaded from **the ACBN website**: [www.acbn.org](http://www.acbn.org)