# 8. Treatment of Malnutrition in Old-age Care

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Fully seventeen percent of Sweden's population is above the age of 65. For the present, that figure is not increasing; but the proportion above 80 is growing. In connection with a major reform in 1992, old-age care became the responsibility of Sweden's municipalities, to which capacity for some 30,000 care recipients was transferred from regional facilities. Since then, the total number of places for acute medical care and geriatric care has decreased from ca. 90,000 to about 35,000. Average time spent in hospital has been significantly reduced, resulting in the transfer of a large health-care burden to municipal old-age care (1).

The majority of those subject to the greatest risk of becoming undernourished, the infirm elderly and the chronically ill, reside in municipal facilities, increasing the need for effective nutritional regimes in old-age care. In 1997 there were about 135,000 individuals living in various kinds of group home for the elderly, and some 165,000 of those 65 and older received personal assistance and/or health care in their homes.

The Swedish National Board of Health and Welfare has in recent years studied nutritional conditions in the health-care system (2–7). Some 1300 individuals have been examined in different types of community, in every part of the country. All were recipients of care in group homes, or of health care and personal assistance in their own homes. A surprisingly large proportion, ranging from 49–100 percent, were found to be or suspected of being undernourished when evaluated with MNA, Mini Nutritional Assessment (see Part I, Chapter 2: "Evaluating the Patient's Nutritional Status") . The figures for various categories are presented in Table 1.

MNA has been criticized for lack of specificity. It is strongly influenced by cases requiring extensive care, which probably increases the likelihood that malnutrition or suspected malnutrition will be found in all nursing homes evaluated with MNA. But heavy care requirements are, in themselves, a risk factor. The MNA results summarized in Table 1 are supported by the fact that a large proportion of those examined were underweight (for an evaluation of BMI, see Part I, Chapter 2).

***Table 1.*** *Percent undernourished in municipal old-age care, according to Mini Nutritional Assessment (MNA) and low Body Mass Index (BMI).*

| Type of care | Under-nourished | In risk zone | BMI ≤20 | BMI ≤23 |
|---|---|---|---|---|
| Home assistance (356) | 6 | 43 | 15 | 35 |
| Home health care (80) | 3 | 62 | 34 | 64 |
| Service flats (349) | 21 | 49 | 18 | 48 |
| Old-age home (261) | 33 | 57 | 25 | 55 |
| Group home for dementia patients (96) | 39 | 51 | 19 | 54 |
| Nursing home(166) | 71 | 29 | 33 | 70 |

# Goals of nutritional care and treatment

The overriding goal for nutritional treatment of the elderly is to achieve the best possible quality of life and human function. This differs from the goal of nutritional guidelines for younger persons, where the emphasis is on preventing future illness. Food and mealtimes also have a social aspect.

# Quality regulations and guidelines. Need of special competence in municipal old-age care

According to the National Board of Health and Welfare's regulations and general guidelines (SOSFS 1996:24), all health care shall include systems for the planning, implementation, follow-up and development of high-quality care. Further, all personnel shall participate in systematic, continual development of quality. The Board has also developed general guidelines for quality-enhancing systems which specify that care of the elderly and the handicapped should include systems for the establishment of quality objectives, and for the planning, implementation, follow-up and development of high-quality care. The purpose of quality-enhancing systems is to ensure that the individual's needs for care and service are satisfied. To accomplish that purpose within the area of nutrition, various types of special medical competence are required. Co-operation between such specialities is a basic precondition of high quality, according to a report of the Swedish Association of Local Authorities' Committee on Ageing (16).

# Responsibility

Care-providers are responsible for supplying food to the infirm elderly. The need for various kinds of special competencies should be clearly defined. In order for care-providers to be able to properly perform their function in this regard, the allocation of responsibility between various specialities must be clearly defined. Presented below are suggestions in that regard.

## *Political responsibility*

The basic principle of political responsibility in this context is that the relevant authorities understand and support nutritional treatment as part of the total care process, and therefore initiate efforts to maximize quality. For that purpose, it is important to identify work flows and processes in, for example, regional hospitals, between hospitals and municipalities, and within municipalities. Quality-enhancing efforts that focus on the infirm elderly must therefore involve various authorities, medical specialities and social services.

## *Co-ordination of hospitals and municipalities*

Nutritional treatment must be taken into account during the entire care process. The treatment of many older persons may be complete from a medical standpoint when they leave hospital after brief periods of care; but they may still be in need of active, long-term nutritional treatment when they are transferred to municipal old-age care.

The National Board of Health and Welfare's regulations and general guidelines on transfer of information and co-ordinated planning of care (SOSFS 1996:32) indicate what is to be done after the hospital phase of the patient's treatment is judged to be complete. Among other things, it is stressed that the patient's physician shall determine if the health care offered by the relevant county council is adequate to the patient's needs. Thus, it must be clearly established that there is an adequate programme of nutrition before the patient is transferred. That assessment is made jointly by the physician, the public assistance officer, the nurse in charge and/or personnel at the receiving residence or institution.

## *Municipal allocation of responsibility for nutritional treatment*

For elderly persons living at home, the public assistance officer is primarily responsible. He or she also plays a key role in specifying and deciding upon the kind of assistance required. Home-assistance personnel are responsible for assessing any need for health care.

It is desirable that every municipality have at least one dietician responsible for nutrition in old-age care, just as there is a medically responsible nurse. The dietician should assume the primary responsibility for the education and training of other personnel in nutritional matters, and be available for consultation by those providing home assistance and health care. Together with the physician and the medically responsible nurse, the dietician should also be responsible for establishing routines for the diets and nutrition of elderly persons in care. In addition, the dietician should initiate and suggest supplementary nutrition (liquid supplements, enriched food, etc.) and enteral nutritional treatment, as needed.

The patient's physician is responsible for assessment, prescription and treatment, and shall also ensure that various kinds of treatment are co-ordinated, followed up and evaluated on a regular basis.

### *Responsibility for diet and food preparation*

It is necessary to be aware of patients' specific problems in order to supply food which is suited to their needs. Those responsible for preparing food for the elderly should therefore be trained dietary chefs. They are responsible for the menu, food preparation, compliance with national quality norms (ESS committee's recommendations), and ensuring that the food delivered matches what is ordered. Care personnel are responsible for ordering food, and must therefore have sufficient knowledge to do so. Preparing food so that it meets the needs of the individual patient should be the responsibility of a nurse or dietician. In this connection, it should be emphasized that nurses in municipal old-age care should receive training in nutritional matters.

When contracting for food services, it is necessary that specifications are formulated by someone with knowledge of nutrition, and that due consideration is given to the issues noted below. It is also important that the allocation of responsibility between the entrepreneur and care personnel be clearly specified. Further, the competence of the entrepreneur's personnel, and their eventual need of additional training, should be established beforehand.

## Guidelines for quality documentation and contract specifications

Municipalities should develop dietary programmes for the elderly in their care. Such programmes should provide guidelines for the organization of meals, including timing and types of meals, the ingredients of various meals, and the number of meals per day. The maximum time of the nightly fast should be no more than eleven hours. Programmes should also specify

demands for nutritional content, warm-up times, and what kinds of special diets and food consistencies can be offered.

Food preparation often takes place near or within the care facility. In other cases, it is possible to ensure the quality of food served to the elderly in municipal care by entering a contract with an entrepreneur. This requires a clear set of specifications, systematic follow-up (with questionnaire surveys of patients and personnel, for example), spot checks, and reviews of legally required self-administered inspections and statistics on food service. The same specifications included in contracts with entrepreneurs can also be applied to the municipality's own food service.

A study of health and food service for the elderly that was conducted in Stockholm County in 1995 found that no municipality could present a written decision by local government on the goals and specifications of food service (17). This unhappy state of affairs stimulated the municipality of Sundbyberg to develop a set of quality requirements for food served to the elderly, in co-operation with a local nursing home and the North-west Geriatric Clinic (18). After an extensive review by all interested parties, a revised proposal for suitable requirements was adopted unanimously by Sundbyberg's Committee on Old-age Care in May of 1997. This was the first formal decision on quality requirements for food in municipal old-age care in Stockholm County. The document has been published in its entirety in a book published by the Swedish Association of Local Authorities (19).

These quality requirements are now applied in all contracts for the provision of food service to old-age care in Sundbyberg. They are included as an appendix to all contractual agreements, and are also used in the municipality's own food service. Similar procedures have now been adopted by several other municipalities in Stockholm County, and also in Göteborg (20), Uppsala (21), and other locations.

The Sundbyberg study also found that providing food to the elderly is a very resource-demanding component of their care (17). Personnel spent at least five hours daily between 7:00 a.m. and 7:00 p.m. on food-related activities, which means that over forty percent of working time was devoted to the elderly's food and dining.

## Needed: competence, education and better routines

The level of knowledge concerning nutritional theory and practice within municipal old-age care varies widely, and is often inadequate. Dieticians should therefore be given responsibility for continuing education of all care personnel, in accordance with a definite teaching plan.

## Recommended measures

It is recommended that municipalities:

- develop a dietary programme for old-age care in every municipality
- acquire nutritional competence
- educate personnel in such matters as
  - how to identify individuals at risk
  - nutritional theory, especially in regard to nutritional needs of the elderly
  - proper treatment of nutritional problems
  - documentation of nutritional treatment
- develop regulations that specify tasks and areas of responsibility
- establish contractual specifications that include essential quality requirements
- develop routines for the transfer of information between various care facilities
- ensure the quality of the elderly's food intake, that dietary programmes are followed, and that food is properly supplied to the patient
- provide personnel with enough time and opportunity to carry out the practical tasks associated with between-meal snacks and enriched food.

## Realistic goals

During the last days of life, many elderly persons are ill, lack appetite and lose weight. To some extent, this is unavoidable, and it is unrealistic to believe that it is always possible to restore a normal state of nutrition. In the terminal phase of life, food is often of minor interest. Good oral hygiene, pain mitigation and general care may then be more important.

However, most of those in old-age care still have many years of life remaining. For them, adequate nutrition is a precondition of functional ability and high quality of life. Much remains to be done. With one of the world's oldest populations, Sweden can take the lead in developing satisfactory routines for maximum prevention of malnutrition in the elderly.

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Socialstyrelsens rapportserie om nutrition i äldreomsorgen, se referenser 2, 4, 6,7 ovan.