

CANDIDATE HANDBOOK

**Commission
on Dietetic
Registration**

the credentialing agency for the
eat right. Academy of Nutrition
and Dietetics



TABLE OF CONTENTS	PAGE
INTRODUCTION	1
TESTING AGENCY	1
STATEMENT OF NONDISCRIMINATION	1
CONFIDENTIALITY	1
EXAMINATION APPOINTMENTS	1
HOLIDAYS	2
ASSESSMENT CENTER LOCATIONS	2
SPECIAL ARRANGEMENTS FOR CANDIDATES WITH DISABILITIES	2
TELECOMMUNICATION SERVICES FOR THE DEAF	3
RESCHEDULING OR CANCELING AN EXAMINATION APPOINTMENT	3
INCLEMENT WEATHER, POWER FAILURE OR EMERGENCY	3
EXAMINATION CONTENT	4
COPYRIGHTED EXAMINATION QUESTIONS	4
ON THE DAY OF YOUR EXAMINATION	4
SECURITY	4
PERSONAL BELONGINGS	5
EXAMINATION RESTRICTIONS	5
MISCONDUCT	5
COMPUTER LOGIN	6
PRACTICE EXAMINATION	6
TIMED EXAMINATION	6
CANDIDATE COMMENTS	6
FOLLOWING THE EXAMINATION	7
PASS/FAIL SCORE DETERMINATION	7
QUALITY CONTROL/SCORING	7

TABLE OF CONTENT CONTINUED	PAGE
SCORES CANCELLED BY THE CLIENT OR AMP	7
IF YOU PASS THE EXAMINATION	7
RE-ESTABLISHING ELIGIBILITY	7
FAILING TO ARRIVE FOR AN EXAMINATION	7
DUPLICATE SCORE REPORT	7
APPEALS PROCESS	8
RECERTIFICATION	8
CONTENT OUTLINE	9
SAMPLE QUESTIONS- MULTIPLE CHOICE	17
SAMPLE QUESTIONS- KEY FEATURE	18
REFERENCE LIST	19
NOTES PAGE	20
REQUEST FOR SPECIAL EXAMINATION ACCOMODATIONS FORM	21
DOCUMENTATION OF DISABILTY-RELATED NEEDS	22

Candidate Handbook

INTRODUCTION

Specialty Board Certification for registered dietitians is offered by the Commission on Dietetic Registration (CDR), the credentialing agency for the Academy of Nutrition and Dietetics in the areas of gerontological nutrition, oncology nutrition, pediatric nutrition, renal nutrition and sports dietetics. CDR Specialty Board Certification is granted in recognition of the applicant’s documented practice experience and successful completion of a computerized examination in the specialty area. There are two examination windows for the Board Certification Specialist in Renal Nutrition, one in May and one in November. The examination consists of 150 multiple-choice questions and key feature questions. It is essential that you keep this Candidate Handbook readily available for reference until you have successfully completed the examination. You are responsible for knowing its contents.

TESTING AGENCY

Applied Measurement Professionals, Inc. (AMP) is currently the professional testing agency retained by CDR to assist in the development, administration, scoring, and analysis of this specialty examination. AMP is a research and development firm that conducts professional competency assessment research and provides examination services for a number of health practitioner credentialing programs.

STATEMENT OF NONDISCRIMINATION

CDR and AMP do not discriminate among candidates on the basis of race, color, creed, gender, religion, national origin, disability or marital status.

CONFIDENTIALITY

Information about candidates for testing and their examination results are considered

confidential. Test question drafts and other materials used to create examination questions (except for test content outlines or reference lists) are secure and confidential. All such materials shall be kept in secure, locked storage, accessible only by authorized personnel, and not disclosed to or shared with others. All questions written and materials developed for questions are considered a “work for hire,” and remain the property of CDR. Question writers are not allowed to conduct “review courses” or other programs designed to prepare candidates to take a CDR Specialty examination. Studies and reports concerning candidates will contain no information identifiable with any candidate, unless authorized by the candidate.

EXAMINATION APPOINTMENTS

After you have received notification of your eligibility from CDR, and about one month before the examination dates, you may schedule an examination appointment by one of the following methods. Be prepared to confirm a date and location for testing and to provide your CDR registration number as your unique identification number.

1. Schedule Online:

Follow these steps:

- Go to www.goAMP.com
- Select “Candidates”
- Select “Category”- “Healthcare”
- Select “Program”- “Commission on Dietetic Registration”
- Select “Examination” – “Specialist in Renal Nutrition Examination”
- Click On “Register for this Exam”
- If you have never used AMP’s online system before you will have to register as a new user by clicking on “New user?”

- After scheduling your examination appointment online you will receive an email confirmation.

2. Telephone Scheduling:

Call AMP at 888-519-9901 to schedule an examination appointment. This toll-free number is answered from 7:00 a.m. to 9:00 p.m. (Central Time) Monday through Thursday, 7:00 a.m. to 7:00 p.m. on Friday and 8:30 a.m. to 5:00 p.m. on Saturday. You will not receive an e-mail confirmation if you schedule by phone.

If special accommodations are requested, please submit the Request for Special Examination Accommodations form included at the end of the Handbook prior to contacting AMP.

The examinations are administered by appointment only Monday through Friday (there may be some limited Saturday appointments available at select locations) at 9:00 a.m. and 1:30 p.m. Individuals are scheduled on a first-come, first-served basis. Refer to the chart below.

If AMP is called by 3:00 p.m. Central Time on...	Depending on availability, your examination may be scheduled as early as...
Monday	Wednesday
Tuesday	Thursday
Wednesday	Friday/Saturday
Thursday	Monday
Thursday	Tuesday

When the appointment is made, the applicant will be given a time to report to the Assessment Center. Please make a note of it since an admission letter will not be sent. The applicant

will only be allowed to take the examination for which the appointment has been made. No changes in examination type will be made at the Assessment Center. **UNSCHEDULED CANDIDATES (WALK-INS) WILL NOT BE ADMITTED** to the Assessment Center.

HOLIDAYS

The examinations are not offered on the following holidays:

- New Year’s Day
- Martin Luther King Day
- Presidents’ Day
- Good Friday
- Memorial Day
- Independence Day (July 4)
- Labor Day
- Columbus Day
- Veterans’ Day
- Thanksgiving Day (and the following Friday)
- Christmas Eve Day
- Christmas Day
- New Year’s Eve Day

ASSESSMENT CENTER LOCATIONS

Examinations are administered by computer at over 180 Assessment Centers geographically distributed throughout the United States. Assessment Center locations, detailed maps and directions are available on AMP’s website, www.goAMP.com. Specific address information will be provided when a candidate schedules an appointment.

SPECIAL ARRANGEMENTS FOR CANDIDATES WITH DISABILITIES

AMP complies with the Americans with Disabilities Act and strives to ensure that no individual with a disability is deprived of the opportunity to take the examination solely by reason of that disability. AMP will provide reasonable accommodations for candidates with disabilities. Candidates requesting special accommodations must call AMP at 1-888-519-9901 to schedule their examination.

Wheelchair access is available at all established Assessment Centers. Candidates must advise AMP at the time of scheduling that wheelchair access is necessary.

Candidates with visual, sensory or physical disabilities that would prevent them from taking the examination under standard conditions may request special accommodations and arrangements.

Verification of the disability and a statement of the specific type of assistance needed must be made in writing to CDR using the form at the end of the Candidate Handbook at least 45 calendar days prior to your desired examination date. Please inform AMP of your need for special accommodations when scheduling your examination time.

TELECOMMUNICATION DEVICES FOR THE DEAF

AMP is equipped with Telecommunication Devices for the Deaf (TDD) to assist deaf and hearing-impaired candidates. TDD calling is available 8:30 a.m. to 5:00 p.m. (Central Time) Monday-Friday at 913-895-4637. This TDD phone option is for individuals equipped with compatible TDD machinery.

RESCHEDULING OR CANCELING AN EXAMINATION APPOINTMENT

A candidate may reschedule an appointment for examination at no charge once by calling AMP at 1-888-519-9901 at least two business days prior to the scheduled testing session. (See table below.)

If your examination is scheduled on...	Your must call AMP by 3:00 p.m. Central Time to change your appointment by the previous...
Monday	Wednesday
Tuesday	Thursday
Wednesday	Friday
Thursday	Monday
Friday	Tuesday

A candidate who does not schedule his/her examination appointment during the current test administration window may have their application and examination fee transferred to the next test administration free of charge by contacting CDR at 800-877-1600, ext 4705 or 4816 or specialists@eatright.org. Candidate’s eligibility and examination fee will only extend one test administration window. An application may need to be updated if a candidate would like to extend their eligibility more than one test administration window.

A candidate who does not schedule his/her examination appointment after confirmation of eligibility may request a full refund if they do not wish to test during the current or subsequent test administration window. Requests for refunds must be made in writing and mailed, faxed or e-mailed to CDR. If the candidate wishes to take the examination again a new application and examination fee will need to be resubmitted.

A candidate who wishes to reschedule his/her examination appointment, but fails to contact AMP at least two business days prior to the scheduled testing session will be required to pay a \$85 fee to reschedule the examination. The fee applies even if the candidate waits until the next test window to reschedule their appointment. In order to reschedule your appointment, you will need to contact CDR at 800-877-1600, ext. 4705 or 4816 or specialists@eatright.org. Note that your examination eligibility may expire after the next test administration window.

INCLEMENT WEATHER, POWER FAILURE OR EMERGENCY

In the event of inclement weather or unforeseen emergencies on the day of an examination, AMP will determine whether circumstances warrant the cancellation, and subsequent rescheduling, of an examination. The examination will usually not be rescheduled if the Assessment Center personnel are able to open the Assessment Center.

Candidates may visit AMP's website at www.goAMP.com prior to the examination to determine if AMP has been advised that any Assessment Centers are closed. Every attempt is made to administer the examination as scheduled; however, should an examination be canceled at an Assessment Center, all scheduled candidates will receive notification following the examination regarding rescheduling or reapplication procedures.

If power to an Assessment Center is temporarily interrupted during an administration, your examination will be restarted. The responses provided up to the point of interruption will be intact, but for security reasons the questions will be scrambled.

EXAMINATION CONTENT

The examination consists of 150 multiple-choice questions and key feature questions (130 questions scored questions and 20 pretest questions), and is constructed using approximately the number of items indicated in the Content Outline. Pretesting is done to see how well items perform before they are used in the scored portion of the examination. The pretest questions cannot be distinguished from those that will be scored, so it is important that all questions are answered to the best of your ability. A key feature question is a multiple choice question that requires more than one answer (see sample question toward the end of this handbook). Candidates will have 3 hours to complete the examination.

COPYRIGHTED EXAMINATION QUESTIONS

All examination questions are the copyrighted property of CDR. It is forbidden under federal copyright law to copy, reproduce, record, distribute or display these examination questions by any means, in whole or in part. Doing so may subject you to severe civil and criminal penalties.

ON THE DAY OF YOUR EXAMINATION

On the day of your examination appointment, report to the Assessment Center no later than your scheduled testing time. Once you enter the building, look for the signs indicating AMP Assessment Center check-in. A CANDIDATE WHO ARRIVES MORE THAN 15 MINUTES AFTER THE SCHEDULED TESTING TIME WILL NOT BE ADMITTED.

To gain admission to the Assessment Center, a candidate needs to present two forms of identification, one with a current photograph. Both forms of identification must be current and include the candidate's current name and signature. The candidate will also be required to sign a roster for verification of identity.

Acceptable forms of identification include a current:

1. Driver's license with photograph
2. State ID card with photograph
3. Passport
4. Military ID card with photograph
5. Social security card (secondary form)

Employment ID cards, student ID cards and any type of temporary identification are NOT acceptable as primary identification. Candidates are prohibited from misrepresenting their identities or falsifying information to obtain admission to the Assessment Center.

SECURITY

CDR and AMP maintain examination administration and security standards that are designed to ensure all candidates are provided the same opportunity to demonstrate their abilities. The Assessment Center is continuously monitored by audio and video surveillance equipment for security purposes.

The following security procedures apply during the examination:

- Examinations are proprietary. No cameras, notes, tape recorders, Personal Digital Assistants (PDAs), pagers or cellular phones are allowed in the testing room. Possession of a cellular phone or other electronic devices is

strictly prohibited and will result in dismissal from the examination.

- Only silent, non-programmable calculators without alpha keys or printing capabilities are allowed in the testing room.
- No guests, visitors or family members are allowed in the testing room or reception areas.

PERSONAL BELONGINGS

No personal items, valuables, or weapons should be brought to the Assessment Center. Only wallets and keys are permitted. Coats must be left outside the testing room. You will be provided a soft locker to store your wallet and/or keys with you in the testing room. You will not have access to these items until after the examination is completed. Please note the following items will not be allowed in the testing room except securely locked in the soft locker:

- watches
- hats

Once you have placed everything into the soft locker, you will be asked to pull out your pockets to ensure they are empty. If all personal items will not fit in the soft locker you will not be able to test. The site will not store any personal belongings.

If any personal items are observed in the testing room after the examination is started, you will be dismissed the administration will be forfeited.

EXAMINATION RESTRICTIONS

- Pencils will be provided during check-in.
- You will be provided with one piece of scratch paper at a time to use during the examination, unless noted on the sign-in roster for a particular candidate. You must return the scratch paper to the supervisor at the completion of testing, or you will not

receive your score report.

- No documents or notes of any kind may be removed from the Assessment Center.
- No questions concerning the content of the examination may be asked during the examination.
- Eating, drinking or smoking will not be permitted in the Assessment Center.
- You may take a break whenever you wish, but you will not be allowed additional time to make up for time lost during breaks.

MISCONDUCT

If you engage in any of the following conduct during the examination you may be dismissed, your scores will not be reported and examination fees will not be refunded. Examples of misconduct are when you:

- create a disturbance, are abusive, or otherwise uncooperative;
- display and/or use electronic communications equipment such as pagers, cellular phones, PDAs;
- talk or participate in conversation with other examination candidates;
- give or receive help or are suspected of doing so;
- leave the Assessment Center during the administration;
- attempt to record examination questions or make notes;
- attempt to take the examination for someone else;
- are observed with personal belongings, or
- are observed with notes, books or other aids without it being noted on the roster.

COMPUTER LOGIN

After your identification has been confirmed, you will be directed to a testing carrel. You will be instructed on-screen to enter your registration number. You will take your

photograph which will remain on screen throughout your examination session. This photograph will also print on your score report.

PRACTICE EXAMINATION

Prior to attempting the examination, you will be given the opportunity to practice taking an examination on the computer. The time you use for this practice examination is NOT counted as part of your examination time or score. When you are comfortable with the computer testing process, you may quit the practice session and begin the timed examination. Please note that this practice examination is to help you become familiar with the computerized examination format; it is possible that the problems will not be nutrition related.

TIMED EXAMINATION

Following the practice examination, you will begin the timed examination. Before beginning, instructions for taking the examination are provided on-screen.

The computer monitors the time you spend on the examination. The examination will terminate if you exceed the time allowed. You may click on the "Time" box in the lower right-hand corner of the screen or select the Time key to monitor your time. A digital clock indicates the time remaining for you to complete the examination. The Time feature may be turned off during the examination.

Only one examination question is presented at a time. The question number appears in the lower right hand corner of the screen. Choices of answers to the examination question are identified as A, B, C, or D. You must indicate your choice by either typing in the letter in the response box in the lower left hand of the computer screen or clicking in the option using the mouse.

To change your answer, enter a different option by pressing the A, B, C, or D key or by clicking on the option using the mouse. You may change your answer as many times as you wish during the examination time limit.

To move to the next question, click on the forward arrow (>) in the lower right portion of the screen or select the NEXT key. This action will move you forward through the examination question by question. If you wish to review any question or questions, click the backward arrow (<) or use the left arrow key to move backward through the examination.

An examination question may be left unanswered for return later in the examination session. Questions may also be bookmarked for later review by clicking in the blank square to the right of the Time button. Click on the hand icon or select the NEXT key to advance to the next unanswered or bookmarked question on the examination. To identify all unanswered and bookmarked questions, repeatedly click on the hand icon or press the NEXT key. When the examination is completed, the number of examination questions answered is reported. If not all questions have been answered and there is time remaining, return to the examination and answer those questions. Be sure to provide an answer for each examination question before ending the examination. There is no penalty for guessing. Also if more than one answer is required it will be indicated with the question.

CANDIDATE COMMENTS

During the examination, comments may be provided for any question by clicking on the button displaying an exclamation point (!) to the left of the Time button. This opens a dialogue box where comments may be entered. Comments will be reviewed, but individual responses will not be provided. Once you leave the test center, if you still have comments you may forward written comments to CDR at specialists@eatright.org. All comments sent to CDR should be to the attention of Specialty Certification and sent to CDR no later than five business days after the close of the examination window. Please note that the appeal process is different.

FOLLOWING THE EXAMINATION

After completing the examination, candidates are asked to complete a short evaluation of their examination experience. Candidates are then instructed to report to the examination proctor to receive their examination completion report; this is not a score report. Score reports will be mailed to candidates approximately 6-8 weeks following the last date of the examination window. Scores are reported in written form only. Scores are not reported over the telephone, by electronic mail, or by facsimile.

PASS/FAIL SCORE DETERMINATION

The methodology used to set the minimum passing score is the Angoff method, based upon data gathered during the performance of a Passing Point Study by a panel of experts in the field. The experts evaluated each question on the examination to determine how many correct answers are necessary to demonstrate the knowledge and skills required to pass this examination portion. Your ability to pass the examination depends on the knowledge and skill you display, not on the performance of other candidates.

Passing scores may vary slightly for each version of the examination to accommodate for variances in examination difficulty. To ensure fairness to all candidates, a process of statistical equating is used. Slight variations in difficulty level are addressed by adjusting the passing score up or down, depending on the overall difficulty level statistics for the group of scored questions that appear on a particular version of the examination.

QUALITY CONTROL/SCORING

Before the final scores are released to the candidate, each examination undergoes quality control checks. A thorough item analysis is completed and is used a part of the statistical review of the performance of the examination. CDR, AMP and subject matter experts (SME's) review examination data and candidate comments. All these materials are reviewed during a key validation meeting with SME's to

ensure that the scoring of the questions is appropriate.

SCORES CANCELLED BY THE CLIENT OR AMP

CDR and AMP are responsible for the validity and integrity of the scores they report. On occasion, occurrences, such as computer malfunction or misconduct by a candidate, may cause a score to be suspect. CDR and AMP reserve the right to void or withhold examination results if, upon investigation, violation of its regulations is discovered.

IF YOU PASS THE EXAMINATION

All candidates who pass the examination will receive a wall certificate, specialty identification card and orientation materials about four weeks after they receive their score report.

RE-ESTABLISHING ELIGIBILITY

A candidate who fails the examination should contact CDR at 1-800-877-1600 ext 4705 or 4816 or specialists@eatright.org to verify which sections of the application may need to be resubmitted. The whole application may not need to be submitted again.

FAILING TO ARRIVE FOR AN EXAMINATION

A candidate who fails to report for an examination forfeits the registration and all fees paid to take the examination. A new application form and examination fee are required to reapply for examination.

DUPLICATE SCORE REPORT

Candidates may purchase additional copies of their results at a cost of \$25 per copy. Requests must be submitted to CDR, in writing. The request must include the candidate's name, registration number, mailing address, telephone number, date of examination and examination taken. Submit this information with the required fee payable to CDR in the form of a check, money order or cashier's check. Duplicate score reports will be mailed within approximately two weeks after receipt of the request and fee.

APPEALS PROCESS

The Appeals Panel of the Commission on Dietetic Registration evaluates requests to review adverse decisions. The applicant must submit a written petition to the Commission on Dietetic Registration, 120 South Riverside Plaza, Suite 2000, Chicago, Illinois 60606-6995, within seven (7) calendar days after notification of an adverse decision. A \$20 Appeal Review Fee will be required with every appeal submitted. Appeals submitted without the \$20 fee will not be considered by the CDR Appeals Panel. Appeal letters should be sent to:

Attn: Specialty Certification
Commission on Dietetic Registration
120 S Riverside Plaza, Ste 2000
Chicago, IL 60606-6995

RECERTIFICATION

At the end of the specialist five-year certification period, specialists who wish to recertify must be a current Registered Dietitian with CDR and:

1. Successfully complete an eligibility application – including the required minimum number of specialty practice hours
2. Submit an examination fee
3. Pass the specialty examination

The reasoning for requiring recertification testing is that the Specialty Board Certification is a practice credential, a credential that represents to the public that the certificant possesses the knowledge, skills and experience to function effectively as a specialist in that area. The nature of the knowledge and skills to practice at a specialty level is subject to change due to technological and scientific advances. Recertification testing helps to provide continuing assurance that the certified specialist has indeed maintained their knowledge in the specialty area.



Commission of Dietetic Registration
Board Certified Specialist in Renal Nutrition
Certification Examination Content Outline

Effective Date: November 2012

© 2012. CDR. All rights reserved.

I. Nutrition Assessment and Re-assessment (36%)

A. Food/Nutrition-Related History

1. Evaluate current nutrition intake, losses, and nutrient adequacy.
2. Assess nutritional needs related to ethnic and cultural diversity.
3. Assess patient for situations where advocacy is needed (e.g., food security).
4. Identify need for transitional or combination feedings.
5. Evaluate history of previous nutrition care services/MNT.
6. Evaluate information regarding use of complimentary alternative medicine. (CAM) (e.g., herbal products, botanical medicine, and over-the-counter dietary supplements).
7. Evaluate patient's comprehension and acceptance of education recommendations and interventions.
8. Obtain information regarding:
 - a. adherence to and satisfaction with current nutrition prescription.
 - b. feeding skills.
 - c. fluid status, intake and output.
 - d. hypersensitivities, food intolerances or food allergies.
 - e. ingestion of non-food items, (e.g., pica).
 - f. tolerance to current diet.
 - g. use of complimentary alternative medicine (CAM) (e.g., herbal products, botanical medicine, and over-the-counter dietary supplements).
 - h. usual dietary patterns and nutrient intake.
9. Assess need for enteral/parenteral nutrition.
10. Identify causes of inadequate or excessive mineral intake (e.g., sodium, phosphorous, potassium, calcium, magnesium).
11. Reassess medical nutrition therapy plan.

B. Anthropometric Measures

1. Obtain data regarding:
 - a. BMI.
 - b. frame size.
 - c. height.
 - d. ideal/standard BW.
 - e. weight/weight history.
2. Evaluate body weight and composition.



Commission of Dietetic Registration
Board Certified Specialist in Renal Nutrition
Certification Examination Content Outline

Effective Date: November 2012

© 2012. CDR. All rights reserved.

C. Biochemical Data, Medications, Medical Tests, and Procedures

1. Determine CKD stage.
2. Evaluate adequacy of dialysis and impact of dialysis prescription.
3. Evaluate blood chemistries.
4. Evaluate Chronic Kidney Disease-Mineral Bone Disorder (CKD-MBD) status.
5. Evaluate diabetes status.
6. Evaluate drug-drug, and drug-nutrient interactions.
7. Evaluate effect of infection, inflammation, and metabolic insult on biomedical parameters and nutrition status.
8. Evaluate for long term glycemic control (e.g., A1c, estimated average glucose (EAG)).
9. Evaluate for presence of cardiac disease and dyslipidemia.
10. Evaluate impact of drug and nutrient interactions.
11. Evaluate medication and dietary supplement regimen (i.e., calorie protein supplements, complementary alternative medicine (CAM), vitamin/mineral supplements).
12. Evaluate nutrition implications of diagnostic tests and therapeutic procedures.
13. Evaluate prescribed and delivered dose of dialysis.
14. Evaluate presence of anemia.
15. Evaluate residual renal function.
16. Evaluate short term glycemic control (2-3 weeks).
17. Interpret biochemical profile for acid/base status.
18. Obtain blood chemistries related to metabolic status.
19. Obtain information regarding:
 - a. dialysis prescription.
 - b. infection, inflammation, and metabolic insult.
 - c. use of over-the-counter medications.
 - d. use of over-the-counter vitamins and/or minerals.
 - e. use of prescription medications and prescribed nutrition supplements.
20. Obtain results of urine chemistries related to metabolic status.
21. Perform relevant calculations using available laboratory data (e.g., BUN:Cr, FENa, creatinine clearance, corrected calcium).

D. Nutrition Focused Physical Findings

1. Evaluate blood pressure and fluid status.
2. Evaluate gastrointestinal function.
3. Evaluate interdialytic weight changes and fluid status.
4. Evaluate physical and functional status.
5. Examine patient for integrity of tissue stores and fluid status.
6. Examine patient for physical signs and symptoms of nutrient deficiencies/excesses.



Commission of Dietetic Registration
Board Certified Specialist in Renal Nutrition
Certification Examination Content Outline

Effective Date: November 2012

© 2012. CDR. All rights reserved.

7. Obtain information regarding:
 - a. activities of daily living that could impact nutrition status.
 - b. amputation(s).
 - c. oral health.
 - d. chewing and swallowing problems.
8. Evaluate nutrition focused physical exam that includes:
 - a. alterations in smell.
 - b. alterations in taste.
 - c. dentition.
 - d. perioral structures.
 - e. skin and related structures.

E. Patient History

1. Determine patient's activity level, exercise program, and sleep patterns.
2. Evaluate the effect of co-morbid conditions of the patient.
3. Identify psychosocial issues that may impact nutrition status.
4. Identify socioeconomic, religious and ethnic considerations that may impact nutrition status.
5. Identify the need to tailor data collection based on health condition history and present state.
6. Obtain information regarding:
 - a. alcohol, drug, or tobacco use.
 - b. gastrointestinal function.
 - c. patients' medical history.
 - d. weight history data.

II. Nutrition Diagnosis (15%)

A. Intake

1. Write nutrition diagnostic statements and establish patient outcomes related to the following:
 - a. excessive intake and associated factors.
 - b. insufficient intake and associated factors.
 - c. intake different than recommended.
 - d. food and nutrient intolerance.
 - e. nutrition and health awareness.
 - f. food and nutrient knowledge.
 - g. physical activity diagnosis.
 - h. food availability.
 - i. food/medication interactions.

B. Clinical

1. Write nutrition diagnostic statements and establish patient outcomes related to the following:
 - a. anthropometric data/changes.



Commission of Dietetic Registration
Board Certified Specialist in Renal Nutrition
Certification Examination Content Outline

Effective Date: November 2012

© 2012. CDR. All rights reserved.

- b. biochemical data.
- c. medical tests and procedures.
- d. head and neck.
- e. gastrointestinal system.
- f. neurologic system.
- g. cardiovascular/pulmonary system.
- h. spine/limbs/extremities.
- i. skin integrity.
- j. vital signs.
- k. unintentional weight gain/loss.

C. Behavioral-Environmental

1. Identify problems that relate to knowledge, attitudes/beliefs, physical environment, access to food, or food safety.
2. Write nutrition diagnostic statements and establish patient outcomes related to the following:
 - a. social history.
 - b. personal/family history.
 - c. medical/health history.
 - d. mental status.
 - e. signs and symptoms.
 - f. treatments.
 - g. medications and supplements.
 - h. disordered eating patterns.
 - i. food and nutrition related knowledge deficits.
 - j. limited access to food and water.
 - k. limited ability to prepare foods/meals.
 - l. limited adherence to nutrition related recommendations.

III. Nutrition Intervention (25%)

A. Food and/or Nutrient Delivery

1. Collaborate with patient to develop goals and individualize nutrition prescription.
2. Determine long-term goals of enteral/parenteral nutrition.
3. Develop safety alert systems to monitor key indicators of medical conditions for nephrology clients (e.g., starfruit, diabetes, medications).
4. Educate on adequate fluid and fiber intake to normalize bowel function.
5. Estimate calories absorbed from peritoneal dialysate.
6. Implement goals for:
 - a. macronutrient recommendations for stage of chronic kidney disease and treatment modality.



Commission of Dietetic Registration

Board Certified Specialist in Renal Nutrition

Certification Examination Content Outline

Effective Date: November 2012

© 2012. CDR. All rights reserved.

b. micronutrient recommendations for stage of chronic kidney disease and treatment modality.

7. Implement plan for feeding difficulties, feeding alterations, and disordered eating.

8. Educate on fluid status, intake and output.

9. Address mineral content of dialysate.

10. Recommend initiation of nutrition supplements.

11. Recommend plan for:

a. enteral/parenteral nutrition therapy.

b. management of gastrointestinal dysfunction.

B. Nutrition Education

1. Determine readiness to learn and learning style.

2. Develop individual and group education programs in compliance with national guidelines and standards (e.g., ADA, KDOQI, KDIGO).

3. Educate patient regarding:

a. biochemical parameters and their relationship to dietary intake.

b. difference between dry weight and fluid weight.

c. importance of maintaining or achieving healthy weight.

d. issues pertaining to enteral/parenteral nutrition.

e. prevention and treatment of cardiovascular disease.

f. treatment for anemia.

g. treatment of CKD-MBD.

h. treatment for diabetes.

i. treatment for hypoalbuminemia.

4. Encourage PD patient to reserve fluid intake for between meals to minimize stomach distention and decrease early satiety.

5. Explain consequences of non-adherence to treatment plan.

6. Explain the effects of nutrition modifications on health status.

7. Explain treatment modalities and their nutrition implications.

8. Select appropriate educational materials for enriching the knowledge base of patient.

C. Nutrition Counseling

1. Counsel patient on appropriate self-management behaviors for identified nutritional goals.

2. Identify underlying or non-apparent barriers or failures that relate to nutrition therapy.

D. Coordination of Nutrition Care

1. Collaborate with the Interdisciplinary Team (IDT) and other agencies to coordinate nutritional care (e.g., bariatric, long-term care residents, home-bound patients).

2. Collaborate with the IDT regarding:

a. additional medical/nutrition evaluation.

b. fluid management.



Commission of Dietetic Registration
Board Certified Specialist in Renal Nutrition
Certification Examination Content Outline

Effective Date: November 2012

© 2012. CDR. All rights reserved.

- | |
|--|
| c. dialysis prescription. |
| d. medication regimen or protocol. |
| e. modifications to nutrition care plan. |
| f. nutrition prescription and care plan. |
| g. treatment modalities. |
| 3. Educate family and/or caretaker as needed, with patient's permission. |
| 4. Educate patient about appropriate dialysis access. |
| 5. Educate patient regarding adequacy of dialysis treatment. |
| 6. Encourage patient to discuss exercise options with primary care provider. |
| 7. Establish goals for fluid balance. |
| 8. Identify causes of inadequate delivered dose of dialysis. |
| 9. Identify referral sources (e.g., financial, psychosocial, functional status) to assist with CKD-related issues. |
| 10. Identify resources to assist with CKD within education services and community programs (e.g., support groups, health care services, meal programs, web sites). |
| 11. Interact with appropriate facility (e.g., extended care, adult day care) regarding nutrition care upon transfer or discharge. |
| 12. Recommend evaluation of dry and/or target weight. |
| 13. Recommend plan for: |
| a. anemia management. |
| b. mineral and bone management. |
| c. diabetes management. |
| d. dyslipidemia management. |
| e. hypoalbuminemia management. |
| f. obesity and underweight. |

E. Medications

- | |
|--|
| 1. Educate patient about relationships between medications and diet. |
| 2. Encourage adherence to stool softener or laxative to reduce constipation. |
| 3. Evaluate dosage and timing of medications. |
| 4. Evaluate medication regimen and adherence. |
| 5. Facilitate the use of protocols/algorithms used in medication management. |
| 6. Identify strategies to improve medication compliance. |
| 7. Recommend additional medications as needed. |
| 8. Recommend wound healing vitamins, minerals, and/or amino acids as needed. |

IV. Nutrition Monitoring and Evaluation Based on Outcomes Measurement (18%)

A. Food/Nutrition-Related History

- | |
|---|
| 1. Monitor and reevaluate adequacy of oral intake. |
| 2. Monitor and reevaluate adequacy and tolerance to enteral/parenteral nutrition. |



Commission of Dietetic Registration
Board Certified Specialist in Renal Nutrition
Certification Examination Content Outline

Effective Date: November 2012

© 2012. CDR. All rights reserved.

B. Anthropometric Measures

1. Evaluate body weight and composition impacted by:
 - a. nutritional interventions.
 - b. renal replacement therapy.
2. Evaluate BMI.
3. Measure height annually.
4. Evaluate change in fat and/or muscle stores.

C. Biochemical Data, Medications, Medical Tests, and Procedures

1. Assess compliance with prescribed medications.
2. Evaluate hypo-response to erythropoietin (EPO) dosing to identify cause, (e.g., increased PTH, infection).
3. Evaluate metabolic status based on biochemical parameters.
4. Evaluate patient adjustment to disease state and adherence to treatment regimen.
5. Evaluate possible causes for certain combinations of abnormal blood test results.
6. Identify causes of poor medication compliance.
7. Monitor biochemical parameters relevant to enteral/parenteral nutrition.
8. Recommend additional blood and/or urine chemistries.

D. Nutrition Focused Physical Findings

1. Monitor blood pressure and interdialytic weight changes and fluid status.
2. Monitor gastrointestinal function.
3. Monitor physical and functional status.
4. Monitor patient for integrity of tissue stores and fluid status.
5. Monitor patient for physical signs and symptoms of nutrient deficiencies/excesses.

V. Quality Management and Evidence-Based Practice (6%)

1. Collaborate with the IDT to:
 - a. establish renal dietitian driven medical and nutrition protocols.
 - b. identify, prevent, and reduce medical errors (e.g., risk management).
2. Collect data for documenting outcomes and used for trending and assessment.
3. Complete a corrective action plan when goals are not met.
4. Comply with the Centers for Medicare and Medicaid Services (CMS) guidelines for writing assessments and care plans.
5. Establish outcome indicators (goals/objectives) for nutrition interventions in observable, measurable terms.
6. Evaluate whether established goals are being met.
7. Identify potential errors and hazards in nutrition care and foodservice systems (e.g., risk management).
8. Research appropriateness of nutrient content of food/supplements and products.



Commission of Dietetic Registration
Board Certified Specialist in Renal Nutrition
Certification Examination Content Outline

Effective Date: November 2012

© 2012. CDR. All rights reserved.

- | |
|--|
| 9. Integrate best available research for clinical practice. |
| 10. Maintain tracking mechanism for scheduled completion of Comprehensive Interdisciplinary Assessment/Plan of Care (CIA/POC) document per CMS guidelines. |
| 11. Manage systematic processes to identify, track, and monitor utilization of resources. |
| 12. Participate with the IDT to identify areas that need improvement as well as developing, implementing, and evaluating the plan to achieve that improvement (e.g., quality assessment and performance improvement (QAPI)). |
| 13. Utilize evidenced-based protocols and guidelines to deliver standardized care (e.g., ADA, CMS, ESRD networks, KDOQI, KDIGO, NKF, TJC). |

SAMPLE MULTIPLE CHOICE QUESTIONS

1. KDOQI guidelines recommend maintaining serum calcium levels between 8.4 and
 - A. 9.2 mg/dL.
 - B. 9.5 mg/dL.
 - C. 10.2 mg/dL.
 - D. 10.5 mg/dL.

2. A hemodialysis patient has a dry weight of 70 kg (154.3 lb) and consistently has interdialytic weight gains (IDWG) of 5 kg (11 lb). The patient admits to eating fast food and TV dinners frequently. The BEST nutrition diagnostic statement would be excessive
 - A. fluid intake related to excessive sodium intake as evidenced by low IDWG.
 - B. fluid intake related to excessive sodium intake as evidenced by high IDWG
 - C. energy intake related to dependence on prepared meals as evidenced by low IDWG.
 - D. energy intake related to dependence on prepared meals as evidenced by high IDWG.

3. A 55-year-old female presents with complaints of polydipsia, polyphagia, polyuria, and dry, itchy skin. She is 157 cm (62 in) tall and her weight has recently increased to 84 kg (185 lb). The dietitian should suspect
 - A. over nutrition.
 - B. food allergies.
 - C. hypoglycemia.
 - D. type II diabetes.

KEY:

1. B, 2. B, 3. D

SAMPLE KEY FEATURE QUESTIONS

A 37-year-old male, now three months status post successful kidney transplant, is 5'11", 107 kg (235.9 lb), SBW of 81 kg (178.6 lb), and adjusted weight of 100 kg (220.5 lb). The patient's laboratory values are as follows:

Potassium	3.9 mEq/L
Albumin	4.0 g/dL
Calcium	8.7 mg/dL
Phosphorus	3.1 mg/dL
Magnesium	1.0 mEq/L

- The patient is currently taking prednisone, oral hypoglycemic agent, tacrolimus (Prograf), mycophenolic acid (Myfortic), and trimethoprim-sulfamethoxazole (Bactrim). Urine output is 1650 mL, and blood sugars are 226-312 mg/dL. The patient's lipid panel reveals cholesterol of 250 mg/dL, HDL of 50, and LDL of 140. Which of the following should the dietitian select at this time? Select FOUR of the following options.
 - 10-15 g fiber daily
 - 1 L fluid restriction
 - 1.5 gm sodium diet
 - 90 gm protein per day
 - potassium supplement daily
 - 800 mg phosphorus per day
 - carbohydrate-controlled diet
 - magnesium supplement daily
 - 1200-1500 mg calcium per day
- Which of the following interventions should a dietitian recommend to improve glycemic control? Select TWO of the following options.
 - Start insulin therapy.
 - Discontinue prednisone.
 - Recheck hemoglobin A_{1c}
 - Continue oral hypoglycemic agent.
 - Recommend patient attend diabetes education activity.
- Which of the following should a dietitian recommend to improve lipid levels? Select THREE of the following options.
 - low protein diet
 - 2 g sodium diet
 - hypocaloric diet
 - physical activity
 - low cholesterol diet
 - low carbohydrate diet
 - low saturated fat diet

KEY:
1. D, G, H, I
2. A, E
3. D, E, G

References for Board Certification as a Specialist in Renal Nutrition Examination

Academy of Nutrition and Dietetics. International Dietetics and Nutrition Terminology (IDNT) Reference Manual: Standardized Language for the Nutrition Care Process. eNCPT 2015 edition. Academy of Nutrition and Dietetics; 2015. General info at: <http://ncpt.webauthor.com/> Pricing info at: <http://ncpt.webauthor.com/encpt-subscription-pricing>

Academy of Nutrition and Dietetics Evidence Analysis Library. Evidence-based Nutrition Practice Guideline on Chronic Kidney Disease Executive Summary of Recommendations—July 2010 at <http://andevidencelibrary.com/topic.cfm?cat=3929> and copyrighted by the Academy

ASPEN Clinical Guidelines: Nutrition Support in Adult Acute and Chronic Renal Failure. *J Parenter Enteral Nutr.* 2010; 34: 366-377. <http://pen.sagepub.com/content/34/4/366.full>

Byham-Gray L, Stover, J, Wiesen K. *A Clinical Guide to Nutrition Care in Kidney Disease.* 2nd ed. Chicago, Ill: American Dietetic Association; 2013. ISBN: 9780880914703

Centers for Medicare and Medicaid Services (CMS). Measurement Assessment Tool (MAT). Version 2.3. October 2008. <http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/downloads/SCletter09-01.pdf>

Centers for Medicare and Medicaid Services (CMS). Conditions for Coverage. Federal Register April 15, 2008. <https://www.cms.gov/Regulations-and-Guidance/Legislation/CFCsAndCoPs/Downloads/ESRDfinalrule0415.pdf>

Daugirdas JT, Blake PG and Ing TS. *Handbook of Dialysis.* 4th ed. Philadelphia, Pa: Lippincott Williams and Wilkins; 2007. ISBN: 0781752531

McCann L, ed. *Pocket Guide to Nutritional Assessment of the Patient with Chronic Kidney Disease.* 5th ed. New York, NY: National Kidney Foundation Council on Renal Nutrition; 2015.

McCarthy, M, Pavlinac, J, and Aoun, A. *Chronic Kidney Disease and the Nutrition Care Process.* The Academy of Nutrition and Dietetics; 2013. ISBN: 9780880914796.

Mitch, WE and Ikizler, TA. *Handbook of Nutrition and the Kidney.* 6th ed. Philadelphia, Pa: Lippincott-Williams and Wilkins; 2010. ISBN: 9780781795173

Pronsky, Z (author), Crowe JP (author), and Elbe D, Epstein S, Roberts W, Young V, and Ayoob K (eds). *Food-Medication Interactions.* 17th ed. Birchrunville, Pa: Food Medication Interactions; 2012. ISBN: 9780971089655

Kidney International. <http://kdigo.org/home/guidelines/>

KDIGO Clinical Practice Guidelines for:

- [Acute Kidney Injury](#), Published 2012
- [Anemia in Chronic Kidney Disease](#), Published 2012
- [Management of Blood Pressure in Chronic Kidney Disease](#), Published 2012
- [Care of Kidney Transplant Recipients](#), Published 2009
- [CKD Evaluation and Management](#), Published 2013
- [Diagnosis, Evaluation, Prevention and Treatment of Chronic Kidney Disease related Mineral and Bone Disorders \(CKD-MBD\)](#), Published 2009
- [Prevention, Diagnosis, Evaluation and Treatment of Hepatitis C in Chronic Kidney Disease](#), Published 2008
- [Lipids Management in CKD](#), Published 2013

(continued)

KDOQI Clinical Practice Guidelines for:

- [Diabetes and Chronic Kidney Disease Download Guidelines](#), Published 2007, Updated 2012
- Nutrition in Chronic Renal Failure [Download Guidelines](#), Published 2000
- [Hemodialysis Adequacy Download Guidelines](#), Published 2006, Updated 2015
- [Peritoneal Dialysis Adequacy Download Guidelines](#), Published 2006

National Kidney Foundation Commentaries for:

- [Commentary on the 2013 KDIGO Clinical Practice Guideline for Lipid Management in Chronic Kidney Disease](#), Published 2014
- [Commentary on the 2012 KDIGO Clinical Practice Guideline for the Evaluation and Management of CKD](#), Published 2014
- [Commentary on the 2012 KDIGO Clinical Practice Guideline for Glomerulonephritis](#), Published 2013
- [Commentary on the 2012 KDIGO Clinical Practice Guideline for Anemia in CKD](#), Published 2013
- [Commentary on the 2012 KDIGO Clinical Practice Guideline for Management of Blood Pressure in CKD](#), Published 2013
- [Acute Kidney Injury Commentary](#), Published 2013
- [Hepatitis C Commentary](#), Published 2008
- [Mineral and Bone Disorder \(CKD-MBD\) Commentary](#), Published 2010
- [Commentary on Care of the Kidney Transplant Patient](#), Published 2010

NOTES PAGE:

REQUEST FOR SPECIAL EXAMINATION ACCOMMODATIONS

If you have a disability covered by the Americans with Disabilities Act, please complete this form and the Documentation of Disability-Related Needs so your accommodations for testing can be processed efficiently. The information you provide and any documentation regarding your disability and your need for accommodation in testing will be treated with strict confidentiality. Please return this form to CDR within 45 days of the desired testing date.

CANDIDATE INFORMATION

CDR Registration Number		
Last Name	First Name	Middle Initial
Address		
City	State/Province	Zip Code/Postal Code and Country
Daytime Phone Number	Fax Number	E-mail Address

SPECIAL ACCOMMODATIONS

I request special accommodations for the _____ examination.

Please provide (check all that apply):

- Reader
- Extended examination time (time and a half)
- Reduced distraction environment
- Other special accommodations (please specify)

Description of disability: _____

Signed: _____ **Date:** _____

Return this form to:
Attn: Specialty Certification, Commission on Dietetic Registration,
120 S Riverside Plaza, Ste 2000, Chicago, IL 60606-6995
specialists@eatright.org



DOCUMENTATION OF DISABILITY-RELATED NEEDS

Please have this section completed by an appropriate professional (**education professional, physician, psychologist, psychiatrist**) to ensure that AMP is able to provide the required examination accommodations.

PROFESSIONAL DOCUMENTATION

I have known _____ since ____ / ____ / ____ in my capacity
as a _____ Examination Applicant Name

Professional Title

The applicant discussed with me the nature of the examination administered. It is my opinion that because of this applicant's disability described below, he/she should be accommodated by providing the special arrangements listed on the previous page.

Description of
disability: _____

Signed: _____

Title: _____

Date: _____ License # (if applicable): _____

Return this form to:
Attn: Specialty Certification

Commission on Dietetic Registration,
120 S Riverside Plaza, Ste 2000, Chicago, IL 60606-6995
specialists@eatright.org

Commission on Dietetic Registration
120 S Riverside Plaza, Ste 2000
Chicago, IL 60606-6995
specialists@eatright.org