Promoting well-nutrition in elderly care

A guide to organising the nutritional journey in elderly care settings

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EUROPEAN AGEING NETWORK

2021

Promoting well-nutrition in elderly care
Recommendations for EAN members
A guide to organising the nutritional journey in elderly care settings

ISBN: 978-80-88361-12-1
ISBN: 978-80-88361-15-2 (online)

Publisher:
Asociace poskytovatelů sociálních služeb České republiky
Vančurova 2904, 390 01 Tábor
Czech Republic
www.apsscr.cz

Table of Contents

Preface	4
European Ageing Network	6
Introduction	8
The social aspects of eating	12
Cultural aspects of nutritional care	16
The business case for well nutrition	20
Medical aspects and clinical guidelines	24
Nutritional therapy in palliative care	34
Roles and responsibilities	38
The challenges for individual organizations	42
List of abbreviations	46

PREFACE

One of the main goals of the European Ageing Network (EAN) is to help enhancing the quality of long-term care. Nutrition is an important part of the quality of elderly care and good nutrition promotes generally health related quality of life.

Therefore it is important to not only be aware of this fact and make nutrition an element of the complex approach to elderly but also to share good practices examples, knowledge, recommendations and innovative solutions.

The European Ageing Network addressed experts in nutrition in whole Europe to start an EAN Nutrition working group and to create a document and guidelines that would and could be an everyday tool and assistant in the journey towards optimal well-nutrition care.

The outcome that you hold in your hands would be not possible without the initiative from our partners and members but also without all the experts that worked over a year on this document.

It's our hope that this document will help the long-term care providers to meet their main mission – to enable the older persons high quality of life, with dignity, joy and happiness.

Dr. Jiří Horecký, MBA
President, CEO
European Ageing Network

EUROPEAN AGEING NETWORK

The European Ageing Network (EAN) groups **more than 10.000 care providers across the European continent.** Members represent all types of organizations and individuals active for older persons and all types of ownership including for profit, not-for-profit and governmental organizations. It is their vision and mission to improve the quality of life for older persons and support them in making each day a better day by providing high quality housing, services and care.

10.000 CARE PROVIDERS

The European Ageing Network (EAN) is present in 25 European countries. With EAHSA well represented in Northwestern Europe and E.D.E. in the South-East, the combination makes of the European Ageing Network a truly pan-European organization. EAN does not stand alone in pursuing its vision, values and mission. It is affiliated with the Global Ageing Network (GAN), a global network with its office in Washington D.C. EAN and GAN bring together experts from around the world, lead education initiatives and provide a place for innovative ideas in senior care. They pave the way to improve best practices in elderly care so that older people everywhere can live healthier, stronger, more independent lives.

25 EUROPEAN COUNTRIES

The members of the European Ageing Network (EAN) are servicing over 1 million older people in Europe. Longevity is one of the biggest achievements of modern societies. The Europeans live longer than ever before and this pattern is expected to continue due to unprecedented medical advances and improved standards of living. By 2020, a quarter of the Europeans will be over 60 years of age. Combined with low birth rates, this will require significant changes to the structure of European society, which will impact on our economy, social security and health care systems, the labor market and many other domains of our lives.

1 MILLION SERVICED SENIORS

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EUROPEAN AGEING NETWORK

As professionals we seek to improve the quality of care and supervision. Common training standards, reciprocal visits and observation, congresses and symposia all foster professionalism among care home directors and a greater understanding of the various forms of care and assistance. Creating humane living and working conditions in our homes is the vision we are all striving for in the EAN.

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Belgium
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Czech Republic
Estonia
Finland
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Germany
Great Britain
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Latvia
Lithuania
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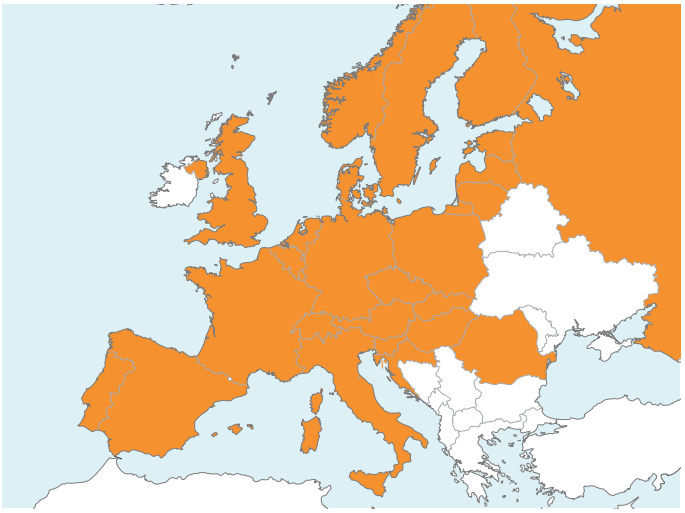

INTRODUCTION

The European Ageing Network's Nutrition Working Group was created to come up with guidelines for nutritional care in social services facilities for elderly people. The guidelines focus on the nutritional journey in elderly care and include key principles, procedures and processes, good practices, examples and solutions. The guidelines promote well-nutrition and should be helpful for managers, carers, cooks and hosts in elderly care facilities, and fuel the discussions about raising appetites to benefit residents.

The working group focused on many aspects of the issue of nutrition and has based its opinions and suggestions on discussions about:

- The issue of malnutrition in older persons in care settings: stock-taking of the issue, prevalence (especially in elderly care settings (residences, assisted living, community), policies and labelling systems in place, best practices;
- The different relevant aspects of malnutrition in older people: what makes older persons malnourished, what are the determinants, what and who are responsible for identifying solutions to malnutrition?
- The best ways to tackle malnutrition, for older people and for elderly care providers: best practice examples, innovations, new food, hospitality, culture and usage, availability, economics, etc.;
- How to provide guidance on raising awareness of problems and implementing solutions at all levels.

FROM MALNUTRITION TO WELL-NUTRITION

When a person is not getting enough food or not getting the right sort of food, malnutrition is just around the corner. In this report, malnutrition refers to deficiencies, excesses or imbalances in a person's intake of energy and/or nutrients. The term malnutrition

covers two broad groups of conditions. One is overweight, obesity and diet-related non-communicable diseases (such as heart disease, stroke, diabetes and cancer). The other is 'undernutrition', which includes stunting (low height for age), wasting (low weight for height), underweight (low weight for age) and micronutrient deficiencies or insufficiencies (a lack of important vitamins and minerals). Older persons are especially vulnerable to malnutrition. They lack the force to eat or just have no appetite to eat.

The working group's ambition is to help to combat malnutrition and to prepare for well-nutrition: an optimal mix of nutritional, medical, economic, cultural and organisational aspects to support older persons in being and feeling well in an elderly care setting – with appropriate food and beverages and an individualised approach as a starting point. However this report will not only deal with bio-medical aspects of eating but will also pay attention to all other relevant disciplines of good nutrition. Apart from a chapter on the medical and clinical aspects, the report includes chapters on economic costs and benefits, on social and cultural aspects of eating and enjoying food, and on roles and responsibilities within elderly care organisations. Specific attention is paid to palliative nutritional care in a separate chapter.

One thing became clear from the discussions and research we undertook : well-nutrition calls for awareness of the issue of malnutrition and a multidisciplinary approach to tackling it.

WORKING METHOD

The working group started its work in February 2020, just before the COVID-19 outbreak. After only one meeting in persona, all following working sessions and discussions took place digitally. This has not hindered the productivity of the group.

The basis for the chapters was laid through pre-discussion and research by groups of members. Together they proposed content for the different chapters of this report. All separate parts were then reviewed and discussed by all members and have led to this joint report.

MEMBERS OF THE WORKING GROUP

The EAN Nutrition Working Group consisted of the following experts:

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ACKNOWLEDGEMENTS

EAN wishes to thank all working group members for their valuable contributions and much appreciated co-operation. Thanks to the EAN Secretariat, all these volunteers were able to meet, plan and work together. A special word of appreciation and thanks goes out to DSM, which agreed to support the logistics and meetings of the group.

THE SOCIAL ASPECTS OF EATING

Meals are universal in terms of being a significant phenomenon for meaning-making in the social interaction between people. Commensality, the practice of eating together, implies the social aspect as one of the main characteristics of eating. Hence, we prefer to eat in company and the family meal is considered to be the archetype of commensality. The constellation of a family may however change over the course of a life, and a reduction in household size may be associated with declining levels of commensality.

ENJOYABLE EXPERIENCE

Social isolation and subjective loneliness among older persons have been found to be risk factors for malnutrition, as they tend to eat less when eating alone. Literature portrays the meaning of preparing, cooking, and serving meals among retired women (this was a duty of many women belonging to the older generation). The findings showed that a profound meaning of this work was to do something for others. This meant that for widows, the whole meaning of cooking and eating in commensality was lost, and hence a risk of poor nutritional intake was evident among these women. It is known that eating with others increases food intake among older people compared to eating alone. However, an increased food intake is also linked with the familiarity of the group of people eating together, as eating with friends nurtures a sense of community and allows the group to evolve in ways which fit its needs and desires.

Individual cultural aspects such as habits and traditions may play important roles when determining the social qualities of needs and desires connected to meals. Hence, the cultural aspects are likely to affect not only the social constellation in which an individual prefers to eat but also the way in which food is served. In a study of what mealtimes meant to older people and health care professionals, meals were, with some exceptions, considered enjoyable

experiences. Also, the healthcare professionals emphasised that the social aspect of mealtimes even outweighed the nutritional aspect in terms of importance.

TIPS FOR PRACTICE AND ORGANISATION

- Carefully consider each resident´s personal preferences for socialising at mealtimes
- Assure that there is no undesired social isolation at mealtimes
- Have well implemented routines concerning meals in order to make them enjoyable
- Consider the meal as a part of care used as a resource to create a social significant environment
- Shared meals ought to be a significant part of care in elderly care
- Regularly train staff in being attentive to social aspects
- Use furniture that facilitates flexible groups of co-eaters
- Offer cooking classes to, or organise cooking clubs for, independent older persons living alone in order to break social isolation and for teaching purposes
- Offer meeting points and preventive actions that involve older adults in social activities

AN INTERESTING CASE FROM SWEDEN

In a small town, the community had the ambition to counter the social isolation at mealtimes of older people living in the community. The project aimed to find “meal mates” for them. When the project started the interest in helping was huge and numerous people happily volunteered to be a “meal mate”. However the older people did not show the same interest. It turned out that an established relationship was missing – they were not interested in eating with a stranger. The story ended well: once the “mates” got to know each other, the project was a success.

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CULTURAL ASPECTS OF NUTRITIONAL CARE

There is no question that we need water and food to survive. However, over the millions of years of human evolution, we have developed extremely diverse views and habits related to this issue – and these are all influenced by our cultural environment. Food choices may differ among cultures due to geography, cultural and religious norms and medical philosophies. Also, factors such as socio-economic status, gender, age, education, employment, personality and taste can add diversity within the already diverse cultures.

This diversity is reflected in society, in older people, and hence in elderly care settings. This is especially important in relation to nutritional care, as habits cannot be easily or forcibly changed. Acknowledging the exceptionally deep roots of eating habits is especially important when serving older people with cognitive impairments, who may not be able to share their specific cultural eating preferences. Good awareness and understanding of individual nutritional needs and food preferences is imperative in providing optimal nutritional care.

CULTURALLY COMPETENT STAFF

Nursing homes are becoming increasingly diverse places, not only with respect to residents, but also due to diversity among staff. Social and healthcare professionals working in these settings require cultural competence to effectively work across the boundaries of diverse cultural habits, religious beliefs, ethnicities and languages.

Cultural competence can be defined as a set of congruent behaviours, attitudes and policies that come together in a system, or among individuals, that enables that system or those individuals to work effectively in a cross-cultural situation. In the field of nutrition and dietetics, competence means undertaking the task of learning about different cultures, and developing flexibility in approach by

having a variety of potential interventions at one's disposal.

SOME TIPS FOR PRACTICE

Cultural competence is seen as one of the most significant challenges in providing optimal nutrition in elderly care settings. It is a life-long learning process, based on self-awareness and critical self-reflection. Building blocks to grow the cultural competence of staff include:

- Keeping an open mind as to various cultural, religious and individual views on nutrition;
- Providing detailed nutritional assessments, including the cultural aspects of nutrition and involving family and friends if needed;
- Planning nutritional interventions while taking residents' cultural background, habits and beliefs into account.

Cultural competence is not only a matter of staffing, but is also important on an organisational level. In order to enable staff to grow their cultural competence, elderly care organisation should:

- Assure a philosophy, policies and procedures which enable and encourage staff to act and react in the culturally competent way;
- Assure regular training, education, and self-reflection activities in cultural issues for the multi-disciplinary staff;
- Assess and address organisational cultural competence by using one of the standardised self-assessment tools.

AN INTERESTING CASE FROM AUSTRIA

In an Austrian residence, a Turkish lady with moderate dementia started refusing meals and losing weight significantly. Because of her condition, the resident was not able to verbalise any reason for her refusal, nor to express any food preference. It was amid the COVID crisis and elderly care facilities were closed for visits as a result of the national lockdown.

At their daily meeting, staff discussed the alarming situation and concluded that the lady had lost her appetite because she was sad that she was no longer seeing her family. Later, however, one nurse remembered that before the lockdown family members often brought home-made food. Considering her background, some Turkish staff members started bringing their own home-made meals. As a result, the lady started eating again, and without any hesitation. As the nursing home has its own kitchen and prepares meals for its residents on-site, staff and chef discussed possible adjustments in food preparation for this specific resident.

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THE BUSINESS CASE FOR WELL-NUTRITION

Nutrition is not only a matter of cooking and eating. It has an economic aspect as well. Good food has its price and may incur budgetary effects. Malnutrition has a negative impact on health and hence, on healthcare budgets. Well-nutrition to the contrary, can have saving effects on the costs of good health. There is sufficient evidence to make a business case for optimal nutrition in elderly care settings. And well-nutrition is about much more than quantity. It is about an optimal mix of quality, quantity and individuality.

THE COSTS OF MALNUTRITION

Whereas 5% of the general population is said to be malnourished, it is about 30% in care homes. Research finds that the total costs that come with this group are considerably higher than those of well-nourished residents. As an example, malnutrition can cause sarcopenia, leading to loss of muscle strength and mass, and hence to more falls, fractures, and physical disability. More GP visits, hospitalisation and more treatments are the main cost drivers for the group of malnourished. These extra costs of malnutrition are a considerable burden for the elderly care sector.

NUTRITIONAL CARE AS AN INVESTMENT

Prevention of malnutrition in elderly care settings can be seen as an investment. Optimal nutrition, as part of a healthy lifestyle, decreases the risk of many diet-related diseases like obesity, diabetes and cardiovascular diseases. There is evidence that Interventions to reduce malnutrition, such as nutritional supplements, lead to a decrease in hospital admissions and medical visits.

Little research is available into the cost-benefits and cost-effectiveness of nutritional care. One study states that for every €1 spent on dietary counselling, society reaps a return of between €14 and €63. Another study reports a return on investment in malnourished elderly patients of 120 to 190%.

AVOIDING FOOD WASTE

Investing in good food is one thing – and avoiding food waste is another. Yearly, one-third of the world's food produced for human consumption is wasted, according to the Food and Agriculture Organisation (FAO) of the United Nations. The hospitality and food services industry is responsible for throwing away 920,000 tons of food annually, of which 75% is still suitable for consumption.

The elderly care sector could be committed to making changes, as well. Food wastage seems quite common in the elderly care sector. Around 40% of food purchased, mostly vegetables, ends up in the waste bin in hospitals and elderly care homes. There are several reasons for this. Apart from inaccurate forecasting and over-caution as regards not ordering enough, show plates turn out to be one of the leading causes. As studies have shown, show plates cost up to €20,000 per residence on average. Replacing show plates with high-quality pictures, for example, still allows residents to see the meals on offer. Mistakes with food orders is a second reason. Orders taken at the table are sometimes incorrectly communicated to the kitchen staff. Handwriting, misinterpretation, allergies and food preferences that are not recorded accurately may lead to food deliveries that the resident did not ask for, or does not want to eat, or even cannot eat.

FOOD WASTAGE REDUCTION

Food wastage reduction is possible in small operational steps, for example by broadening the range and offering of better quality food. Savings can also be made if residents only have to order their meals just before eating. Research found that people will then order precisely what they feel like eating in terms of taste and portion size. Creating an accurate inventory and keeping it updated may help to give a better understanding of what stocks are required. And last but not least, carefully rethinking portion size may lead to the conclusion that differentiation in size could respond to the various needs and desires of the residents.

But larger strategic steps can also be taken. Below are some elements relating to the experiences

of catering professionals and perceived barriers facing current strategies to reduce food waste:

- reviewing attitudes and habits
- enhancing internal awareness
- reconsidering internal priorities
- collaboration and communication with and between all food stakeholders
- defining and taking responsibilities
- forecasting and portion flexibility
- routine monitoring

AN INTERESTING CASE FROM THE NETHERLANDS

A Dutch study gives an interesting view on investments in nutritional care in elderly homes:

Normal nutritional costs in the Dutch nursing home sector are €319 million per year;

The extra costs for managing nursing home residents at risk of malnutrition are €8,000 per patient, and €10,000 per malnourished patient;

Nursing homes spent on average €10,600 per malnourished person when tackling disease-related malnutrition;

The use of medical nutrition with sick and malnourished older people results in net benefits of between €1.43 and €3.10 per person. For each €1 invested in the treatment of a malnourished person, society as a whole saves between €1.90 and €4.20.

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MEDICAL ASPECTS AND CLINICAL GUIDELINES

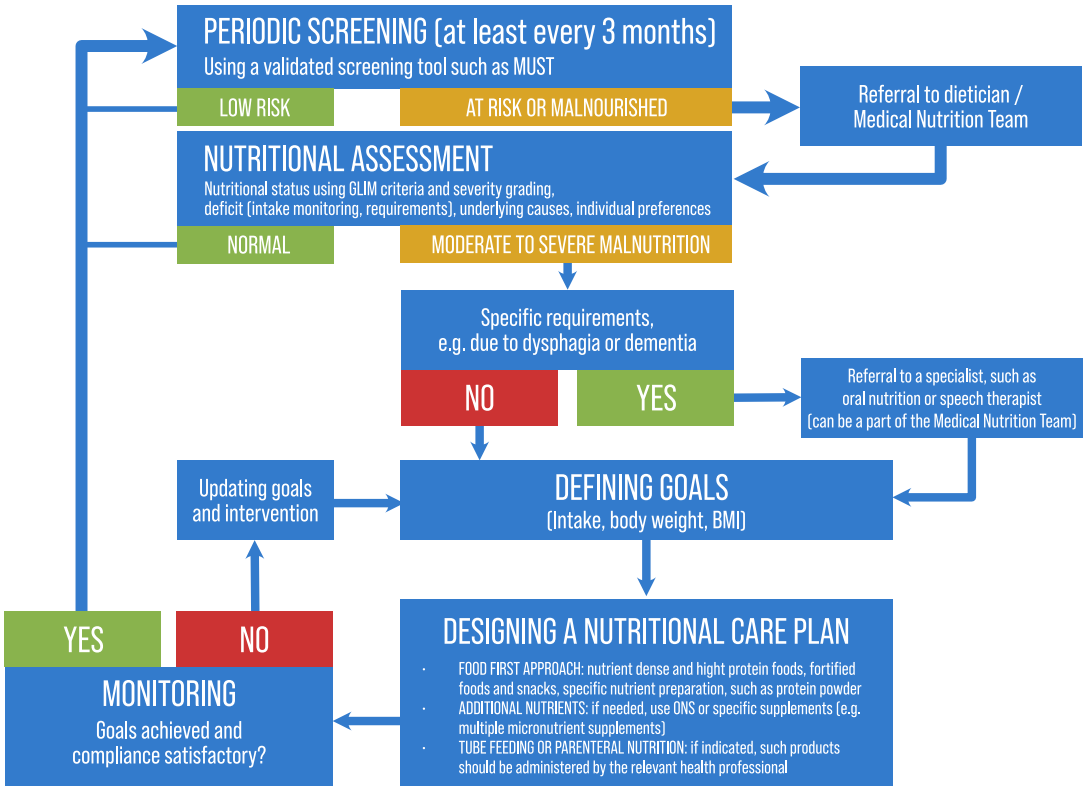
For older people, achieving an adequate intake of energy and essential nutrients becomes challenging due to changing gastrointestinal physiology, hormone levels, metabolism, decreased physical activity, and lower bioavailability of some nutrients. They are also less likely to ingest the required amounts of energy and essential nutrients due to the so-called anorexia of ageing.

Reported prevalence rates of malnutrition are generally below 10% in independently living older persons. But malnutrition prevalence rises to more than 60% of older persons in acute care and rehabilitation hospitals. Malnutrition is associated with increased risk of frailty, sarcopenia, falls, dependence in activities of daily living, hospital admissions and longer length of stay, with poor wound healing and more complications, increased mortality and poor quality of life. It is therefore important to assess, maintain and if necessary correct the nutritional status of older people in elderly care settings.

NUTRITIONAL SCREENING, ASSESSMENT AND PLANNING

The Global Leadership Initiative on Malnutrition (GLIM) defines malnutrition as a sub-acute or chronic state of nutrition, in which a combination of varying degrees of undernutrition or overnutrition and inflammatory activity have led to changes in body composition and diminished function. According to the GLIM criteria, malnutrition is confirmed if at least one phenotypic criterion (i.e. involuntary weight loss, low body mass index or reduced muscle mass) and one etiologic criterion (i.e. reduced food intake or assimilation, inflammation or disease burden) is present.

To identify older people with, or at risk of, malnutrition, GLIM recommends that they be screened routinely with a validated tool (see the example of MUST in the Annex). This screening should preferably take place at least every three months for long-term care residents in a stable condition, and at least yearly in general practice for



older people living at home. A positive malnutrition screening should be followed by systematic assessment, individualised intervention, monitoring and corresponding adjustment of interventions.

The aim of clinical nutrition in older persons is to provide adequate amounts of energy, protein, micronutrients and fluid in order to meet nutritional requirements and thus to maintain or improve nutritional status. Dietary restrictions that may limit diary intake are potentially harmful and should be avoided. Optimal body weight is important for longer-term health. Nevertheless, it needs to be kept in mind that for older people, a slightly higher Body Mass Index (BMI) might be beneficial as a BMI in the range of 23.0 to 29.9 is associated with optimal longevity and the range generally categorised as overweight, i.e. 25.0 to 29.9, is not associated with adverse health outcomes.

Nutritional management needs to take into account a range of factors such as comorbidities and the desires and preferences of the person in question. It is good clinical practice to liberalise dietary restrictions in older persons in order to reduce the risk of malnutrition and related loss of fat-free mass and functional decline.

NUTRITIONAL REQUIREMENTS AT A GLANCE

The following recommendations by expert bodies should be used as the basis for an individualised nutritional care plan as it is impossible and/or impractical to define the nutritional requirements for each individual. Their translation into individualised meal plans then requires close collaboration within the multi-disciplinary Medical Nutrition Teams as well as the wider organisation of the nursing home (see chapter on roles and responsibilities). The guiding value for energy intake in older persons is 30 kcal per kg body weight and day. This value should be individually adjusted with regard to nutritional status, physical activity level, disease status and tolerance.

Protein intake in older persons should be at least at least 1 g protein per kg body weight and day. This value should be individually adjusted with regard to nutritional status, physical activity level, disease status and tolerance. Higher daily amounts have been suggested for healthy older persons by several expert groups. In case of illness, protein requirements may even be further increased, e.g. due to inflammation (including inflammaging), infections and wounds – however to what extent is difficult to assess. Very little is known about the protein needs of frail and ill older persons. Scientific evidence, e.g. from intervention trials, is presently insufficient to derive concrete figures. Daily protein amounts of 1.2 to 1.5 g per kg body weight and day have been suggested for older people with acute or chronic illness and up to 2.0 g per kg body weight and day in case of severe illness, injury or malnutrition.

A daily amount of 25 g of fibre is considered adequate for normal laxation in adults of all ages and can be regarded as the guiding value for older persons. Consequently, menu choices contributing to this recommendation are important in order to contribute to normal bowel function. For enterally-fed persons, fibre-containing products should be routinely used unless bowel function is compromised.

Micronutrients, provided that there is no specific deficiency, should be delivered according to the respective national recommendation for healthy older persons.

Adequate intake of micronutrients is essential to maintain bone and muscle mass/function and to counter effects of advancing age on the immune system. It is thought that preventing or treating malnutrition is an important measure to reduce complications of a potential infection. A recent ESPEN expert statement consequently recommends the use of supplements to ensure adequate daily intake of all vitamins and minerals for vulnerable groups in the current COVID-19 pandemic.

In a recent publication on nutrients to support a well-functioning immune system in the general population, additional recommendations were ≥200 mg per day vitamin C. According to the Linus Pauling Institute, a vitamin C intake of at least 400 mg per day may be particularly important for older persons with age-related chronic conditions. These levels are still well within the intake range EFSA regards as safe.

Based on evidence for the compensatory effect of vitamin E on age-related effects on the immune system, it was suggested that levels as high as 200 mg per day of vitamin E may be needed for optimal immune function in the elderly. Even though significantly above the current recommendations, they are still well within the upper level (1,000 mg per day) and can be regarded as safe.

MAINTENANCE OF MUSCLE AND BONE MASS, PREVENTION OF OSTEOPOROSIS, SARCOPENIA AND FRAILTY

In older people, weight loss frequently occurs at the expense of muscle mass and is associated with impaired physical function. Muscle disuse and periods of bed rest can further exacerbate the degradation of muscle mass and strength. The European Working Group on Sarcopenia in Older People defines sarcopenia as a progressive and generalised skeletal muscle disorder that involves the accelerated loss of muscle mass and function.

Age-related chronic low-grade inflammation may be an important contributor to sarcopenia. Given its potential for resolving inflammation, supplementation with omega-3 long-chain polyunsaturated fatty acids DHA and EPA may help reduce the age-related loss of muscle mass as part of a com-

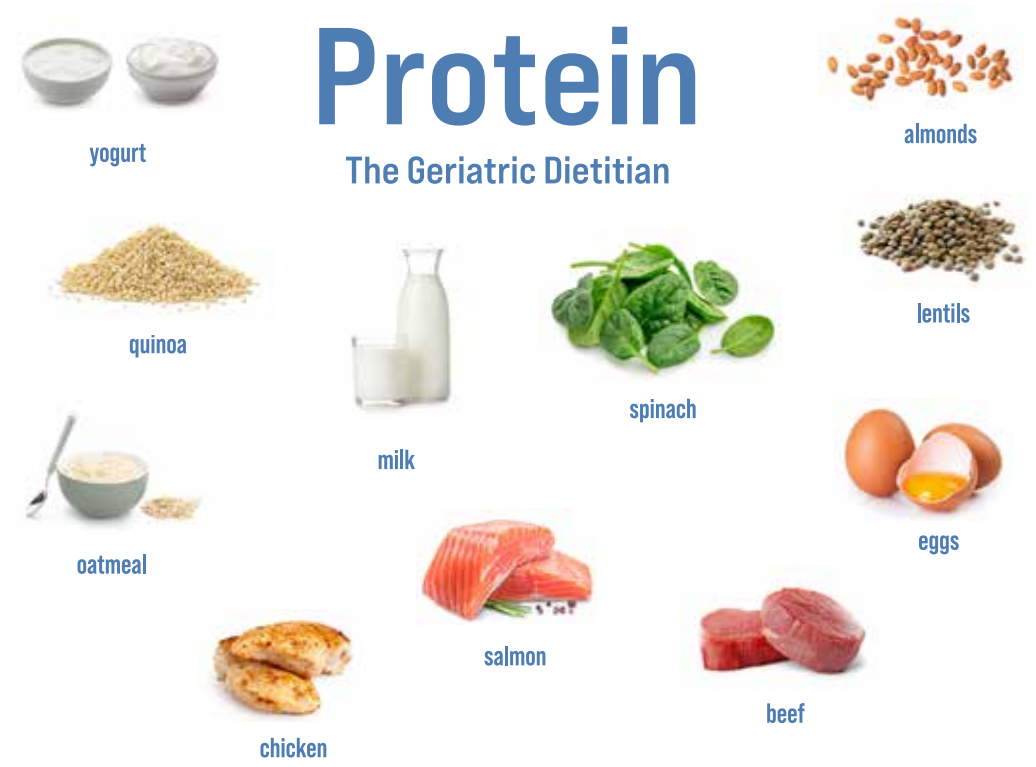
prehensive management regime including nutrition and exercise. Endogenous synthesis of EPA and DHA is limited in most humans and is influenced by a range of factors such as age, sex, genetics and disease. Therefore, adequate intake of DHA and EPA is important in older people, who frequently suffer from insulin resistance or other features that limit endogenous synthesis. It is now generally accepted that an intake of 250 to 500 mg EPA and DHA per day is required for optimal nutrition and is still well within the range generally regarded as safe.

Moreover, supplementation with vitamin D was also found to have a beneficial effect on muscle strength in older people. In addition it is important to maintain strong bones, and as a consequence the International Osteoporosis Foundation recommends a daily intake of 20 to 25 micrograms for people of 60 years or older. However, the Endocrine Society states that a daily intake of at least 37.5 to 50 micrograms per day of supplemental vitamin D might be required to reach adequate serum vitamin D levels. The recommended level of vitamin D is above most of the current recommended daily intakes (e.g. DACH for those 65 years or older is 20 micrograms per day), but still well within what is regarded as safe by EFSA. In addition to vitamin D supplements, the International Osteoporosis Foundation recommends an intake of 1,200 mg per day calcium to maintain strong bones.

Importantly, older people with malnutrition, or at risk of malnutrition, should be encouraged to be physically active and to exercise in order to maintain or improve muscle mass and function. Before starting the exercise intervention, the health status and physical performance level of the person need to be evaluated to exclude contraindications for exercise training and to identify the appropriate training type, intensity and starting level.

MEAL PLANS

To achieve the required intakes, it is important to prepare a diet with high nutrient density. Economic constraints are often seen as a barrier to such a diet. Foods rich in micronutrients are frequently more expensive than energy-dense options. However, milk and milk products are good sources of calci-



um and protein. They are, like beans and eggs, high quality food available at reasonable prices. Moreover, fresh oranges or carrots, but also canned or frozen vegetables such as tomatoes or green peas, also provide reasonably priced and nutrient-dense additions to the diet.

Ideally, intakes of nutrients would be achieved through the consumption of a well-balanced and diverse diet. However this is a challenge in the general population, and older people are even less likely to ingest the required amounts of energy and micronutrients due to the anorexia of ageing. Moreover, requirements for specific nutrients such as vitamin D and long-chain omega-3 polyunsaturated fatty acids are in a range that is, particularly in older people, unlikely to be met by the diet alone. Fortified foods and supplements are effective ways to achieve adequate micronutrient intakes and should be considered as safe and cost-effective means to improve nutritional status in older people.

FOOD MODIFICATION AND ORAL NUTRITIONAL SUPPLEMENTS

Older people with malnutrition or at risk of malnutrition should be offered fortified food as well as additional snacks or finger food in order to support adequate dietary intake. Food fortification, or dietary

enrichment, can increase the energy and protein density of meals and beverages, for example by using natural foods like oil, cream, butter and eggs, or by specific nutrient preparations like maltodextrin and protein powder. This will enable an increased intake from eating similar amounts of food.

Dieticians and other healthcare professionals traditionally use a number of dietary strategies to improve the energy and nutrient intake of older people. These include the use of snacks between meals or finger food, particularly for people who have difficulties using cutlery or remaining at the table.

Older people with malnutrition or at risk of malnutrition with chronic conditions, when hospitalised or after discharge, should be offered oral nutritional supplements (ONS). These are also useful when dietary counselling and food fortification are not sufficient to increase daily intake and reach nutritional goals. In such cases, the ONS should provide at least 400 kcal per day including 30 g or more of protein per day. Type, flavour, texture and time of consumption should be adapted to the person's taste and eating capacities. ONS should be continued for at least one month and be assessed monthly.

For people showing signs of oropharyngeal dysphagia or chewing problems, texture-modified, enriched foods can be part of compensatory strategies to support adequate dietary intake. For such strategies, refer to the International Dysphagia Diet Standardisation Initiative (IDDSI) for a description of texture modified menu options.

Meals on wheels offered to home-dwelling older people with malnutrition or at risk of it should be energy-dense and/or include additional meals to support adequate intake.

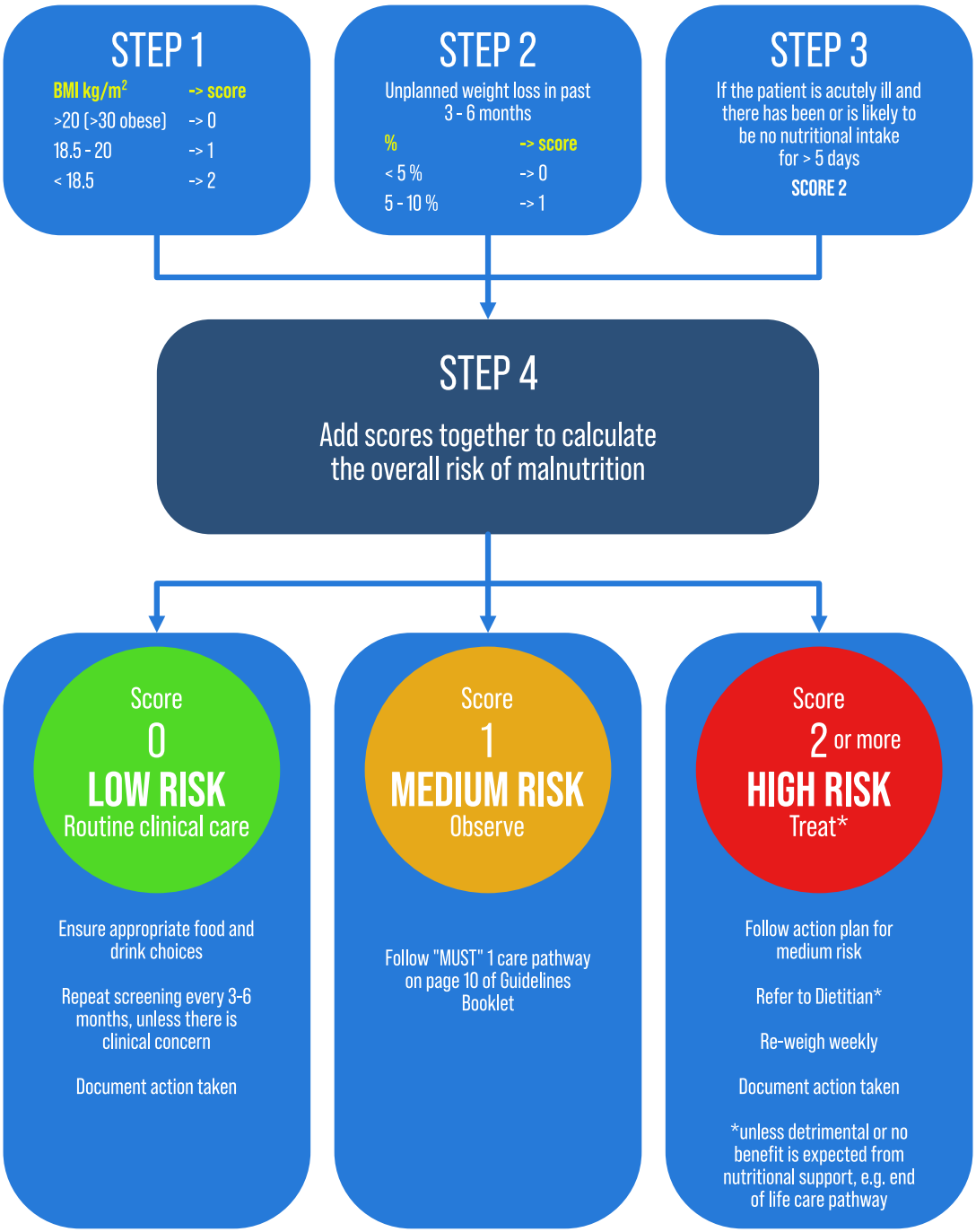
RECOMMENDATIONS AT A GLANCE

Intervention	Recommendation
Energy	Approx. 30 kcal per kg body weight and day, to be adjusted for individual nutritional status, physical activity level, disease status and tolerance
Protein	Generally healthy people ≥1 g per kg body weight and day Older people with acute or chronic conditions 1.2 to 1.5 g per kg body weight and day In case of severe illness, injury or malnutrition up to 2 g per kg body weight and day
Dietary fibre	Daily amounts of 25 g are considered adequate
Vitamins and minerals	Ensure adequate intake preferably via a balanced, nutrient-dense diet, and if needed through ONS or supplements
Vitamin C	Healthy older people daily intake of at least 200 mg per day
Vitamin D	Daily intake of 20 to 25 µg per day 50 µg per day might be required to achieve an adequate status if serum vitamin D levels are low
Vitamin E	A complementary intake of 200 mg per day is recommended
Calcium	Daily intakes of 1,200 mg per day
DHA and EPA	Daily intake of up to 500 mg per day
Exercise	Daily exercise in line with individual health status and physical performance level

AN INTERESTING CASE FROM GERMANY

Three years ago, an 80-year-old lady moved into a long-term care facility. She had been diagnosed with diabetes mellitus 10 years before and had managed to control her condition through her diet. Over a couple of months she began having difficulties swallowing and was prescribed a texture-modified diet. She lost 10 kg in weight and was diagnosed with malnutrition. Staff decided to offer her throughout the day fortified food and snacks of appropriate texture to support adequate dietary intake. Moreover, she was prescribed 2 ONS providing 400 kcal and 30 gr of protein on a daily basis. Type, texture, flavour and time of consumption were adapted to the lady's needs. After a month of daily assessing her compliance in ONS consumption, she managed to gain 1 kg. Continuation of fortified food, additional snacks and ONS was agreed and a monthly review of the malnutrition treatment protocol was scheduled.

"MUST" TOOL



This tool is to assist your assessment. If in doubt, use your professional judgement.

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NUTRITIONAL THERAPY IN PALLIATIVE CARE

Nutrition in elderly care gains an extra dimension in the palliative stage. As it is difficult to determine the start of this last phase, it is disputable when nutritional care shifts from supportive for life to comforting life. The function of nutrition may lose its clinical function, and hence nutritional guidelines may change.

The World Health Organisation (WHO) defines palliative care as an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems – physical, psychosocial and spiritual. It is a life-affirming approach with the aim of promoting and maintaining an optimal quality of life until death. In palliative care, dying is seen as a normal process which should not be accelerated, nor should it be obstructed or prolonged.

DIFFERENT VIEWS, DIFFERENT OPINIONS

Especially in geriatric medicine, people with neurological or heart diseases, lung or kidney problems or other conditions receive palliative care. But what does that mean? Many conditions are life-limiting and that there will be an end is clear. The question is when that end is a fact. And hence, when is specific nutritional intervention relevant? What are the goals, and what are the needs? Feed until the end, or do nothing? Therefore, it is most important to be self-critical and to reflect on the issue of nutritional care in the palliative phase. Notwithstanding the fact that opinions differ, it is at least clear that attention should be paid to this issue.

WELL-BEING AS A PALLIATIVE AMBITION

Especially in the end-phase of life, appropriate nutrition can contribute to relief and to quality of life. Nutritional recommendations in the terminal phase differ

considerably from those in earlier life phases. Nutrition as a life-sustaining and therapy-supporting intervention loses its meaning. Nutritional interventions in the dying phase require a carefully considered and individualised approach. The goal shifts from maintaining nutritional status and functioning to providing comfort and well-being.

In the last phase of life, people should be supported to eat and drink as long as they are able or willing to. When they gradually start to eat and drink less, this can be difficult for the person's relatives to accept. Extensive communication among staff and relatives, as well as psychosocial support for the dying person and relatives, are of vital importance. At this stage, nutritional support may not provide benefits as the person often experiences no hunger or thirst. Also, nutrients do not metabolise as they would in earlier life stages. Artificial nutrition is not recommended, and artificial hydration only in exceptional cases. On the other hand, dying people frequently experience symptoms of discomfort like a dry mouth, nausea or an impaired sense of taste. In these cases, alleviation can be found in nursing measures such as lip and mouth care.

The ultimate ambition of implementing any nutritional intervention in palliative care should be focused on the preservation of well-being. Respect is key, as is an understanding of the fact that curative and palliative nutritional care go hand in hand with a changing balance depending on status, conditions, needs and demands.

WHAT TO DO IF NOTHING CAN BE DONE ANY MORE?

The precious balancing act of nutritional care in the palliative phase should start with the ambition to preserve well-being. But what can be done when nothing can be done any more? Nutritional experts, as part of a multidisciplinary palliative care team, could rely on the following pointers:

- Conservation of individual nutritional status. The goal should not be to reach the perfect nutritional status or calculated need, but to satisfy the needs and wishes of the people concerned;
- Conservation of the individual

and subjective quality of life. Communication between the dying person, staff and relatives is key to knowing and understanding their needs. Encourage open communication between all people involved. Actions and intervention require planning and communication;

- Respect for autonomy. Assure and respect the right of autonomy of each person when planning nutritional interventions in the palliative stage and fulfil personal preferences regarding food and beverage requests, while addressing distressing symptoms affecting the intake of food and drinks;
- Rely on nutritional expertise. Be aware of diets that are neither evidence-based nor add to quality of life.
- Prevention and therapy of pressure sores. Malnutrition does have a negative effect on the quality of life and it is important to treat. But dietary goals like optimal blood-sugar, cholesterol and other metabolic parameters should no longer be the focus;
- Advisory assistance. A multidisciplinary palliative care team can counsel on alternatives for the fulfilment of nutritional needs, like treatment of nausea, loss of appetite, digestion problems and trouble with chewing and swallowing;
- Start and end of nutrition. Always seek nutritional expertise and consult on individual decisions for starting, adapting or ending enteral or parenteral nutrition;
- Flexibility. It is important to take an open stance towards specific needs and to support the development of adequate answers;
- Education and training. Nutritional expertise is subject to ongoing changes and new insights. Nutrition in a palliative context should be part of any professional training.

ROLES AND RESPONSIBILITIES

Managing nutritional care in elderly care settings is quite a challenge. The road from malnutrition to well-nutrition is long and bumpy, and a lot of people are involved. Developing a strategy towards well-nutrition is a first step to take. A second important element is to identify and implement roles and responsibilities in order to be able to execute the strategy. Well-nutrition in elderly care is a multidisciplinary exercise that can only be successful if theory is translated well into practice. To this end, it is important to clearly define processes and interfaces in daily business, collaboration and communication.

WHO DOES WHAT?

Well-nutrition is not only a matter of chefs and cooks. Adding a dietitian is not enough to make a multidisciplinary team work. The number of stakeholders goes way beyond the "usual suspects":

THE MANAGER

The managers of elderly care facilities are first and foremost responsible for creating a culture and developing a clear strategy that focuses on nutrition as an investment and on the effect of well-nutrition on the health and well-being of the residents. In line with this, management is responsible for developing a supportive environment within which all those involved in nutritional care can implement that strategy: the nursing management, the human resources and training management, the facility management and the quality management. Management should realise that nutritional care is multidisciplinary and organise processes and communication accordingly.

THE COOK

Chefs and kitchen staff are responsible for ensuring that the full offer of meals and beverages meets the needs and requirements of the residents. Therefore, expert skills in nutrition for older people and their specific nutritional requirements are required. Of course, the food must taste good, look attractive and be served tastefully. The kitch-

en staff are not the start, but are a crucial element in the nutrition chain that needs to be taken on board in nutritional planning, production and delivery. With a crucial role in translating ever-changing needs, requirements and demands into practical and possible nutritional production, kitchen staff need to be creative and flexible.

THE (EXTERNAL) CATERER

As there is little difference between an in-house caterer or an external caterer who delivers meals to the facility, it is important that the underlying service provision contract is clear in the definition of services and responsibilities. The caterer should be seen as a nutritional care partner and not only as a food supplier. Communication between the caterer and the care facility management and nutritional staff is key.

THE DIETITIAN

As the expert in nutritional needs and possibilities, the dietitian is the linchpin between residents and kitchen, and the coordinator of the multidisciplinary team. His tasks are very diverse, ranging from developing and evaluating nutritional protocols to safeguarding adequate delivery and intake. Participation in interdisciplinary case discussions and the development of training courses for nursing staff and kitchen staff are part of the dietician's duties. Several years of professional experience are needed to meet these responsibilities.

In some countries there are food service dietitians. They are responsible for the residences in a municipality for example regarding all kitchen staff, the quality of the meals (nutrition, taste, quality of products, diets etc.), as well as for economic aspects such as procurement, budget, equipment and transport.

THE NURSE

As they are usually in daily personal contact with the residents, the nursing and care staff are well positioned to play the role of information broker and to signal changing needs and requirements. Depending on their qualifications, nursing staff are responsible for regular screening, assessment, planning, implementation and evaluation of nursing care, which includes a variety of nutri-

tional aspects. Close cooperation with nutritional experts and other members of the multidisciplinary team and correct application of nutritional procedures and protocols are of vital importance. Nurses are responsible for working with the residents and should apply all procedures and protocols correctly. Therefore, there is a need for regular training in the various aspects of malnutrition.

THE THERAPIST

Speech and language therapists, physiotherapists, logopaedists and other therapists play an important role as they can help improve the understanding of, and can advise, the multidisciplinary team on underlying issues explaining causes of reduced intake capacities and malnutrition.

THE DOCTOR

Medical staff, such as the GP and gerontologist, should apply screening protocols for malnutrition regularly and inform the multidisciplinary team of the residence about changing circumstances and underlying health conditions of the residents.

THE "FOOD COMMITTEE"

In some organisations there is a food committee or reference group to represent the requests or demands of residents. These groups, together with the multidisciplinary nutrition staff, discuss and develop specific menus and nutritional elements that best meet people's expectations and wishes.

THE RESIDENT

The resident himself should be made part of the nutritional process and be informed as well as possible about his status, the opportunities and risks of nutrition and the action that is planned.

The relatives, family, friends, informal carers, social workers and volunteers

All other persons accompanying the resident have a role and responsibility as sources of information about status, feelings, demands and needs of the resident, and should communicate openly with the staff of the residence.

AN INTERESTING CASE FROM GERMANY

A multidisciplinary team at a care facility discussed the need for a special high-calorie drink for a malnourished resident. The cook, as a member of the team, shared the information with his kitchen staff and posted the information on the noticeboard in the kitchen. Over the next few days the staff prepared the special high-calorie drink. But during the next team meeting a nurse complained that the high-calorie drink had been forgotten.

What had happened? The kitchen staff labelled the drink with an internal kitchen abbreviation and delivered it to the living area. The serving staff did not recognise the special drink and gave it to someone else. Fortunately, the staff discovered the reason for the mistake after the team meeting, and from that moment on all special food was labelled not only with the name of the resident but with its exact content as well.

LIST OF ABBREVIATIONS

BMI	Body Mass Index
DACH	Germany-Austria-Switzerland
DHA	Docosahexaenoic acid (a long-chain omega-3 polyunsaturated fatty acid)
EAN	European Ageing Network
EFSA	European Food Safety Authority
EPA	Eicosapentaenoic acid (a long-chain omega-3 polyunsaturated fatty acid)
ESPEN	European Society for Clinical Nutrition and Metabolism
GLIM	Global Leadership Initiative on Malnutrition
GP	General practitioner
FAO	Food and Agriculture Organisation of the United Nations
ONS	Oral nutritional supplements
IDDSI	International Dysphagia Diet Standardisation Initiative
WHO	World Health Organisation

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ISBN: 978-80-88361-12-1
ISBN: 978-80-88361-15-2 (online)

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ISBN 978-80-88361-12-1

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