



CNS SPE Competencies

Category A: Personalized Nutrition Assessment & Interpretation (min 200 hours required)

Definition: Nutrition assessment is an ongoing, dynamic process that incorporates a systematic approach to collect, record, and interpret quantitative and qualitative inputs including diet, lifestyle, behavior, symptoms, nutritional genomics, biochemical laboratory markers, and personal and family health history. The nutrition assessment is used to identify existing manifestations of dysfunction as well as the underlying root causes of imbalance which contribute to risk factors and current nutritional health issues to enable effective treatment and prevention strategies and monitor improvements

Be able to competently perform a personalized nutrition assessment incorporating the following quantitative and qualitative inputs:

1. Comprehensive medical nutrition health history, including linking symptoms and health status
2. Evaluation of laboratory data including identification of optimal value ranges
3. Evaluation of functional testing (organic acid, stool, and saliva tests for adrenals and hormones, other)
4. Evaluation of hormonal and neurotransmitter imbalances based on laboratory assessment
5. Assessment of single nucleotide polymorphisms (SNPs)
6. Nutritional inborn errors of metabolism
7. Body composition analysis (skin fold, bioelectrical impedance, ultrasound, DEXA, other)
8. Anthropometric measurements (BMI, waist-to-hip, waist circumference, other)
9. Dietary assessment tools (food records, dietary recalls, food frequency questionnaires, others including computerized analysis of food intake)
10. Identification of symptoms that require medical referral
11. Correlation of symptoms and lab findings for research and development of personalized Medical Nutrition Therapy (MNT) protocol
12. Use of behavior change strategies such as Motivational Interviewing and Stage of Change theory
13. Lifestyle factors which impact nutrient needs and compliance such as exercise, stress, and sleep

Category B: Personalized Nutrition Interventions, Education, Counseling & Ongoing Care (min 200 hours required)

Definition: A nutrition intervention consists of planned actions designed to change nutrition-related or lifestyle-related behaviors for the purpose of resolving health issues or optimizing health. It may involve any of the following activities: research related to treatment plan, development of medical nutrition therapy interventions, client education, counseling and



management of individuals or groups, food preparation instruction, shopping, sustainability practices, and behavioral/motivational counseling.

Interventions may include changes to diet; use of targeted nutraceuticals; addressing issues related to lifestyle factors such as movement, sleep, stress management; addressing food related behaviors such as timing of eating, eating environment, fasting, food selection, food storage, and food preparation.

1. Medical Nutrition Therapy

Be able to competently formulate actionable medical nutrition therapies and interventions, education, counseling and ongoing care for the prevention, modulation, and management of a broad range of chronic systemic disorders, such as:

- a. Obesity
- b. Cardiovascular disease, dyslipidemias, and hypertension
- c. Type 1 diabetes
- d. Insulin resistance and type 2 diabetes
- e. Endocrine disorders
- f. Autoimmune disorders
- g. Gastrointestinal disorders
- h. Hematologic disorders
- i. Bone disorders
- j. Hepatic disorders
- k. Pulmonary disorders
- l. Renal disorders
- m. Cognitive and neuro-cognitive disorders
- n. Food allergies and intolerances
- o. Cancer
- p. Bariatric surgery
- q. Surgical procedures
- r. Mastication, swallowing, and nutrient absorption disorders
- s. HIV-AIDS
- t. Dermatological disorders
- u. Mental health/mood disorders

2. Key concepts in nutrition intervention and monitoring

Understand, evaluate, and apply knowledge of the following key concepts in the formulation of actionable intervention and monitoring plans:

1. Impact of nutrigenomics and nutrigenetics on health



2. Drug, herb or nutraceutical action, duration of action, purpose, and dose of a client's current therapeutic regimen
3. Nutrient depletions related to commonly used drugs
4. Interactions between drugs and foods, alcohol, vitamins, minerals, herbs, phytochemicals, and zoochemicals
5. Synergistic effects and antagonistic interactions of nutrients in foods and supplements
6. Evaluation of established diets, including appropriate application, effectiveness, and contraindications
7. Linking childhood behaviors to obesity and other chronic health issues in adults
8. Gauging and optimizing client compliance
9. Evidence-based dose and duration of nutraceutical use for common conditions
10. Good manufacturing practices and other quality markers for nutritional supplements
11. Effects of disordered eating patterns on nutrition status, body composition, and body functions
12. Application of national guidelines, policies, consensus recommendations, and evidence-based research in the development of personalized therapeutic interventions
13. Evidence-based use of common botanical supplements for health promotion and common conditions
14. Safety, toxicity, and contraindications for nutraceuticals and botanical supplements
15. Consideration of client's personal and cultural beliefs when developing nutrition intervention plans

Category C: Personalized Nutrition Monitoring & Evaluation (min 200 hours required)

Definition: Regular re-evaluation of medical nutrition therapy treatment and prevention plan and goals in accordance with evaluation of improvements made based on symptoms, overall health status, and quantitative and qualitative data. Includes review of clinical research, standards of care, and other indirect contact.

Ongoing monitoring and evaluation are crucial to a robust client care, as they enhance personalization of interventions throughout the duration of the care process. Regular assessment of subjective input and collection of objective data enables honing and refinement of therapeutic intervention strategies to build self-efficacy and behavior change in the individual, thereby optimizing quantitative and qualitative measures of an individual's health.