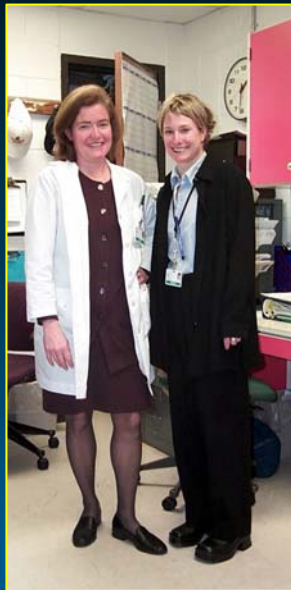


American Dietetic Association Nutrition Care Process and Model



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



American Dietetic Association

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.



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?



Keys to Quality

NCP provides framework for demonstrating how nutrition care improves outcomes

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



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.”



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



NCP Incorporates Evidence-Based Practice

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



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.



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



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



Central Core



Relationship between client and dietetics professional

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



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



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



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?



Nutrition Diagnosis

Purpose

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



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



PES Relationships

Nutrition
Assessment



Nutrition
Diagnosis

Nutrition
Intervention

Nutrition
Mon & Eval

Problem

Etiology

Signs & Symptoms



PES Relationships

Nutrition
Assessment

Nutrition
Diagnosis

Nutrition
Intervention

Nutrition
Mon & Eval



Problem

Etiology

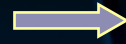
Signs & Symptoms



PES Relationships

Nutrition
Assessment

Nutrition
Diagnosis



Nutrition
Intervention

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Problem

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Signs & Symptoms



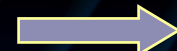
PES Relationships

Nutrition
Assessment

Nutrition
Diagnosis

Nutrition
Intervention

Nutrition
Mon & Eval



Problem

Etiology

Signs & Symptoms



PES Relationships



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



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



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



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



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



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



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



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



Implement the Intervention: Example

Nutrition Diagnosis

Excessive fat intake
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)



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



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



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



What Gets Measured?

Nutrition Monitoring and Evaluation

Types of Outcomes

- **Direct nutrition outcomes**
- **Clinical and health status outcomes**
- **Patient/client-centered outcomes**
 - **Health care utilization**

**Intermediate-result
outcome**

**End-result
outcome**

Nutrition Monitoring and Evaluation Components

Sub Step 3: Evaluate outcomes

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



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



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



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



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



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



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



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



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**



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



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**



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**



Review of Key Points

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



What's Next?

- Education and implementation
- Standardized language



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

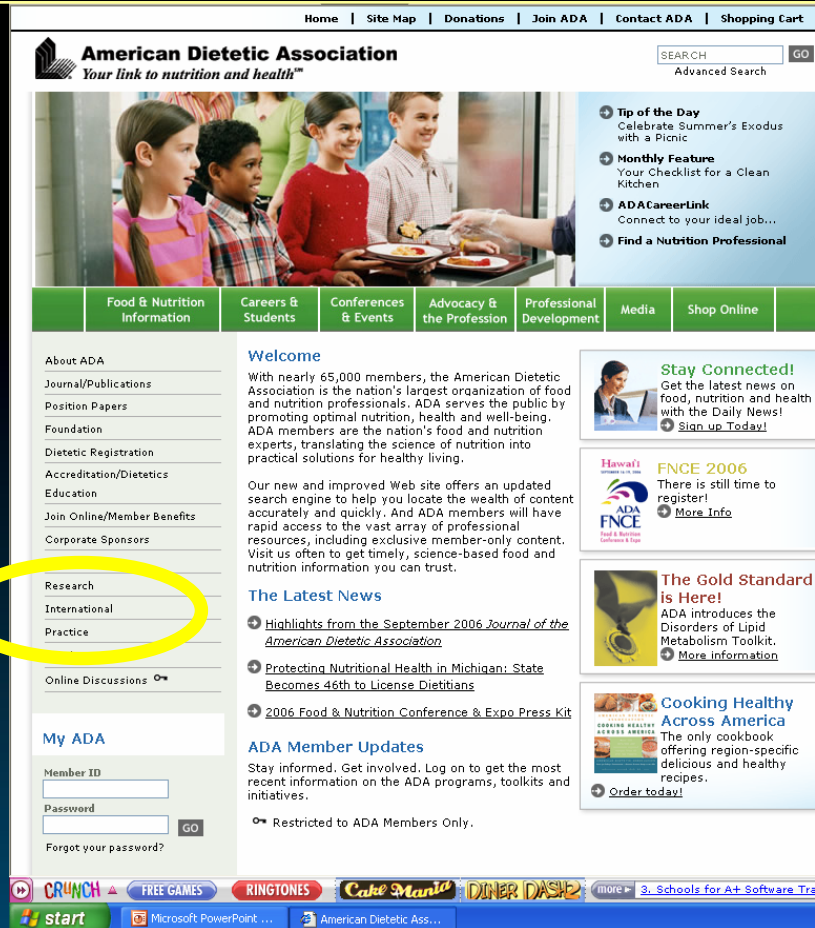


Nutrition Diagnostic Terms

- 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)



Resources



The screenshot shows the American Dietetic Association website. At the top, there are navigation links: Home, Site Map, Donations, Join ADA, Contact ADA, and Shopping Cart. The main header includes the ADA logo and tagline "Your link to nutrition and health™", a search bar, and a "GO" button. Below the header is a banner image of children at a picnic, with a "Tip of the Day" section on the right. A green navigation bar contains links for Food & Nutrition Information, Careers & Students, Conferences & Events, Advocacy & the Profession, Professional Development, Media, and Shop Online. The main content area is divided into several sections: "Welcome" with a paragraph about the association's 65,000 members; "The Latest News" with three news items; "ADA Member Updates" with a paragraph and a "Restricted to ADA Members Only" note; and "Stay Connected!" with a "Sign up Today!" link. On the left, a sidebar lists various resources, with "Practice" circled in yellow and a yellow arrow pointing to it from the left edge of the slide. At the bottom, there is a banner for "CARUNCH" and other services, and a Windows taskbar is visible.

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

American Dietetic Association



Acknowledgements

- Hammond MI, Guthrie HA. Nutrition clinic: An integrated component of an undergraduate curriculum. J Am Diet Assoc. 1985 (May); 85; 594
- Splett P, Myers E. A proposed model for effective nutrition care. J Am Diet Assoc. 2001 (March); 101:357
- Kight MA, Sandrick K. Is nutritional diagnosis a critical step in the nutrition care process? J Am Diet Assoc. 2002 (March); 102: 427
- Lacey K, Cross, N. A problem-based nutrition care model that is diagnostic driven and allows for monitoring and managing outcomes. J Am Diet Assoc. 2002 (April); 102:578



Nutrition Care Process-Standardized Language Committee (06-07)

Annalyn Skipper, PhD, RD, FADA, Chair

- **Nancy Lewis, PhD, RD, FADA, Vice Chair**
- **Pam Charney, MS, RD, CNSD**
- **Patricia Splett, PhD, MPH, RD**
- **Mary Russell, MS, RD, LDN, CNSD**
- **Donna A Israel, PhD RD LD LPC FADA**
- **Judy Beto PhD RD LD FADA**
- **Susan Cowen MS, RD, CSP**
- **Elise Smith, MA, RD, LD**
- **Joanne Shearer, RD, MS, CDE, LN**
- **Kristy Hendricks, DsC, RD**
- **Staff Liasons:**
 - **Esther Myers, PhD, RD, FADA**
 - **Kim Thomsen, MBA, RD, UDA, Maj (Training With Industry)**
- **Consultants:**
 - **Melinda Jenkins, PhD, RN**
 - **Donna Pertel, MS, RD**
 - **Joanne Spahn, MS, RD**



Standardized Language Task Force (04-05)

Sylvia Escott-Stump, MA, RD, LDN, Chair

- Peter Beyer, MS, RD, LD
- Chris Biesemeier, MS, RD, LDN, FADA
- Pam Charney, MS, RD, CNSD
- Marion Franz, MS, RD CDE
- Karen Lacey, MS, RD, CD
- Kathleen Niedert, MBA, RD, LD, FADA
- Mary Jane Oakland, PhD, RD, LD, FADA
- Patricia Splett, PhD, MPH, RD
- Frances Tyus, MPD, RD
- Staff Liasons:
 - Esther Myers, PhD, RD, FADA
 - Ellen Pritchett, RD, CPHQ
 - Vivian Hutson, MBA, RD, Lt Col (Training With Industry)
- Consultants:
 - Melinda Jenkins, PhD, RN
 - Annalynn Skipper, MS, RD,
 - Donna Pertel, MS, RD

