## MEDICAL NUTRITIONAL THERAPY

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- Medical Nutrition Therapy (MNT) is individualized dietary instruction that integrates diet therapy counseling for a nutrition-related problem.
- MNT is the use of specific nutrition interventions to treat an illness, injury or condition, to achieve or maintain good nutritional status.

Nutritional Therapy is an evidence-based approach to maximizing one's health potential though individually formulated nutritional and lifestyle changes.

Nutritional Therapy treats the body as a whole while seeking the root source of health concerns, rather than simply treating the symptoms. It involves an in-depth nutrition assessment of the patient, nutrition diagnosis, nutrition intervention(which includes diet therapy, counseling, and the use of specialized nutrition supplements), and nutrition monitoring and evaluation. MNT includes setting goals for the patient's treatment and developing a specialized nutrition prescription that includes patient education and self-management training. MNT, which is also called therapeutic nutrition,

has become an increasingly important component of integrated health-care systems.

The purpose of MNT is to identify patients at risk for major nutrition-related health problems and recommend dietary adjustments leading to better health outcomes and improved quality of life.

Eight of the 10 leading causes of death—including coronary heart disease, stroke, diabetes mellitus, and some cancers—are related to food and alcohol consumption patterns.

Other important patient populations who benefit from MNT include the obese, the elderly, and infants of low birth weight. MNT can range in complexity, from designing a reduced calorie diet for weight loss to prescribing a <u>high protein</u> <u>diet</u> to promote wound healing for patients with severe burns.

In severe cases, such as for people with cancer, a qualified dietician can recommend tube or intravenous (IV) feeding to prevent <u>malnutrition</u>.

The duration of MNT varies. Typically, the therapy stays in place until the initial goal is achieved or the nutritionrelated diagnosis is resolved. However, the plan can be adjusted as needed by the medical team.

#### When should MNT be implemented?

Like other medical treatments, MNT has an appropriate time and place.

MNT is prescribed after an in-depth evaluation by the physician and dietitian determines that a patient had a medical condition that can be improved by adhering to this method.

# What are the benefits of medical nutrition therapy?

There are many advantages associated with MNT. The following benefits when following a specialized diet plan with dietitian:

1. Slow or reverse symptoms of chronic disease Chronic disease can be difficult to manage. However, MNT can slow the progression of chronic disease and may even reverse or stop some of the symptoms patient are experiencing. An example of this can be seen when a person with type 2 diabetes is able to maintain their blood glucose levels in target ranges, they may experience fewer symptoms associated with unmanaged diabetes such as frequent urination or weight gain.

2. Prevent other diseases from happening in the first place

MNT may reduce the risk of chronic diseases, such as type 2 diabetes, heart disease and obesity. Also, effective MNT may help reduce onset or progression of painful diabetic neuropathy.

#### 3. Increase daily energy and activity levels

Optimizing nutrition may also increase overall energy levels, allowing patient to focus on other components of his overall health care plan.

#### 4. Lose weight

As a result of balanced nutrition, patient may also see a reduction in his weight. Many chronic diseases are exacerbated by excess weight so weight loss may be a first-line goal of medical nutrition therapy.

#### 5. Reduce health care costs

Preventing chronic disease and managing symptoms more efficiently can save patient a lot of time and money down the road. It may even save him from having to undergo invasive tests and procedures. For example, if he have heart disease and can lower his cholesterol with an MNT plan, and may not have to undergo an operation to clean or replace main arteries later on. That will save the patient from the difficulty of recovery and the potentially big financial burden that is involved with surgery.

#### **Purpose of Nutrition Therapy**

#### The purpose of nutrition therapy is to :-

- Ensure adequate energy and nutrient intake- to prevent under and over nutrition (malnutrition)
- Prevent insufficient intake of some micronutrients such as iron and folate
- Prevent physiological consequences of malnutrition- LBW babies, NCDs and mortality
- Improve adherence of recommendations such as RDA.

Clinical nutrition is of central importance for patient ability to handle diseases in general, infections, surgery and trauma in particular.

The objective of medical nutrition therapy is improved patient outcome by avoiding malnutrition, maintaining body tissue and functioning plasma protein stores, preventing macro – and micro nutrient deficiency.

## **MNT Protocols**

 MNT protocols are a set of <u>steps</u> incorporating current professional knowledge (evidence-based) that clearly define the <u>level, content and frequency</u> of <u>nutrition care</u> appropriate for a disease or condition.

## **Nutrition Care Process**

The Nutrition Care Process (NCP) is designed to improve the consistency and quality of individualized care for patients/clients or groups and the predictability of the patient/client outcomes.

Process of planning for and meeting MNT needs of the individual through

- 1. Assessing nutrition status and analyzing data to identify nutrition related problems
- 2. Coming up with a nutrition diagnosis
- 3. planning & prioritizing nutrition intervention(s) to meet the patient's needs
- 4. Evaluating the nutrition care outcomes

- Successful nutritional therapy can occur only when the diet is personalized ( adapted to meet individua needs).
  - This can only be done by planning with the patient or family .
  - Four areas must be explored together, as follow:

- 1- Personal needs What personal desires, concerns, goals, or life situation needs must be met?
- 2- Disease --How does the patient's disease or condition affect the body and its normal metabolic functions ?
- **3- Nutritional therapy** How and why must the diet be changed to meet needs created by the patient's particular disease or condition ?
- 4- Food plan -- How do these necessary nutritional modifications affect daily food choices ?

## **The Diet Prescription**

Defines type, amount, frequency of feeding based on pt.'s needs, care goals

May specify calorie goal

May limit or increase various components of the diet

Each institution usually has specific diets that have been approved by committee that are used at that institution???

## **Modifications of the Normal Diet**

**ONORMAL NUTRITION IS FOUNDATION OF** therapeutic diet modifications

- Based on DRIs
- Based on Food Guide Pyramid

**OPurpose of diet is to supply needed** nutrients

## **Modifications of the Normal Diet**

- **1-Change in consistency**
- 2-Increase/decrease energy value of diet
- 3-Increase/decrease type of food or nutrient consumed
  - **4-Elimination of specific foods or components**
- 5-Adjustment in level, ratio, balance of protein, fat, CHO
- 6-Change in number, frequency of meals
- 7-Change in route of delivery of nutrients

Nutrition Counseling: A supportive process to set priorities, establish goals, and create individualized action plans which acknowledge and foster responsibility for self-care.

### **Nutrition Education and Counseling**

- Communicating with a patient about his or her specific nutrition intervention plan is a critical step in the potential success of the treatment.
- Patients and families who understand the necessary changes to food or nutrient delivery methods are able to appreciate the benefit from such adjustments and are more likely to be compliant.

Education may be a one-on-one experience with the dietitian, or it may occur in a group setting.

Initial education and counseling interactions during inpatient stays can continue through outpatien appointments, when necessary.

- Nutrition intervention plans are generally long term lifestyle modifications that are meant to promote and improve health.
- Some patients will have more changes to make than others, and they will need continued nutrition counseling support to reach one goal at a time.
- The plan of care will be modified over time as needed and in response to intervention.