Effective 05-2018



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

Exam Content Outline # Items
Nutrition Assessment, Monitoring, and Re-assessment43
Food/Nutrition-Related History 11
Assess current nutrient intake, losses, and adequacy.
Assess nutritional needs related to socioeconomic, religious, cultural, and ethnic considerations that may affect nutrition status.
Assess need for advocacy (e.g., food security).
Assess appropriateness of various methods of feeding.
Evaluate history of previous nutrition care services (e.g., MNT, and/or self-prescribed diet).
Evaluate patient's comprehension and acceptance of education recommendations.
Interpret information regarding adherence to, tolerance of, and satisfaction with current nutrition prescription.
Interpret information regarding feeding skills.
Interpret information regarding history of disordered eating.
Interpret information regarding fluid status, intake and output.
Interpret information regarding hypersensitivities, food intolerances or food allergies.
Interpret information regarding ingestion of non-food items, (e.g., pica).
Interpret information regarding food acquisition and preparation.
Assess need for nutrition support (e.g., oral, enteral, parenteral nutrition).
Identify causes of inadequate or excessive mineral intake.
Reassess medical nutrition therapy plan.
Anthropometric Measures 10
Evaluate data regarding BMI, height, ideal or standard body weight, edema-free weight, and/or weight and weight history.
Biochemical Data, Medications, Medical Tests, and Procedures 10
Evaluate impact of dialysis prescription (e.g., estimate peritoneal dextrose absorption, protein losses).
Evaluate adequacy of dialysis and impact of prescribed and delivered dose.
Evaluate and interpret blood and urine chemistries.
Evaluate Chronic Kidney Disease-Mineral Bone Disorder (CKD-MBD) status.
Evaluate Chronic Kidney Disease-Mineral Bone Disorder (CKD-MBD) status. Evaluate short-term and long-term status of co-morbidities related to CKD.

7 Evaluate effect of infection, inflammation, and metabolic changes on biomedical parameters and nutrition status.

- 8 Evaluate prescribed medications and dietary supplement regimen, timing, and adherence.
- 9 Evaluate nutrition implications of diagnostic tests and therapeutic procedures.
- 10 Evaluate anemia status.
- 11 Evaluate residual renal function.
- 12 Assess need for and interpret relevant calculations based on available laboratory data (e.g., BUN:Cr, nPCR, FENa, creatinine clearance, corrected calcium).

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- **D** Nutrition-Focused Physical Findings
- 1 Evaluate blood pressure and fluid status.
- 2 Evaluate gastrointestinal function.
- 3 Evaluate inter/intradialytic weight changes and fluid status.
- 4 Evaluate functional status.
- 5 Assess patient for integrity of fat and muscle stores.
- 6 Assess patient for physical signs and symptoms of nutrient deficiencies or excesses.
- 7 Evaluate information regarding activities of daily living, amputations, oral health, alterations in smell and taste, chewing, swallowing ability, and/or skin and related structures.

## E Patient History

- 1 Determine patient's activity level, exercise program, and sleep patterns.
- 2 Evaluate patient medical history.
- 3 Assess psychosocial issues that may affect nutrition status.
- 4 Identify the need to tailor data collection based on health condition history and present state.
- 5 Obtain information regarding alcohol, drug, or tobacco use.

2	Nutrition Diagnosis 23
Α	Intake 8
1	Determine nutrition diagnosis and patient outcomes related to excessive intake and associated
	factors.
2	Determine nutrition diagnosis and patient outcomes related to insufficient intake and associated
	factors.
3	Determine nutrition diagnosis and patient outcomes related to intake different than recommended.
4	Determine nutrition diagnosis and patient outcomes related to food and nutrient intolerance.
5	Determine nutrition diagnosis and patient outcomes related to nutrition and health awareness.
6	Determine nutrition diagnosis and patient outcomes related to food and nutrient knowledge.
7	Determine nutrition diagnosis and patient outcomes related to food availability.
8	Determine nutrition diagnosis and patient outcomes related to food/medication interactions.
9	Determine nutrition diagnosis and patient outcomes related to nutrition diagnosis statements
	(problem, etiology, signs and symptoms).
В	Clinical 6
1	Determine nutrition diagnosis and patient outcomes related to anthropometric data and changes.
2	Determine nutrition diagnosis and patient outcomes related to biochemical data.
3	Determine nutrition diagnosis and patient outcomes related to medical tests and procedures.
4	Determine nutrition diagnosis and patient outcomes related to gastrointestinal system.

- 5 Determine nutrition diagnosis and patient outcomes related to cardiovascular and pulmonary system.
- 6 Determine nutrition diagnosis and patient outcomes related to skin integrity.
- 7 Determine nutrition diagnosis and patient outcomes related to vital signs.
- 8 Determine nutrition diagnosis and patient outcomes related to nutrition diagnosis statements (problem, etiology, signs and symptoms).
- 9 Determine nutrition diagnosis and patient outcomes related to unintentional weight gain or loss.

С	Behavioral and Environmental	
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- 1 Determine nutrition diagnosis and patient outcomes related to social history.
- 2 Determine nutrition diagnosis and patient outcomes related to personal and family history.
- 3 Determine nutrition diagnosis and patient outcomes related to medical and health history.
- 4 Determine nutrition diagnosis and patient outcomes related to mental status.
- 5 Determine nutrition diagnosis and patient outcomes related to signs and symptoms (e.g., shortness of breath, edema, itching).

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- 6 Determine nutrition diagnosis and patient outcomes related to treatments.
- 7 Determine nutrition diagnosis and patient outcomes related to medications and supplements.
- 8 Determine nutrition diagnosis and patient outcomes related to disordered eating patterns.
- 9 Determine nutrition diagnosis and patient outcomes related to food and nutrition related knowledge deficits.
- 10 Determine nutrition diagnosis and patient outcomes related to limited access to food and water.
- 11 Determine nutrition diagnosis and patient outcomes related to limited ability to prepare foods or meals.
- 12 Determine nutrition diagnosis and patient outcomes related to nutrition diagnosis statements (problem, etiology, signs and symptoms).
- 13 Determine nutrition diagnosis and patient outcomes related to food safety.
- 14 Determine nutrition diagnosis and patient outcomes related to limited adherence to nutrition related recommendations.

3	Nutrition Intervention	38
Α	Food and/or Nutrient Delivery	6

- 1 Collaborate with patient to develop goals and individualize nutrition prescription.
- 2 Implement short and long-term goals of oral and enteral/parenteral nutrition.
- 3 Implement goals for macronutrient and micronutrient recommendations for stage of chronic kidney disease and treatment modality.
- 4 Recommend plan for management of gastrointestinal dysfunction.
- 5 Implement plan for feeding difficulties, feeding alterations, and disordered eating.
- 6 Address mineral content of dialysate.

## **B** Nutrition Education and Counseling

- 1 Determine readiness to learn, learning style, and health literacy.
- 2 Develop individual and group education programs in compliance with national guidelines and standards (e.g., ADA, AND, KDOQI, KDIGO).
- 3 Educate patient regarding biochemical parameters and their relationship to dietary intake.
- 4 Educate patient regarding fluid status.
- 5 Educate patient regarding importance of maintaining or achieving healthy weight.
- 6 Educate patient regarding issues pertaining to enteral/parenteral nutrition.
- 7 Educate patient regarding prevention and treatment of cardiovascular disease.
- 8 Educate patient regarding anemia management.
- 9 Educate patient regarding CKD-MBD management.
- 10 Educate patient regarding diabetes management.
- 11 Educate patient regarding consequences of non-adherence to treatment plan.
- 12 Educate patient regarding effects of nutrition modifications on health status.
- 13 Educate patient regarding treatment modalities and their nutrition implications.
- 14 Educate patient regarding treatment for protein-energy wasting.
- 15 Identify underlying barriers or failures that relate to nutrition therapy.

- 16 Counsel patient on appropriate self-management behaviors for identified nutritional goals (i.e., motivational interviewing).
- 17 Select appropriate educational materials for enriching the knowledge base of patient.
- **C** Coordination of Nutrition Care
- 1 Collaborate with the Interdisciplinary Team (IDT) and external agencies and departments to coordinate nutritional care.
- 2 Collaborate with the IDT regarding additional medical and nutrition evaluation.
- 3 Collaborate with the IDT regarding fluid management.
- 4 Collaborate with the IDT regarding dialysis prescription and adequacy of dialysis.
- 5 Collaborate with the IDT regarding medication regimen or protocol.
- 6 Collaborate with the IDT regarding nutrition prescription and care plan.
- 7 Collaborate with the IDT regarding physical activity.
- 8 Collaborate with the IDT regarding treatment modalities and dialysis access.
- 9 Educate family and/or caregiver as needed, with patient's permission.
- 10 Identify referral sources (e.g., financial, psychosocial, functional status) to assist with CKD-related issues.
- 11 Identify resources to assist with CKD within education services and community programs (e.g., support groups, health care services, meal programs, web sites).
- 12 Recommend plan for management of mineral and bone, diabetes, cardiovascular disease, proteinenergy wasting, obesity, and underweight.

## **D** Medications

- 1 Educate patient about relationships between medications and diet.
- 2 Evaluate medication regimen and adherence.
- 3 Facilitate the use of protocols/algorithms used in medication management.
- 4 Identify strategies to improve medication adherence.
- 5 Recommend additional medications as needed.
- 6 Recommend vitamins, minerals, and/or amino acids as needed.
- 4 Quality Management and Evidence-Based Practice
- 1 Collaborate with the IDT to establish renal dietitian driven medical and nutrition protocols.
- 2 Collaborate with the IDT to identify, prevent, and reduce medical errors (e.g., risk management).
- 3 Collect data for documenting outcomes and use for trending and assessment.
- 4 Complete a corrective action plan when goals are not met.
- 5 Comply with the Centers for Medicare and Medicaid Services (CMS) guidelines for timing of assessments and care plans.
- 6 Establish outcome indicators for nutrition interventions in observable and measurable terms.
- 7 Determine if established goals are being met.
- 8 Identify potential errors, trends, and hazards related to nutrition care.
- 9 Integrate best available research for clinical practice.
- 10 Manage systematic processes to identify, track, and monitor utilization of resources.
- 11 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., QAPI).
- 12 Utilize evidenced-based protocols and guidelines to deliver standardized care.
- 13 Implement regulatory advances in practice (e.g., order writing privileges).

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