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# Malnutrition Might be Avoided through Nutrition Intervention and Evaluation

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#### **Abstract**

Adults over 65 years of age have altered nutritional status due to physiologic as well as psychological changes. In actuality, malnutrition poses a bigger risk to this demographic than obesity. This page examines the risk factors for malnutrition, such as diet, restricted money, social isolation, chronic illness, and physiologic changes, as well as the intake requirements for older persons. Nursing interventions and assessment are also covered.

**Keywords:** Nutritional status; Physiologic; Malnutrition; Isolation

## Introduction

This was a select gathering of senior citizens, in a way. Its members may move around and had family who could look after them. However, if one were to do interviews with every person in the group, a wide range of dietary issues would probably surface. Poor dental hygiene and chronic illnesses are easily identifiable. A caregiver who has spent months caring for a sick spouse may come to light via more examination, as may at least one person who spends the majority of mealtimes alone, staring out a window and scarcely picking at meals [1,2].

Poor nutrition is made possible by physiologic and psychological changes that occur as we age. In fact, under nutrition and malnutrition are common in older persons even in America, where obesity is on the rise (age of 65 and older). Malnutrition is defined as "any disorder of nutrition status, including problems originating from a lack of nutrient intake, poor nutrient metabolism, or over-nutrition" by the American Society for Parenteral and Enteral Nutrition. It can be brought on by a number of circumstances (1) Inadequate intake (2) Mal absorption, (3) A loss of nutrients resulting from diarrhea, excessive perspiration, hemorrhage or renal failure (4) Drug addiction and (5) Infection [3].

According to the Nutrition Screening Initiative (NSI), a multidisciplinary coalition led by the American Dietetic Association and the American Academy of Family Physicians, 20% to 60% of patients receiving home care are malnourished, and 40% to 60% of older adults admitted to hospitals are either malnourished or at risk for it. This is significant for those in charge of these patients' treatment because malnutrition is linked to more expensive hospital stays and longer lengths of stay. Additionally, people who are undernourished are more likely to have weaker muscles and wounds that heal slowly. They are also more likely to experience pressure ulcers, infections, and postoperative problems.

One thing is evident from these estimates: nurses today in all healthcare settings need to be alert to identify under nutrition and use the proper interventions. In order to address this, this article will concentrate on the macronutrients (carbohydrates, proteins, and fats) as well as the physiologic and psychological changes that make under nutrition a serious risk for older persons.

# Types of inadequate nutrition

Under nutrition of the protein-energy variety is the one that affects older persons the most frequently. It may result from either a reduction in intake or the hyper metabolism connected to particular diseases (such as trauma, fever, and surgery). A diagnosis of protein-

energy under nutrition needs "clinical and biochemical evidence of inadequate consumption," according to the Institute of Medicine (IOM). Physical symptoms include lethargy, a low body mass index (BMI), and biochemical proof such as lowered serum albumin or other serum protein levels. Two examples of under nutrition in protein and calories are masamus and kwashiorkor.

The threat that obesity poses to older persons is unknown, despite the fact that it is a substantial public health concern in the US and internationally. Obesity is a nutritional condition that is frequently encountered in older adults. A high BMI in older persons has not been proved to be a predictor of mortality, and there is some evidence to suggest that being overweight as one ages may operate as a safeguard against some ailments like hip fractures. The alternatives for treating obesity in the elderly are also not well-defined or supported by data. 4 The IOM argues that each individual instance must be taken into account when weighing the advantages and hazards of weight loss in obese older persons. In older people, where the loss of fat-free mass is associated with significant morbidity and mortality, an additional loss of lean body mass (body tissues not holding fat or fat-free mass), already decreasing with age, may not always be suitable. It has been hypothesized that older persons may actually have higher optimal body weights than younger adults [4].

## Consumption daily needs

Physiologic changes that occur with ageing alter how many calories, grams of protein, and fluids the body needs. According to the IOM, "as people age, lean body mass gradually declines and body fat levels rise. Lean body mass loss causes a decreased basal metabolic rate, which lowers older people's energy requirements [i.e., necessary calories]. However, a person's overall daily demands may increase due to disease, injury, stress, and degree of exercise.

#### Hazard elements

Older persons are more likely to acquire under nutrition due to

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dietary, economic, psychological, and physiological variables.

#### Food

A lack of appetite, difficulties swallowing or eating, insufficient hot meals, eating less than two meals a day, or having little to no hunger are all risk factors for poor nutrition in older persons.

Due to a lack of funds, some older folks have started eating fewer meals each day, substituting bread and juice for healthier options, and shopping for groceries on a budget. Additionally, because people on fixed incomes frequently only receive money once a month, they might alter their shopping habits based on the day of the month. When the monthly check arrives, buying fresh vegetables can be an option, but after 30 days, purchases might only be of cheap nonperishables like cold cereal [5].

#### Insulation

Loneliness can make older persons who live alone lose their motivation to cook. Shahar and colleagues discovered that widows' enjoyment of meals and appetites both tend to decline, which increases their risk of weight loss. Due to physical limitations or lack of culinary experience, other older persons might find it challenging to prepare meals for themselves. Finally, older adults (especially those in rural areas) can be at high risk for undernutrition if they lack access to transportation to stores.

#### Habitual condition

It is more common for older persons to have chronic illnesses that limit consumption. For instance, a handicap may make it difficult to prepare or consume meals, and despair may result in a loss of appetite. Another risk factor is having poor oral health, which includes having cavities, gum disease, and missing teeth, as well as having xerostomia, or dry mouth, which makes it difficult to "lubricate, masticate, and swallow food." Xerostomia can be exacerbated by antidepressants, antihypertensive and bronchodilators.

Lean body mass decreases and re-distribution of fat around internal organs are two physiological changes that put older persons at risk for poor nutrition. These modifications help explain why elderly persons have lower calorie needs. Lean body mass burns and consume more calories because it comprises metabolically active tissues. Calorie requirements increase when lean body mass declines. Additionally, changes in skin thickness, turgor, elasticity, and compressibility, as well as spine shortening, might affect anthropometric measurements. The last factor that can affect nutritional intake is changes in taste, which can be brought on by drugs, dietary shortages, or taste bud atrophy.

#### Diagnosis and testing

Nutritional evaluation should be common while caring for this population because it is crucial to preventing disease and supporting health in older persons. Determining weight, height, weight history, and functional limitations are just a few of the many already common exam components. A more thorough evaluation, however, is required to ascertain status. This involves looking at "clinical, nutritional, and social histories; anthropometric and biochemical data; as well as drugnutrient interactions."

In any clinical context, dietary intake assessment is crucial. In an inpatient setting, nurses or nursing assistants may be asked to record intake with a calorie count (also known as a nutrient intake analysis) for a predetermined time period if a patient has lost weight, is in a hyper metabolic state, has low serum protein levels, or has wounds that

aren't healing properly [6,7]. This is particularly crucial if it's uncertain whether a patient's diet is sufficient for his needs. These same worries may lead an outpatient to seek a nutritionist to offer a food-frequency or dietary-recall questionnaire, in which the patient records everything he has consumed over a predetermined period of time (usually 24 hours).

Anthropometry measures a person's height, weight, and body mass index (BMI) in order to determine their nutritional condition and to identify obesity and underweight. Nurses should use caution when giving this task to nursing assistants because of the significance of these two measurements. By rechecking the patient's measurements and contrasting them with the nursing assistant's findings, if they want to do so, inter rater reliability can be established. Regularly carrying out this is advised.

#### Mediation

As soon as under nutrition is detected or suspected, a referral to a nutritionist should be initiated. A multidisciplinary team with expertise in nutrition should be consulted, and a pharmacist may check the patient's prescriptions to look for drug-nutrient interactions (many medications can cause anorexia or change taste or appetite). The nutritional state of your patients can be improved by the following strategies [8,9].

## Reduce mouth dryness

Avoiding caffeine, alcohol, smoke, dry, clunky, spicy, salty, or excessively acidic foods is advised for people who have dry mouth. Other actions that the patient can take include putting petroleum jelly on their lips and dentures, frequently drinking small mouthfuls of water, and chewing sugarless hard candy or gum to promote saliva (not recommended for people with dementia or dysphagia).

## **Enhancing diet**

In the hospital context, you might use a variety of tactics to promote lunchtime eating.

- At mealtimes, take a stroll to assess the amount of food being consumed and whether assistance is required.
- When possible, take your breaks before or after mealtimes to make sure there are enough personnel on hand to assist patients with meals.
- Inspire family members to drop by during mealtimes. As long as they adhere to the patient's diet, ask them to bring favourite items from home. Find out the patient's preferred foods.
- To help patients regain or maintain their weight, suggest small, frequent meals that are nutrient-dense. Get dietary services to offer wholesome snacks.
- Before meals, remove bedpans, urinals, and emesis basins from rooms.
- Use analgesics and antiemetic's in a regimented manner to lessen the likelihood of discomfort or nausea at mealtimes.
- If patients can easily get out of bed and remain seated, serve them food on a chair.
- When feeding the patient, sit at her eye level and make eye contact with her to promote a calmer environment.
- If patients are not in their rooms for mealtimes, order a late food

tray or keep food warm. During mealtimes, avoid interrupting patients for rounds and less urgent procedures.

 Assist patients with oral hygiene and denture insertion before meal is served.

# **Raising Nutritional Recommendations**

**Eggs:** To salads, dressings, vegetables, casseroles, and creamed meats, add chopped, hard-boiled eggs. Increase the amount of eggs or egg whites in the batter for quiches, pancakes, and French toast. When making omelettes and scrambled eggs add extra egg whites.

**Milk:** Whenever possible, include into dishes and drinks. Make hot cereal, soup, cocoa, and pudding with this. Serve veggies and other foods with cream sauces.

**Powdered Milk:** Include it in regular milk and milk-based drinks like milkshakes. Use it in breads, muffins, puddings, custards, meat loaves, cream soups, casseroles, mashed potatoes, and cream sauces.

**Ice Cream, Yogurt and Frozen Yogurt:** Combine with soft or cooked fruit to combine or whip; add to cereals, fruits, gelatin desserts, and pies. Addition to milk

**Hard or Semisoft Cheeses:** Melt on items like pies, stewed fruit, tortillas, muffins, breads, vegetables, eggs, and sandwiches. Grate and incorporate into mashed potatoes, meat loaf, rice, sauces, casseroles, and noodles.

Cottage Cheese or Ricotta: Use to fill fruits and vegetables, or combine with. Include in casseroles stuff shells or pasta dishes like manicotti.

**Meat and Fish:** Include cooked, chopped meat or fish in soups, salads, casseroles, and vegetables. Add to omelets, soufflés, quiches, stuffing's for sandwiches and more.

**Beans or Legumes:** Dried peas, legumes, beans, and bean curd (tofu) can be cooked and used in ethnic and local meals as well as soups. Include in pasta, grain, and casserole meals that also have cheese or meat in them.

**Peanut Butter:** Spread on crackers, toast, muffins, pancakes, and waffles. Serve as a dipping sauce for raw veggies including carrots, celery, and cauliflower. Apply a fruit spread to apples and bananas.

**Nuts, Seeds, Wheat Germ, and Other Ideas:** Include in cookies, muffins, pancakes, waffles, breads, and casseroles. Add a sprinkle to salads, veggies, ice cream, yoghurt, fruit, and cereal. For a pasta or vegetable sauce, combine herbs and cream with parsley, spinach, or basil.

## Discussion

If older persons can't eat enough, they should begin receiving

specialist nutrition care if the advantages of better nutrition outweigh the hazards involved. Parenteral nutrition carries hazards such as catheter-related infections, hyperglycemia, metabolic bone disease, fluid and electrolyte abnormalities, and elevated liver enzyme levels. Aspiration pneumonia, fluid and electrolyte imbalances, feeding intolerance, and gastrointestinal disorders are some of the dangers associated with enteral tube feeding.

#### Conclusion

Whereas older patients sent home with tube feedings are routinely followed at home while older patients getting home parenteral nutrition may not receive the same level of professional care. There is definitely a need for an interdisciplinary strategy to monitoring these patients at home, as difficulties caused unscheduled medical visits and readmissions in a recent study of older persons receiving home enteral nutrition

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#### **Conflict of Interest**

None

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