Nutrition Care Process Terminology (NCPT)
Nutrition Care Process Model

THE NUTRITION CARE PROCESS MODEL

SCREENING & REFERRAL SYSTEM
- Identify risk factors
- Use appropriate tools and methods
- Involve interdisciplinary collaboration

Practice Settings

Nutrition Assessment & Re-Assessment
- Clean / collect important and relevant data
- Analyze / interpret collected data

Nutrition Diagnosis
- P: Identify problem
- E: Determine etiology / cause
- S: Statistic signal & symptoms

Nutrition Intervention
- Determine intervention and implement plan
- Formulate goals and determine action
- Implement action

Nutrition Monitoring & Evaluation
- Select or identify quality indicators
- Monitor & Evaluate resolution of diagnosis

Individual / Population Interacts with Nutrition Professional

OUTCOMES MANAGEMENT SYSTEM
- Research NCP
- Use aggregated data to conduct research
- Conduct continuous quality improvement
- Calculate and report quality indicators

Collaboration
Skills & Competencies
Communication
Health Care Systems
Economics
Nutrition & Food Science Knowledge
Documentalization
Critical Thinking
Social Systems

01
02
03
04
Nutrition Care Process: Steps

- **Step 1**: Nutrition Assessment
- **Step 2**: Nutrition Diagnosis
- **Step 3**: Nutrition Intervention
- **Step 4**: Nutrition Monitoring & Evaluation
Step 1: Nutrition Assessment

THE NUTRITION CARE PROCESS MODEL

Practice Settings
- Collaboration
- Skills & Competencies
- Communication
- Health Care Systems
- Social Systems

Nutrition Assessment & Re-Assessment
- Obtain / collect important and relevant data
- Analyze / interpret collected data

Nutrition Diagnosis
- E - Determine etiology / cause
- S - State signs & symptoms

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- Determine intervention and presentation
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Individual / Population Interacts with Nutrition Professional

Screening & Referral System
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Outcomes Management System
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Nutrition Assessment

Nutrition Assessment (NA)

• Obtain adequate information in order to identify nutrition-related problems

• Systematic process of
  – Obtaining
  – Verifying and
  – Interpreting the data

• Make decisions about the nature and cause of nutrition related problems

• Re-assessment at subsequent encounters addresses Monitoring and Evaluation parameters
Step 1: Nutrition Assessment

Critical Thinking Skills

- Determining appropriate data to collect
- Determining the need for additional information
- Selecting appropriate assessment tools and procedures
- Applying the assessment tools in valid and reliable ways
- Distinguishing relevant from irrelevant data
- Distinguishing important from unimportant data
- Validating the data
Nutrition Assessment

Results of Nutrition Assessment

• Leads to appropriate initial determination that a nutrition diagnosis/problem exists

• If a nutrition diagnosis can be made, the RDN labels the problem and creates a PES* statement in Step 2 of the Nutrition Care Process

*PES: Problem, Etiology, Signs/Symptoms
Nutrition Assessment

Results of Nutrition Assessment

• If a nutrition problem is not identified, further information or testing may be necessary to make a determination.

• If the assessment indicates that no nutrition problem currently exists that warrants a nutrition intervention, the term “No nutrition diagnosis at this time (NO-1.1)” may be documented.
Nutrition Assessment

Results of Nutrition Assessment/Reassessment

The RDN will determine

- If a nutrition diagnosis/problem exists

- The plan for continuation of care, specifically:
  - Progression through the NCP
  - Need for additional information/testing
  - Discharge from nutrition care
Nutrition Assessment

Domains (Categories)

1. Food/Nutrition Related History
2. Anthropometric Measurements
3. Biochemical Data, Medical Tests, Procedures
4. Nutrition-Focused Physical Findings
5. Client History
Nutrition Assessment

Components of Nutrition Assessment Process

• **Review** data collected for factors that affect nutritional and health status

• **Cluster** individual data elements to identify a nutrition diagnosis as described in the nutrition diagnosis reference sheets

• **Identify** standards for data comparison
Nutrition Assessment

Nutrition Care Indicators

Clearly defined markers – measureable

- Food and nutrient intake
- Medication use
- Growth and body composition
- Food and nutrition related knowledge
- Attitudes and behaviors
- Food access
- Physical activity
- Anthropometric data
- Laboratory values
- Physical findings (observed or reported)
- Personal and family medical history, social factors
Nutrition Assessment

Assessment of Nutrition Care Indicators

Nutrition Care Criteria – what it is compared against

• Nutrition Prescription or Goal
  o Dietary Intervention
  o Behavior change

• Reference Standard: select what is appropriate for intervention or goal
  o National
  o Institutional
  o Regulatory standards
Nutrition Assessment

Reference Sheet Content for each Term includes:

1. Definition
2. Indicators for
   • Assessment
   • Monitoring and Evaluation
3. Measurement methods or data sources
4. Nutrition interventions that are associated
5. Nutrition diagnoses with which data are used
6. Criteria for evaluation
7. Example for assessment and M&E
8. Literature references
Nutrition Assessment

Data Sources and Tools

- Screening or referral form
- Patient interview
- Medical or health records
- Consultation with caregivers and family
- Community based surveys
- Statistical reports, administrative data, epidemiological studies
Nutrition Assessment

Summary

• Nutrition Assessment is the first step of the NCP

• Dynamic process that develops throughout the NCP

• Data is used for all other steps of the NCP

• New information may provide reason for reassessment or change in approach and intervention
Step 2: Nutrition Diagnosis
Step 2: Nutrition Diagnosis

• New concept for dietetics profession

• Definition of Diagnosis
  • The act of identifying a disease or condition from its signs and symptoms
  • Investigation or analysis of the cause or nature of a condition, situation, or problem.

• This implies
  • Pre-defined list of potential conditions
  • Pre-defined criteria (signs and symptoms) to which the current situation can be compared
The nutrition diagnosis or nutrition problem is summarized into a **structured sentence** called

- Nutrition diagnosis statement

  OR

- PES Statement
This statement has 3 distinct components:

• **P** (Problem)

• **E** (Etiology)

• **S** (Signs and Symptoms)

  – This information is obtained during the nutrition assessment phase of the Nutrition Care Process
This statement has a distinct format:

Problem *related to* Etiology *as evidenced by* Signs and Symptoms
Evaluating Your PES Statement

**P** (Problem): Can the RDN resolve or improve the nutrition diagnosis? Consider the “intake” nutrition diagnosis as the one more specific to the role of the RDN.

**E** (Etiology): Determine if this is the “root cause” for the problem. If addressing the etiology will not resolve the problem, can the RDN intervention lessen the signs and symptoms?

**S** (Signs and Symptoms): Will measuring the signs and symptoms indicate if the problem is resolved or improved? Are the signs and symptoms specific enough that the RDN can monitor and document resolution or improvement of the nutrition diagnosis?
Evaluating Your PES Statement

PES Overall:

Does the nutrition assessment data support the specific nutrition diagnosis, etiology, and signs and symptoms?
Example PES Statements

• Excessive Fat Intake *related to* limited access to healthful options – frequent consumption of high-fat, fast-food meals *as evidenced by* serum cholesterol level of 230 mg/dL and patient report of 10 meals per week of hamburgers and fries.

• Excessive Energy Intake *related to* unchanged dietary intake and restricted mobility while fracture heals *as evidenced by* 5 lb weight gain during last 3 weeks due to patient report of consumption of 500 kcal/day more than estimated needs.

• Swallowing Difficulty *related to* post stroke complications *as evidenced by* results of swallowing tests and reports of choking during mealtimes.
Identifying the etiology leads to selection of the nutrition intervention aimed at resolving the underlying cause of the nutrition problem.

If the intervention cannot be aimed at resolving the underlying cause, as is the case in Physiologic-Metabolic etiologies, then the nutrition intervention is targeted at minimizing the signs/symptoms of the nutrition problem.
Etiologies are grouped by the type of cause or contributing risk factor. See Nutrition Diagnosis Etiology Matrix for definitions.

- Beliefs-Attitudes
- Cultural
- Knowledge
- Physical Function
- Physiologic
- Social-Personal
- Treatment

For the following, the category alone may be the cause or contributing risk factor of the Nutrition Dx (diagnosis)

- Access
- Behavior
Nutrition Dx Reference Sheets

A reference sheet is available for each nutrition diagnosis. Each reference sheet contains **4 components.** See sample reference sheets.

- Problem or Nutrition Diagnosis Label
- Definition of the Nutrition Diagnosis Label
- Etiology (cause/contributing risk factors)
- Signs/Symptoms (defining characteristics)
  - Grouped by
    - nutrition assessment category, and
    - potential indicators of the specific nutrition diagnosis
Nutrition Diagnostic Terminology

Three general domains

• Intake
  – Excessive or Inadequate intake compared to requirements (actual or estimated)

• Clinical
  – Medical or physical conditions that are outside normal

• Behavioral-Environmental
  – Relate to knowledge, attitudes, beliefs, physical environment, access to food, or food safety
Step 3: Nutrition Intervention

THE NUTRITION CARE PROCESS MODEL

- Identify risk factors
- Use appropriate tools and methods
- Involve interdisciplinary collaboration

- Nutrition Assessment & Re-Assessment
  - Observe, collect, interpret, and analyze data
  - Analyze and interpret collected data

- Nutrition Diagnosis
  - P - Identify problem
  - E - Determine etiology / cause
  - S - Specify signs & symptoms

- Nutrition Intervention
  - Determine intervention and prescription
  - Formulate goals and determine action
  - Implement action

- Nutrition Monitoring & Evaluation
  - Select or identify quality indicators
  - Monitor and evaluate the resolution of diagnosis

- Outcome Management System
  - Research NCP
  - Use aggregated data to conduct research
  - Conduct continuous quality improvement
  - Calculate and report quality indicators
Nutrition Intervention

Nutrition intervention is purposeful planned actions intended to positively change a nutrition related behavior, environmental condition, or aspect of health status

• Directed to the etiology or cause of the problem identified in the PES statement

• Sometimes the intervention must be directed toward the signs and symptoms if the RDN cannot impact the etiology
Nutrition Intervention

Two interrelated components

• Planning

• Implementation
Nutrition Intervention

• **Planning:**

  - Prioritize the nutrition diagnoses
  - Review practice guidelines (EAL) and policies
  - Confer with the patient (and others)
  - Set goals and determine expected outcomes
  - Defining the specific nutrition intervention strategy
  - Define time and frequency of care
Nutrition Intervention

Implementation

- Communicate the plan of care
- Carry out the plan of care
- Continue data collection

Monitor and Evaluate

- Follow-up and verify the implementation
- Revise nutrition intervention strategy if needed
Nutrition Intervention

Four Domains

• Food and/or Nutrient Delivery

• Nutrition Education

• Nutrition Counseling

• Coordination of Nutrition Care
Use of Nutrition Interventions Based on Practice Setting

- **Food and/or Nutrient Delivery:**
  - institutional settings (hospitals, long-term care)
  - home care

- **Nutrition Education-Content:**
  - institutionalized settings

- **Nutrition Education-Application:**
  - outpatient/non institutionalized settings
  - private practice
  - community

- **Nutrition Counseling:**
  - outpatient/non institutionalized settings
  - private practice
  - community

- **Coordination of Nutrition Care:**
  - all practice settings
Nutrition Intervention

Reference Sheets include:

• Definition
• Details of Intervention
• Examples of typical use
• Other considerations
• References
Defined nutrition intervention terminology:

- Assists in communication within the dietetics profession and among other health care providers.

- Allows documentation of the impact of the profession on specific diagnoses and etiologies in all patient/client populations.
Step 4: Nutrition Monitoring & Evaluation

THE NUTRITION CARE PROCESS MODEL

- **Screening & Referral System**
  - Identify risk factors
  - Use appropriate tools and methods
  - Involve interdisciplinary collaboration

- **Practice Setting**
  - Collaboration
  - Skills & Competencies
  - Communication
  - Health Care Systems

- **Nutrition Assessment & Re-Assessment**
  - Obtain & collect important and relevant data
  - Analyze & interpret collected data

- **Nutrition Diagnosis**
  - Determine intervention and prevention
  - Formulate goals and determine action
  - Implement action
  - State signs & symptoms

- **Nutrition Intervention**
  - Individual / Population interacts with Nutrition Professional
  - Select or identify quality indicators
  - Monitor & Evaluate resolution of diagnosis

- **Outcomes Management System**
  - Research NCP
  - Use aggregated data to conduct research
  - Conduct continuous quality improvement
  - Calculate and report quality indicators
Critical thinking skills for Nutrition Monitoring & Evaluation:

- Selecting appropriate indicators/measures
- Using appropriate criteria (previous status, nutrition intervention goals, or reference standards) for comparison
- Defining where patient/client is now in terms of expected outcome
- Explaining variance from expected outcomes
- Identifying factors that help/hinder progress
- Deciding between discharge or continuation of nutrition care
Nutrition Monitoring & Evaluation

Determines whether the patient is meeting the nutrition intervention goals or desired outcomes.

A nutrition reassessment is needed to identify whether the nutrition-related problem still exists and evaluate the progress made toward resolving the problem.
Is the nutrition intervention strategy working to resolve the nutrition diagnosis, its etiology, and/or signs and symptoms?

Assesses the patient’s progress by comparing specific markers or nutrition care indicators against recognized, science-based standards or baselines.
Nutrition Monitoring & Evaluation

Definitions

**Nutrition Monitoring:** preplanned review and measurement of selected nutrition care indicators of patient/client’s status relevant to the defined needs, nutrition diagnosis, nutrition intervention, and outcomes.

**Nutrition Evaluation:** the systematic comparison of current findings with the previous status, nutrition intervention goals, effectiveness of overall nutrition care, or a reference standard

**Nutrition Care Outcomes:** the results of nutrition care that are directly related to the nutrition diagnosis and the goals of the intervention plan

**Nutrition Care Indicators:** markers that can be measured and evaluated to determine effectiveness of nutrition care
Nutrition Monitoring & Evaluation

Nutrition Care Outcomes: intermediate outcomes to other broader health care outcomes

• Acute or chronic disease: occurrence, duration, severity
• Infections
• Wound healing
• Health care cost
• Patient functional ability
Nutrition Care Outcome Characteristics:

• Represent results the RDN can impact

• Can be linked to nutrition intervention goals

• Are measureable with tools and resources available to the RDN

• Occur in a reasonable time period
Nutrition Monitoring & Evaluation Components

• Monitor progress toward the nutrition intervention or goal

• Measure the appropriate nutrition care indicators

• Evaluate the nutrition care indicators against appropriate standards selected during the nutrition care planning
Nutrition Care Indicators:

- Factors that food and nutrition professionals can impact directly, such as food and nutrient intake; growth and body composition; food and nutrition-related knowledge, attitudes, and behaviors; and food access

- Laboratory values, such as HgbA1c, hematocrit, or serum cholesterol

- Functional capabilities, such as physical activity

- Patient perception of nutrition care and results of nutrition care, such as nutrition quality of life
Measurement and Evaluation of Nutrition Indicators: Nutrition Care Criteria – what it is compared against

• Nutrition Prescription or Goal
  o Dietary Intervention
  o Behavior change

• Reference Standard: select what is appropriate for intervention or goal
  o National
  o Institutional
  o Regulatory standards
Selection and Interpretation of Nutrition Care Indicators:

Primary factors that influence the selection, measurement, and interpretation of individual nutrition care outcomes:

- Practice setting
- Age of patient
- Disease state and severity
Reference Sheets
These reference sheets are combined with the nutrition assessment reference sheets and contain these eight components:

- **Definition** of the nutrition assessment and nutrition monitoring and evaluation term
- The nutrition assessment and nutrition monitoring and evaluation indicator
- Measurement method or data sources recommended
- The nutrition interventions with which the nutrition assessment and nutrition monitoring and evaluation data are used
- The nutrition diagnoses with which the nutrition assessment and nutrition monitoring and evaluation data are used
- The criteria for evaluation
- The patient/client nutrition assessment and nutrition monitoring and evaluation documentation example
- References
Nutrition Monitoring & Evaluation

**Documentation**

Quality documentation for nutrition monitoring and evaluation includes the following:

- Date and time
- Indicators measured, results, and the method for obtaining the measurement
- Criteria to which the indicator is compared (nutrition prescription/goal or a reference standard)
- Factors facilitating or hampering progress
- Other positive or negative outcomes
- Future plans for nutrition care, nutrition monitoring, and follow-up or discharge
Data Sources and Tools

To monitor and evaluate a patient/client’s progress, the following tools may be used:

- Patient/client questionnaires
- Surveys
- Pretests and posttests
- Patient/client/family member interviews
- Anthropometric measurements
- Biochemical and medical test results
- Food and nutrition intake tools
Nutrition Monitoring & Evaluation

Nutrition Care Outcome Management System

Potential benefits of aggregate nutrition care indicator data include the following:

• Provide for process improvement and foster understanding of what works and what does not
• Can be used for outcomes measurement studies and quality improvement initiatives
• Link care processes and resource utilization
• Give an opportunity to identify and analyze causes of less than optimal performance and outcomes
• Define information for inclusion in centralized data systems relevant to nutrition care
• Can be used to quantify the food and nutrition professional’s contribution to health care
Factors that can impact aggregate nutrition care indicator data interpretation include:

- Method for collecting the outcome (diet record, recall)
- Data source (patient, family/caregiver, chart)
- Intervention components (type, duration, and intensity)
- Education and skill level of RDN
- Nutrition program attributes
Nutrition Monitoring & Evaluation

Summary

Nutrition Monitoring and Evaluation describes the patient’s progress through consistent terms that are evaluated based on carefully selected indicators and criteria.

Documentation of patient progress and outcomes with consistent terminology that can be collected using research methodology will result in documenting the value of the work of the RDN
NCP Resources
A new electronic format with a “responsive website” is available for ease of access around the world.

https://ncpt.webauthor.com/
1. **Translations:** The Academy collaborates with international dietetics associations to produce eNCPT translations. These translations are easily accessible to subscribers via tabs on the webpage.

2. **Easy Navigation:** Every page in the new eNCPT includes a file path at the top so that users can never get lost. Additionally, with the improved toolbar at the top of the screen, users can now easily get to any section of the eNCPT immediately, no matter where they are on the site.

3. **Modern Functionality:** The Scribd tool allows the user to scroll through PDFs on the screen without downloading first.

4. **Improved Organization:** The new online platform follows the layout of the print edition so that charts are left intact and information flows in a logical way.
Language translations
Translations is ongoing collaborative work between the Academy and interested national dietetic associations

Unique URL
Organizations can purchase a unique link for a specified number of simultaneous users and to provide access to their members

No Terminology License
Organizations will be granted permission to use the eNCPT in their Electronic Health Record by purchasing a multi-seat subscription to eNCPT
NCPT Toolkits

Learn the steps for creating an Electronic Health Record using interactive tools as part of an online subscription to the EHR Toolkit.

Utilize a specialty area toolkit designed to help you in your specific practice setting. NCP toolkits are available for use in the Public Health, Neonatal, and Long Term Care settings, and also independently with the Sponsored Independent Learning Toolkit.

To learn more about the NCP/NCPT and other available resources, visit www.eatright/NCP.

Please direct any further questions to ncp@eatright.org
International Reach
Providing Dietetic Resources to the World
Translations Now Available

eNCPT Translations

https://ncpt.webauthor.com/international-collaboration
The Academy has created a student eNCPT workbook, the NEW eNCPT Student Companion Guide, and Instructor’s Solution Manual. This book, in hard copy format, is designed to assist educators in classroom teaching of the eNCPT, and provides the following:

- Documents to help you teach the Nutrition Care Process
- Terminology
- Assessments to measure student comprehension
- Activities that promote group or classroom discussion:
  - Worksheets to teach development of PES statements
  - Case studies that promote active learning
  - Activities that students can complete as homework using their eNCPT subscription
eNCPT Student Companion Guide
and Instructor’s Solution Manual

eNCPT
STUDENT COMPANION GUIDE
Kay B. Howarter, MS, RDN
Robert A. Voss, MA

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NCP – Important Links

- NCP Website:  [www.eatright.org/ncp](http://www.eatright.org/ncp)

- International Collaboration and Translations [https://ncpt.webauthor.com/international-collaboration](https://ncpt.webauthor.com/international-collaboration)

- NCP Snapshots: [http://www.eatright.org/HealthProfessionals/content.aspx?id=5902](http://www.eatright.org/HealthProfessionals/content.aspx?id=5902)

- NCP Publications and Toolkits: [www.eatright.org/shop](http://www.eatright.org/shop)

Nutrition Care Process
FOR NUTRITION AND DIETETICS PROFESSIONALS

Terminology and Definitions

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