Part II

Learning Objectives:

• Define a community in nutrition transition and its impact on both under and over
  nutrition within the same population
• Apply the NCP in public health/community nutrition practice, specifically to target
  populations such as communities in nutrition transition
• Identify at least three advantages of applying the NCP when working with target
  populations

Overview of Key Concepts:

The second presentation will focus on identifying the elements of nutrition transition
communities, how social inequities contribute to the obesity-under nutrition paradox, the tools
for identifying these inequities and how to address nutrition diagnosis within such communities. How to use the NCP-IDNT (International Dietetic Nutrition Terminology) approach to reach early life nutrition interventions in vulnerable groups that ameliorate quality of life through life cycle will be discussed. A case study focused on abandoned children in Venezuela will illustrate the use of the NCP-IDNT. We will conclude with descriptions of intervention and public policy analysis processes.

Key Concept #1: Nutrition Transition, Malnutrition, Obesity-Undernutrition Paradox, Hunger, Hidden Hunger, Food Security/Insecurity

Globally obesity prevalence has increased to become a public health concern even in countries
where traditionally poverty and social inequities were associated with under nutrition. Today,
people are exposed worldwide to changes in lifestyle and demographic conditions, availability of
fast food, sedentary environments and disparities in countries income distribution. These societal
shifts are promoting new patterns and environments that challenge population health. Popkin
describes a transitional society “as a previously low income society that is now facing significant
improvements in income with concomitant changes in disease and dietary patterns” and more
specific a community in Nutrition Transition is a community in which dietary patterns and body
composition are altered as a consequence of demographic and socioeconomic changes, as
referred by Caballero and Popkin.

Moreover, social inequities are leading to a new challenge besides under nutrition: overweight
and obesity, diabetes and other non communicable diseases are emerging as new burdens for low
income communities, as poor neighborhoods lack of adequate spaces for physical activities, access to good quality food may be restricted and lack of education can be present. Unfortunately this might be a common situation not only for developing country but for low income communities in the industrialized world such as immigrants arriving in the search for better opportunities.

In this context the following concepts should be taken in perspective according to FAO and USDA:

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• Food Security: Condition of having regular access to enough, nutritious food for a healthy life. USDA [www.USDA.gov](http://www.USDA.gov) also of interest the FAO concept: Access to food of good quality for covering the nutritional requirements, having the resources for buying these foods and obtained in a socially accepted way (FAO, 1997)

• Food Insecurity: When people do not have adequate physical, social or economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life

• Hunger: The uneasy or painful sensation caused by a lack of food. When used in program evaluations, lack of access to food must be involuntary

• Hidden hunger: When an individual suffers from subclinical nutrient deficiencies (e.g. iron, folic acid and vitamin A) but does not have overt clinical signs of under nutrition

• Obesity/Under nutrition Paradox: The coexistence of malnutrition extremes within the same population

**Key Concept #2: Characterizing the elements of NCP-IDNT for Identifying Nutrition Transition Communities**

The NCP has four phases (1-Nutrition Assessment 2-Nutrition Diagnosis 3-Nutrition Intervention and 4- Nutrition Monitoring and Evaluation) developed to improve the quality and consistency and IDNT standardized language approach for helping in organize and record valuable nutritional information to be used for the formulation of public actions, in the Public Health Context. It is important into the public health perspective that population research studies and evaluations related to nutrition problems are presented accurately to policy makers so the best actions are taken, nutrition related diseases can be prevented and/or if there is a subgroup that needs specific intervention Depending on the public health nutrition problem that should be addressed in a particular environment and/or the interests of the policy makers the information to be compiled and organized may vary. In 2011 and 2012, several researches were conducted in Venezuela to address nutritional associated problems in nutrition transition communities and the following standardized criteria to be found at IDNT International Dietetic Standardized Terminology for the Nutrition Care Process were useful:

- Energy Intake (FH-1.1.1)
- Fluid /Beverage Intake (FH-1.2.1)
- Food Intake (FH-1.2.2)
- Breast Milk/Infant Formula Intake (FH-1.2.3)
- Food/Nutrition Program Participation (FH-6.1)
- Safe Food/Meal Availability (FH-6.2)
- Safe Water Availability (FH-6.3)
- Physical Activity (FH-7.3)
- Nutrition Quality of Life (FH-8.1)
- Body composition/Growth/Weight History (AD-1.1)
- Underweight (NC-3.1)
- Overweight and Obesity (NC-3.3)
- Undesirable Food Choices (NB-1.7)

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Key Concept #3: Public Policy Analysis and NCP, an Integral approach.

The public actions and interventions that will constitute the policies to solve nutritional public problems of vulnerable groups is a need all over the world. For this important issue, actions to be taken require accurate information. One of the reasons for developing NCP and IDNT was the need to have an organized and standardized methodology to label the nutrition care provided by qualified nutrition professionals. This labeling of the nutrition care provided through the 4-phase NCP may be compared to the traditional public policy analysis approach as described by Dunn for sociopolitical environments which also includes four phases. Nutrition interventions and public policies will require that policy makers articulate several fields such as finance, social protection and security with nutritional factors for accurate interventions in order to achieve the best results possible to ameliorate the challenges faced in nutrition transition communities worldwide.

Summary of Key Concepts:

1- Concepts of Nutrition Transition, Malnutrition, Obesity-Under nutrition Paradox, Hunger Hidden Hunger and Food Security/Insecurity are important to identify a nutrition transition community

2- The standardized methodology of the NCP-IDNT can be used to identify what elements of the concepts discussed previously which are present in these communities

3- The quality of life of a population in nutrition transition may be improved by proposing actions to policymakers using the NCP-IDNT

References:


2- Seligman HK and Schillinger D. Hunger and Socioeconomic disparities in Chronic Disease. NEJM 363;1 July 1 2010.


4- Gillman MW. Developmental Origins of Health and Disease. NEJM 353;17 October 27,2005

17- Méndez Castellano Hernán. La Situación Agroalimentaria y la Pobreza. Su Impacto en la Nutrición de la Familia y el Niño en Venezuela.1992 Caracas, Venezuela
18- Uauy R. Undernutrition is Undernourished. Public Health Nut 11 (6) 647-649

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**Resources:**

Academy of Nutrition and Dietetics-Nutrition Care Process  
[www.eatright.org/ncp](http://www.eatright.org/ncp)

United States Department of Agriculture-Food Security  
[www.usda.gov](http://www.usda.gov)

Venezuelan Health Observatory  
[www.ovsalud.org](http://www.ovsalud.org)