SPE Competencies
Requirements for CNS® Candidates
The following are the competencies to be addressed by the supervised practice experience. Although an in-depth experience is not expected for each competency, candidates should have a basic understanding of the application of each in practice. The level of supervision should be adequate to enable the supervisor to attest to these competencies.

Category A: Nutrition Assessment (Min. 200 Hours Required)

**Definition:** Nutrition assessment is an ongoing, dynamic process that incorporates a systematic approach to collect, record and interpret relevant data regarding a client’s health status and lifestyle. The nutrition assessment is used to identify exiting nutritional health issues to enable effective treatment and prevention strategies and monitor improvements.

**Competencies**

**Health history.** Know how to elicit a patient-appropriate health history, including data such as:

a) **Nutrition relationship**
   i. Current health concerns, past and present health history, and family health history
   ii. Body weight history and recent weight changes
   iii. Psychosocial history, including access to food, occupation, living situation, smoking, drug and alcohol use
   iv. Medication and supplement use
   v. Review of body systems
   vi. Mastication and swallowing difficulty, appetite and bowel function
   vii. Pregnancy history and/or desired pregnancy
   viii. Sleep patterns, stress level

b) **Diet and Lifestyle history**
   i. Obtain a focused nutrition history via multi-day food record, a food frequency record and a 24-hour recall
   ii. Identify limitations of food records, food frequency questionnaires and recalls and understand the appropriate use of these tools
   iii. Determine suboptimal dietary intake or status of nutrients
   iv. Evaluate eating patterns, stress eating tendencies-disordered eating behaviors
   v. Identify dietary avoidance behaviors
   vi. Identify allergies and sensitivities to foods and dietary supplement ingredients based on history and symptoms reports
vii. Physical activity, identifying frequency, intensity, type and limitations to exercise
viii. Identify stages of change for making dietary and other lifestyle modifications

c) **Biochemical and laboratory assessment**
   i. Evaluate signs of vitamin and mineral deficiencies or toxicities
   ii. Interpret functional testing (organic acid, stool, saliva) as it applies to nutrition-related conditions and systemic imbalances
   iii. Monitor growth, weight and BMI
   iv. Identify hormonal and neurotransmitter imbalances based on laboratory assessment
   v. Identify personalized and biochemical laboratory value ranges as compared to normal reference value ranges

d) **Genetic/genomic factors**
   i. Demonstrate understanding of the basics of gene expression, transcription and translation
   ii. Assessment of single nucleotide polymorphisms (SNPs)
   iii. Demonstrate understanding of genetic disorders in nutrient metabolism
   iv. Evaluate family health history as it relates to current health status and risk factors

e) **Anthropometrics**
   i. Be familiar with the following anthropometric measurements: mid-arm circumference, triceps skin-fold and mid-arm muscle circumference
   ii. Be familiar with bioelectric impedance
   iii. Be familiar with waist to hip ratio measurements
   iv. Be familiar with emerging tools of anthropometrics (ultrasound, DEXA, MRI, CT scanning, and air displacement plethysmography)

f) **Assessment of diet impact on health issues**
   i. Be familiar with computerized analysis of food intake
   ii. Determine individual micro- and macro- nutrient requirements using guidelines and recommendations customizing them according to the individual’s age, sex, body type, reproductive status, activity level and metabolism.

f) **Identification of clinical status**
   i. Identify symptoms that require medical referral
   ii. Correlate constellations of symptoms for the most effective and efficient treatment protocols
Category B: Nutrition Intervention (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 instructions, shopping, sustainability practices, and behavioral/motivational counseling.

Competencies

a) Nutrition relationship to disease or system (Medical Nutrition Therapy)

Formulate applicable dietary and nutraceutical interventions for prevention, modulation, and management for the following chronic, systemic disorders such as:

i. Obesity  
ii. Cardiovascular disease, dystlipidemias, and hypertension  
iii. Insulin resistance and non-insulin dependent diabetes  
iv. Endocrine disorders  
v. Autoimmune disorders  
vi. Gastrointestinal disorders  
vii. Hematologic disorders  
viii. Bone disorders  
ix. Hepatic disorders  
x. Pulmonary disorders  
xi. Renal disorders  
 xii. Cognitive / neurological disorders  
xiii. Food allergies and intolerances  
xiv. Post bariatric surgery  
xv. Post general surgical procedures  
xvi. Mastication, swallowing, and nutrient absorption disorders  
xvii. Dermatological disorders  
xviii. Mental health/mood disorders  
ix. Cancer  
x. Dialysis  
xxi. HIV/AIDS

b) Drug-nutrient/drug-herb interactions

i. Identify common drug-nutrient and drug-herb interactions affecting glucoregulation, coagulation, and metabolism
ii. Identify drug-herb action duration of action, indication and dose of a patient’s current therapeutic regimen

iii. Identify dietary factors that affect the actions of common drugs and the underlying mechanisms of action

iv. Identify nutrient depletions which can occur related to commonly used drugs

v. Identify interactions between drugs and foods (including herbs) and their constituents

vi. Assess the interaction of nutrients with alcohol

c) Interactions between nutrients
   i. Assess the synergistic effects and antagonistic interactions of nutrients in foods and supplements and how they may impact the health status of an individual.

d) Dietary therapeutics and behavior optimization
   i. Assess the advantages and limitations of popular diets
   ii. Identify the therapeutic usefulness of specific foods
   iii. Apply scientific evidence and methods when developing specific dietary recommendations
   iv. Assess the link between behaviors learned in childhood and their impact on obesity and other chronic health issues in adulthood
   v. Apply psychological and motivational skills to enhance clinical outcomes
   vi. Gauge and optimize compliance with recommendations

e) Nutraceutical and supplement therapeutics
   i. Apply evidence-based dose and duration of use of nutraceuticals for common conditions
   ii. Develop working knowledge of good manufacturing practices and other markers of quality end-products

f) Eating behaviors and eating disorders
   i. Assess the effects of disordered eating patterns on nutritional status, body composition and function

g) Data comprehension and translation
   i. Assess individual patient data and compare with other data (national guidelines, policies consensus statements, expert opinions and previous outcome experience) to develop nutritional therapeutic interventions

h) Botanical and related therapies
   i. Develop working knowledge of the effects of common botanical supplements and their indication for health promotion
   ii. Assess the safe use and potential toxicity of botanical supplements
Category C: Nutrition Monitoring or Evaluation (Min. 200 Hours Required)

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

**Competencies**

The following competencies are to be addressed within categories A and B above:

**a) Public Health**

i. Food quality and safety
ii. Develop working knowledge of the causes and preventative measures for the most common food borne illnesses
iii. Monitor current developments and outbreaks of food borne illnesses and translate media information into science-based evidence and patient recommendations
iv. Assess populations at risk for food safety issues
v. Assess environmental toxicity factors that may negatively affect food quality (pesticides, xenobiotics GMO’s, hormones, food additives, PCB, heavy metals)
vi. Assess the impact of personal and cultural beliefs on dietary and lifestyle patterns and be able to address these beliefs when developing nutrition intervention plans
vii. Epidemiology and biostatistics
viii. Apply the knowledge and basic epidemiology of nutrition into practice
ix. Utilize knowledge from research studies to compare outcomes and translate them into science-based therapies for clients

**b) Practice Management**

i. HIPAA compliance requirements
ii. Refer clients to appropriate healthcare providers when their care requires services outside the scope of practice of a CNS
iii. Ensure compliance with Ethical Standards
iv. Be familiar with state/federal licensure and certification requirements that impact practice rights
v. Be familiar with regulations related to insurance coverage and reimbursement