

American Dietetic Association Nutrition Care Process and Model



*Providing High-Quality
Nutrition Care
in a Variety of Settings*



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Nutrition Care Process and Model

*Systematic problem-solving method that
dietetics professionals use to critically
think and make decisions to address
nutrition-related problems and provide
safe, effective, high-quality nutrition care.*



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Today's Objectives

- Identify steps and criteria
- Apply ADA's Nutrition Care Process and Model in a variety of settings
- Describe how use of NCP and Model enhances value and performance of dietetics professionals

- Why a standardized Nutrition Care Process?
 - What is it?
 - Where can it be used?
 - What's next?



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Keys to Quality

NCP provides framework for
demonstrating how nutrition care
improves outcomes

- 🔑 Consistent, systematic structure and method
- 🔑 Common language
- 🔑 Evidence-based approach



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Ensure Quality of Care

Quality:

“The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”



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Demonstrating Quality

Content of Care:
Best Evidence
▪ Scientific principles
▪ Protocols
▪ Guidelines

+

Process of Care:
Nutrition Care Process and Model

=

Outcome:
Improved quality of care and health status



Clients with needs



Clients with needs met



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NCP Incorporates Evidence-Based Practice

- Evidence-based practice validates nutrition care
- Tools to Implement the NCP include *ADA MNT Evidence-Based Guides for Practice*



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MNT Effectiveness in Managing Chronic Disease

Dietetics professionals use the Nutrition Care Process and Model to demonstrate high-quality, patient-focused care that results in positive outcomes.



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Steps and Systems

Nutrition Care Model

- Reflects key concepts of each step
- Illustrates context within which Nutrition Care Process is conducted

Supporting systems

- Screening and referral
- Outcomes management



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Documentation

Ongoing – supports all steps in NCP

“Telling a story”

Elements of effective documentation include appropriate and thorough summary of nutrition care

- Assessment findings
- Nutrition diagnosis
- Goals
- Interventions
- Progress



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Central Core



Relationship between client and dietetics professional

- Client or patient at center
- Client's experiences influence relationship
- Dietetics professional draws on interpersonal skills



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Outer Rings

- Strengths of dietetics professional
 - ✓ Knowledge
 - ✓ Critical thinking, collaboration, communication skills
 - ✓ Evidence-based practice
- Factors of external environment
 - ✓ Health-care system, practice setting
 - ✓ Social support, economics, education level



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Nutrition Assessment

- Obtain, verify, interpret data
- Compare to relevant standards to help identify possible problem areas
- Review psycho-social, functional and behavioral factors in addition to dietary data
- Ongoing and dynamic



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Example of Nutrition Assessment Content

Nutrition Assessment:
What data are most effective for identifying clients' nutrition-related problem of interest?

What type of assessment data?

Type of assessment Content component

- Nutritional adequacy
- Fat and cholesterol intake
- Trans fatty acid intake
- Health status
- Lipid profile
- BMI
- Waist circumference

What are reliable standards (ideal goals)?

- How well
- How much
- How long

How Do We Get from Assessment

Nutrition Diagnosis

Crucial element of providing quality nutrition care



...to Intervention?



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Nutrition Diagnosis

Purpose

- Identify and label nutrition problem
- Nutrition diagnosis ... **not** medical diagnosis
- **Explicit** statement of nutrition diagnosis



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Nutrition Diagnosis Components

P-E-S Format

- **Problem:** (diagnostic label) describes alterations in client's nutrition status
- **Etiology:** cause or contribution risk factors
- **Signs or Symptoms:** defining characteristics

Problem -- related to -- Etiology --
as evidenced by -- Signs or symptoms



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PES Relationships

Nutrition Assessment → Nutrition Diagnosis Nutrition Intervention Nutrition Mon & Eval

Problem Etiology Signs & Symptoms



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PES Relationships

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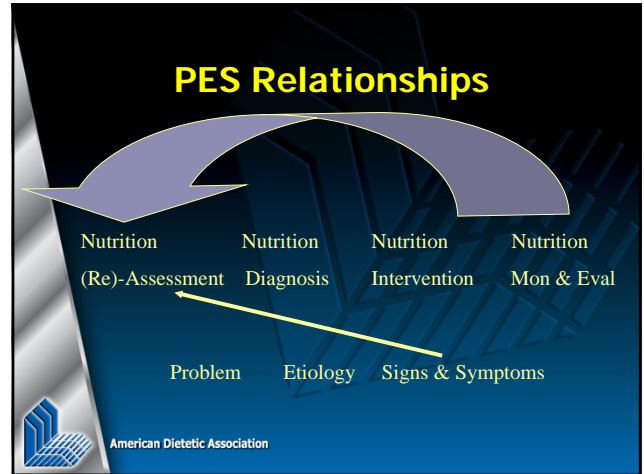
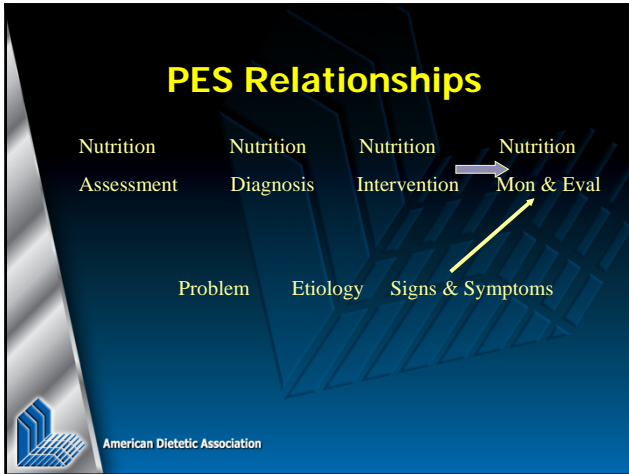
PES Relationships

Nutrition Assessment Nutrition Diagnosis → Nutrition Intervention Nutrition Mon & Eval

Problem Etiology Signs & Symptoms



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Standardized Nutrition Diagnostic Terminology

- Initial list of 61 Nutrition Diagnostic Terms have been identified and described
 - Term
 - Brief Description
 - Reference Sheet
- Can be used as Problem, Etiology or Signs & Symptoms

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Nutrition Diagnosis Example

“Inadequate protein intake **related to** changes in taste and appetite **as evidenced by** average daily protein intake 40 percent less than estimated requirements.”

- Select the **(P)**: nutrition diagnostic term
- Next verify/select **(S)**: signs and symptoms from the assessment data that document the presence of the nutrition diagnosis
- Then evaluate the assessment data that documents the **(E)**: etiology

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Nutrition Intervention

Purpose

- Plan and implement purposeful actions to address identified nutrition problem
 - ✓ Bring about change
 - ✓ Set goals and expected outcomes
 - ✓ Client-driven
 - ✓ Based on scientific principles, best available evidence



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Nutrition Intervention Components: Plan and Implement

Sub Step 1

Plan nutrition intervention

- Prioritize diagnoses
- Identify ideal goals and expected outcome
- Select intervention strategies
- Consult Evidence-Based Guides for Practice, other nationally developed guidelines



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Nutrition Practice Guidelines/Protocols

Links best external scientific evidence – or knowledge from experts – about nutrition care to a specific health problem

Evidence-based guides integrate content of care with process of care components



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Intervention Content Example

Nutrition interventions are purposefully planned actions designed with the intent of changing a nutrition-related behavior, risk factor, environmental condition, or aspect of health status

What the planned action is concerned with

Type of intervention Content component

- Macronutrients
- Micronutrients
- Meal planning
- Supplements
- Meal replacements
- Exercise

Dose, frequency and or duration of intervention component

- How much, how often

Plan the Intervention: Example

Nutrition Diagnosis

Excessive fat intake related to frequent consumption of high-fat meals as evidenced by fat calories greater than 55 percent of total calories per day



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Plan the Intervention: Example

Examples of Expected Outcomes

- Limits foods high in cholesterol, saturated fat
- Uses food sources of mono-unsaturated fat as preferred fat

Examples of Evidence-Based Ideal Goals

- Percentage of total kcal from fat: 25-35 percent
- Less than 7 percent saturated fat
- Up to 10 percent polyunsaturated fat
- Up to 25 percent mono-unsaturated fat



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Nutrition Intervention Components: Plan and Implement

Sub Step 2

Implement nutrition intervention

- Jointly develop for nutrition care plan with client
- Select behavioral change strategy/approach
- Dietetics professionals may...
 - ✓ Directly carry out the intervention
 - ✓ Delegate or coordinate care provided by others
 - ✓ Collaborate with other professionals
- Continue data collection, modify plan and strategies as condition or response change



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Implement the Intervention: Example

Nutrition Diagnosis

Excessive fat intake related to frequent consumption of high-fat meals as evidenced by fat calories greater than 55 percent of total calories per day

Nutrition Intervention

- Provide explanation and definitions of fat
- Review types and sources of fat
- Discuss methods to prepare or select meals with less total fat (focusing on saturated fat)
- Select self management strategies (recording intake, etc)



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Nutrition Monitoring and Evaluation

Purpose

- Determine progress being made toward client's goals or desired outcomes

Monitoring involves:

Review and measurement of status at scheduled times

Evaluation involves:

Systematic comparison with previous status, intervention goals, reference standard



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Nutrition Monitoring and Evaluation Components

Sub Step 1: Monitor progress

- Check client's understanding and adherence
- Determine if intervention is being implemented as planned
- Determine if client's status is or is not changing
- Identify other positive or negative outcomes
- Gather information indicating reasons for any lack of progress



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Nutrition Monitoring and Evaluation Components

Sub Step 2: Measure outcomes

- Select outcome indicators that are relevant to...
 - ✓ Signs or symptoms, nutrition goals, medical diagnosis and outcomes or quality management goals
- Use standardized indicators to...
 - ✓ Increase validity and reliability of measure
 - ✓ Facilitate electronic charting, coding and outcomes measurement

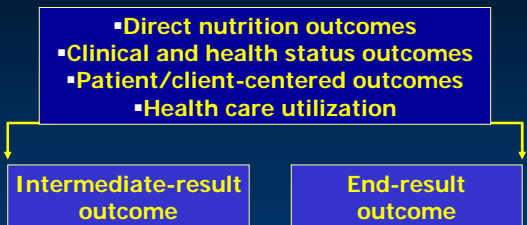


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What Gets Measured?

Nutrition Monitoring and Evaluation

Types of Outcomes



Nutrition Monitoring and Evaluation Components

Sub Step 3: Evaluate outcomes

- Compare current findings with previous status, intervention goals, and/or reference standards



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Support Systems: Screening and Referral System

- Identification of those who could benefit from special nutrition intervention
- Used by dietetics professionals and others
- Established system to connect to nutrition care



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Support Systems: Outcomes Management System

- Management information system that links care processes and resource utilization with outcomes
- Relevant data aggregated from many clients to determine overall effectiveness and efficiency of the process
- Summary findings sent back to providers and reported to administrators, payors

Infrastructure required



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MNT: An Application of the Nutrition Care Process

Nutrition Care Process

- Variety of settings
- Both individuals and groups
- Continuum of care
- Prevention and health promotion

Medical Nutrition Therapy (MNT)

- In-depth nutrition assessment
- Duration and frequency of care
- Uses Nutrition Care Process to manage disease



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NCP Example: Acute Care

Nutrition Assessment

- Large meat portions (greater than 6 oz. daily)
- Only use solid margarines (approx. 6 tbsp. daily)
- Could not identify foods with saturated fats
- Current intake of saturated fat > 15 percent calories
- No previous nutrition education



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NCP Example: Acute Care

Nutrition Diagnosis

- Excessive saturated fat intake **related to** regular use of solid margarine and large meat portions **as evidenced by** daily average of saturated fat in excess of 15 percent of calories
- Knowledge deficient **related to** no previous education **as evidenced by** client not able to name any foods that are sources of saturated fat



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NCP Example: Acute Care

Nutrition Intervention

- Plan with client to determine expected outcomes ... Targeted at the causes
 - ✓ Large meat portions: decrease portion size and change the types of meat consumed
 - ✓ Use of solid margarine: use olive oil in cooking and eating
 - ✓ Little to no knowledge: provide appropriate materials to recognize foods and read labels



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NCP Example: Acute Care

Nutrition Monitoring and Evaluation

- Monitor progress
 - ✓ Check for understanding
 - ✓ May provide follow-up phone call
- Measure outcomes
 - ✓ Average daily percent of saturated fat
- Evaluate outcomes
 - ✓ Compare with baseline diet history



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NCP Example: Community/Public Health

Nutrition Assessment

- Increased incidence of diabetes mellitus among adolescent population
- Increased BMI in middle school students
- Cuts in school budgets resulting in less recess time after lunch in middle schools
- No after-school programs



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NCP Example: Community/Public Health

Nutrition Diagnosis

- Inadequate physical activity **related to** limited outside recess after lunch as **evidenced by** children returning immediately to the class after lunch
- Potential for increase in BMI **related to** inadequate physical activity
- Potential for increase in Type 2 diabetes **related to** increase in BMI in middle school students



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NCP Example: Community/Public Health

Nutrition Interventions

Collaborate with community and school resources to...

- Reinstate school lunch recess
- Create additional means to increase physical activity
- Provide risk management information related to increase in Type 2 diabetes in overweight and inactive children, adults



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NCP Example: Community/Public Health

Nutrition Monitoring and Evaluation

- Track minutes/day of physical activity for children
- Track incidence of Type 2 diabetes
- Track BMI changes over time
- Evaluate knowledge of community education programs



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Review of Key Points

- Standardized process
- Individualized care
- Common language
- High-quality care and better outcomes



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What's Next?

- Education and implementation
- Standardized language



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Nutrition Diagnostic Terms

- Report submitted to HOD and BOD for action
- Information to be downloadable from website
- Publication will be available at FNCE
- Developing grassroots implementation network
- Developing process for members to submit proposed updates to list of terms annually
- Eventually terms will be integrated into electronic medical record coding systems



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Nutrition Diagnostic Terms

- Initial terms and documentation formats being pilot tested at two facilities
 - Virginia Hospital Center
 - San Diego VA
- Initial terms integrated into 3 research studies
 - CARLE Medicare Demonstration Study
 - Charney's doctoral research on reliability and comparing entry level-beyond entry level, and advanced practice
 - Dietetics Practice Based Research Network (DPBRN) study (being planned at end of March)



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Resources



Members Only

Practice or Research Tabs

Lacey K, Pritchett E. Nutrition care process and model: ADA adopts road map to quality care and outcomes management. *J Am Diet Assoc.* Aug 2003; 103:1061-1072

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Acknowledgements

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