

# Provision of adequate nutrition and dealing with obstacles to delivering adequate nutrition in care facilities for the elderly

# A descriptive study from the perspective of care home staff.

Franziska Kochler, Maren Peuker, Kathrin Kohlenberg-Müller

## Abstract

The prevalence of nutritional problems is high in care homes for the elderly. The aim of the quantitative study was to investigate the provision of nutrition and how care home staff deal with nutritional supply problems from their perspective.

The paper-and-pencil survey was aimed at general nursing care staff, assistant care staff and other caregiving staff from six care homes for the elderly run by a single organization. Of the 104 datasets, 80 were able to be statistically assessed, and the open questions were analyzed using qualitative content analysis according to the Mayring method.

General nursing care staff and nursing assistants in particular stated that they were responsible for identifying and solving problems with residents' nutrition. To do this, they use a variety of methods such as observing eating and drinking behavior or nutrition/plate protocols. 18.7% of the respondents said they often succeeded in solving the residents' nutritional supply problems, and 40.0% said they were quite often able to do so. The majority of respondents rated their nutrition knowledge as average.

Care home staff require training in identifying and solving residents' nutritional supply problems. The expertise of nutrition professionals should be more fully integrated into care homes to improve residents' nutrition.

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## Introduction

According to estimates, the number of people requiring care in Germany will rise to 6.5 million by 2050 [1]. The proportion of people requiring care who receive residential care (in a care home) increases with age. In 2021, 16% of the total 4.96 million people requiring care in Germany were being cared for in care homes [2]. Care home residents receive comprehensive personal and domestic care [3], which includes all meals [4]. The quality of the food provided is important, but it is also important that care home staff observe eating behavior and support residents with their eating. Because care homes use the "Bezugspflege"1 model (primary care model), staff are familiar with residents' needs and preferences. Using their care expertise, care home staff assess the individual resident's2 nutritional situation and recognize when their eating habits or food intake change and when there may be a nutritional supply problem. Since residents usually live in care homes for the rest of their lives, it is essential that they receive continuous, personalized nutrition care that meets their needs, along with tailored nutritional interventions [4].

In care homes, there is an increased risk of malnutrition, which can come with serious consequences. People requiring care often

<sup>&</sup>lt;sup>1</sup> The *"Bezugspflege"* model (primary (nursing) care model) is a nursing/care concept under which a person requiring care is assigned a single nursing/care professional who has overall responsibility for their care.

<sup>&</sup>lt;sup>2</sup> Elderly people who have moved into a residential care home for the elderly will hereinafter be referred to as "residents".



experience a loss of appetite, have difficulty swallowing or have cognitive impairments, all of which can make eating difficult or even impossible. In addition, there are various diseases that are associated with disorders of nutrient metabolism and/or increased energy and nutrient requirements [5]. Analysis of the 2018 nutritionDay data for Germany showed that 23% of care home residents were underweight, 14% had unintentional weight loss and 10.5% were considered malnourished by care home staff [5]. Only 30% of the participating care homes reported that they had access to a dietitian. By contrast, 85.7% of care homes across Europe have access to a dietitian. This means that there is a significant lack of nutritional medicine expertise in German care homes [5]. Professional associations in the fields of nutritional science and nutritional medicine, as well as the German Network for Quality Development in Nursing (Deutsches Netzwerk für Qualitätsentwicklung in der Pflege – DNQP), have developed standards and guidelines for providing optimal nutrition to elderly people in care homes. These include the "DGE-Quality Standard for Catering with 'Meals on Wheels' and in Residential Homes for the Elderly" published by the German Nutrition Society [4], the "Expert Standard in Nutritional Management to Ensure and Promote Adequate Oral Nutrition in Care" (EEM) [6] and the guideline "Clinical Nutrition in Geriatrics" [7] as well as the "Guideline on clinical nutrition and hydration in geriatrics" [8] published by the European Society for Clinical Nutrition and Metabolism (ESPEN). These guidelines aim to ensure that elderly people receive nutrition that meets their needs and requirements, which includes the aims of preventing or treating malnutrition. They also recommend that interdisciplinary nutrition teams and/or qualified nutrition professionals, together with other professional groups, should ensure that elderly people receiving care are supplied with adequate nutrition [6, 7]. Complex nutritional situations, such as inadequate energy and/or nutrient intake, should be treated with the help of qualified nutrition professionals [6].

Care homes for the elderly employ general nursing care staff (Pflegefachpersonen) and care assistants to provide nursing and domestic care. General nursing care staff complete a three-year nursing care training program [9] whose curriculum includes training on proper nutrition in the care context [10]. Germany introduced a generalist nursing care training qualification in 2020 [9]. Geriatric care assistant training (Altenpflegehelfer\*in) is regulated by the individual federal states in Germany. The training programs run in vocational colleges and take one to two years to complete [11]. As an example of the content, the Hesse training program includes basic concepts in nutrition, in particular eating habits and food intake [12]. Another category of care staff, sometimes referred to as "daytime attendants" ("Tagesbegleiter\*innen"), care for and support residents in close cooperation and professional consultation with the nursing care staff and nursing care teams, and help to continuously improve the quality of everyday nursing care [13]. No therapeutic or nursing care qualification is required to work as this type of carer [14]. Very few care homes for the elderly have nutrition teams or nutrition professionals who can work with nursing care staff and other professional groups to identify and treat nutritional problems [5, 15].

The "Bezugspflege" model (primary care model) allows care home staff to build very close, trusting relationships with residents. This should, in theory, allow them to quickly identify any problems or challenges with nutrition and initiate appropriate interventions [6]. However, it remains unclear how well care home staff can implement this in practice.

To address the question of how the nutritional situation in care homes can be improved, the present study specifically explored the perspective of care home staff, i.e., general nursing care staff, care assistants and "daytime attendants" on the nutritional care of elderly care home residents. The term "nutritional supply problems" is used below to refer to the nutritional issues they mentioned. According to process models for nutrition counseling and dietetic therapy (NCDT), these problems are only one part of the wider dietetic assessment and refer selectively to the category "clinical status in dietetic assessment" [16]. The aim of this study is to gain insights into how care home staff perceive residents' nutritional supply problems and how they perceive the provision of nutrition in care homes for the elderly in general, in order to develop an understanding of how nutritional problems are dealt with. This paper will then reflect on care home staff's perspectives on nutritional care from the NCDT standpoint.

# Methodology

The survey was given to care home staff – consisting of generalist nursing care staff, care assistants and daytime attendants – in six care homes for the elderly belonging to a single provider in East Hesse. These six facilities provide residential care for a total of 444 residents aged 60 and over at all care levels, including in in-house nursing units and wards, as well as in shared residential accommodation. Residents who live in care homes full-time have three different menus to choose from. One of the six facilities provides specialist dementia care, and another has a special facility for elderly people with special care needs. The care homes in the study did not employ any permanent, qualified nutrition professionals [17], but care home staff had the option of consulting/calling in external dietitians. The paper-and-pencil survey was conducted from mid-January to early February 2022.



Based on a structured literature review, a questionnaire was developed with 45 questions covering five main topics: "Points of contact with nutrition", "Dealing with residents' nutritional problems", "Nutrition knowledge", "Access to nutrition professionals and NCDT" and "Personal details". There were 40 closed-ended questions and five open-ended questions. The questionnaire contained a total of 14 scale questions with five response choices each (e.g., ranging from "often" to "rarely", and from "agree" to "disagree"). Additional response options such as "not interested" or "don't know" were not included because they do not increase the reliability of a questionnaire [18].

Three knowledge questions were also integrated into the survey. The respondents were asked to state the body mass index (BMI) at which people aged 70 and over are considered underweight. The statement issued by ESPEN served as the basis here: *"Diagnostic criteria for malnutrition – An ESPEN Consensus Statement"* [19]. The respondents were also asked to assess the effects of oral nutritional supplements on elderly people and to evaluate statements about the nutritional status of people over 65 years of age. Specialist information from the German Nutrition Society [20, 21] and the ESPEN guideline *"Guideline on clinical nutrition and hydration in geriatrics"* was used as the basis here [8].

Before the survey began, a pre-test of the questionnaire was carried out and appropriate adjustments were then made. According to the provider, around 250 nursing care staff, care assistants and day attendants were working across the six care homes during the survey period. The staff were informed about the survey and 280 questionnaires were given out. The completed questionnaires were collected in sealed ballot boxes. The management of the care homes expressly encouraged participation in the survey. Trainees in nursing and care were not included in the target group because their level of training varied and no statement could be made about their current qualifications.

A total of 104 responses were received (response rate: 42%) and these were captured using the EvaSys SurveyGrid software. Of the 104 responses received, 80 were able to be included in the study and were used as a dataset. The other 24 responses were excluded from the analysis because they did not include a job title or because the respondent was a trainee. The data from the 80 questionnaires were processed and descriptively analyzed using the IBM<sup>®</sup> SPSS<sup>®</sup> Statistics 26 statistical software. The five open-ended questions in the questionnaire were coded and analyzed using qualitative content analysis according to the Mayring method [22].

## Results

### **Respondent characteristics**

Almost 80% of the respondents were female. Their ages ranged from 32 to 45 years old. Professional experience ranged from 5.4 to 12.4 years, and the length of service at the facilities ranged from 3.8 to 7.2 years. The majority of the respondents also stated that their highest educational qualification was the *Realschulabschluss* (Intermediate level secondary school leaving certificate) (• Table 1).

# Interest in nutrition-related topics among care home staff

• Figure 1 shows the extent to which the care home staff were interested in nutrition-related topics. The majority of respondents were moderately to very interested in nutrition-related topics.

# Residents' nutritional problems from the perspective of care home staff

According to the respondents, the most common nutritional problem among residents is loss of appetite (33.8%), followed by weight loss (10.0%), malnutrition (8.8%) and swallowing

Characteristics	Professional groups			
	General nursing care staff (n = 43) 53.8%	Care assistants (n = 22) 27.5%	Daytime attendants (n = 15) 18.8%	Total (n = 80) 100%
Female	74.4%	72.7%	100.0%	78.8%
Male	16.3%	18.2%	0.0%	13.8%
Non-binary / intersex	9.3%	9.1%	0.0%	7.5%
Age [years]	35.0 ± 11.9	32.8 ± 10.9	45.4 ± 11.8	36.3 ± 12.3
Professional experience [years]	12.4 ± 8.8	7.1 ± 6.8	5.4 ± 3.5	9.7 ± 8.1
Length of service in care home [years]	6.4 ± 5.3	3.8 ± 2.8	7.2 ± 9.0	$5.8 \pm 5.8$
<i>Realschulabschluss</i> as highest completed level of education	69.0%	42.9%	69.0%	50.0%

Table 1: Characteristics of the care home staff at the six residential care homes for the elderly (percentages, means and standard deviations)



disorders (8.8%). Chewing disorders (2.5%) and obesity (3.8%) were the least frequently mentioned problems (• Figure 2). 20.0% of the respondents gave multiple answers. These were too heterogeneous to be summarized into new categories and were therefore not included in the analysis.

# How care home staff deal with residents' nutritional problems

Residents' nutritional problems are recorded by all professional groups involved in their care. The respondents reported a wide range of methods that they used for this (\* Figure 3). The respondents most frequently observed residents' eating and drinking behavior (83.3%), usually with the help of nutrition/ plate logs (74.4%), by observing residents' nutritional status (69.7%), or by consulting with colleagues (69.2%). Conversations with residents also contributed to the recording of nutritional problems (57.7%). The care record (in German: "Pflegebogen") was rarely used (5.1%), and the same applies to screening forms (5.0%) and laboratory blood test values (6.4%). Other recording methods that the respondents mentioned under "Other, namely" included regular weight checks.

The survey also asked about the documentation of nutrition-related data. 85.5% of the respondents reported that they document residents' weight trends. In addition, they often included food intake (75.0%), likes and dislikes (71.1%) and residents' food preferences (68.4%) in the documentation. Energy intake (14.5%) and eating history (35.5%) were the parameters that the respondents documented the least (• Figure 4).

The analyses show that 94.9% of general nursing care staff are involved in identifying nutritional problems and 97.5% are involved in addressing them. Care assistants also identify residents' nutritional problems (81.0%) and address them (75.9%) (• Figure 5). Kitchen staff, physicians and additional care staff also address residents' nutritional problems, at rates of 60–72%.

The majority of respondents document residents' nutritional problems (92.3%) and pass this information on (87.2%). As an example of how nutritional problems were addressed, half of the respondents offered residents oral nutritional supplements (• Figure 6). Other measures noted in the free text field "Other, namely" included: "Preparing bite-sized portions of food" and "case discussions".







Fig. 2: From the care home staff's perspective, the most common nutritional problem for residents (n = 64, pre-defined answer categories in which a single answer can be given)

### Addressing residents' nutritional supply problems

When asked "How often are you able to address residents' nutritional problems?", 18.7% of the respondents stated that they were able to do this "often" (according to their own assessment). 40.0% said "quite often" and 41.3% "sometimes". None of the respondents responded with "quite rarely" or "rarely".

In another self-assessment question, 56.6% said they "agree" and 32.9% said they "tend to agree" with the statement "I know how to proceed if I cannot address a resident's nutritional problem independently". The majority of respondents stated that they receive adequate support with addressing nutritional problems. 6.6% of the respondents responded to this question with "neither agree nor disagree", 2.6% said "tend to disagree" and 1.3% said "disagree". The respondents were asked an open-ended question about what support they would like to receive to help with addressing residents' nutritional problems. • Table 2 summarizes the results.





Fig. 3: Methods used by care home staff to record residents' nutritional problems (n = 78, pre-defined answer categories, multiple answers possible)



Fig. 4: Documentation of nutritional data by care home staff (n = 76, pre-defined answer categories, multiple answers possible)

### Nutrition knowledge among care home staff

The care home staff were asked to give a self-assessment of their nutrition knowledge. The majority of respondents rated their nutrition knowledge as average. 15.4% of the respondents stated that they have a high level of expertise, and 5.1% said they had a quite low to low level of expertise. General nursing care staff have the highest self-reported level of nutrition knowledge, with 57.1% stating they have a rather high or high level of expertise.

Care assistants had the lowest levels of self-reported expertise. 20.0% of this group rated their expertise as rather low and 13.4% rated it as rather high to high.

In response to the question about which BMI value classifies people aged 70 and over as underweight, 25.4% of the respondents correctly stated the BMI value for underweight (<  $22 \text{ kg/m}^2$ ).





Fig. 5: Professional groups that, from the perspective of care home staff, identify, assess and solve the nutritional problems of residents (n = 79, pre-defined answer categories, multiple answers possible)



Fig. 6: How care home staff handle nutritional problems (self-reported) (n = 78, pre-defined answer options, multiple answers possible)

While 92.2% of the respondents correctly answered the statement "oral nutritional supplements increases the energy and nutrient intakes of older people", less than 10% of the respondents correctly answered the second correct statement "oral nutritional supplements reduces the risk of complications in older people". Regarding nutritional status, 76.3% and 77.6% of the respondents gave the correct answers "People over 65 have a lower energy metabolism than younger people" and "People over 65 with swallowing disorders should receive a diet adapted to the severity of the swallowing disorder". The two statements "People over 65 should consume calcium in the form of dietary supplements" and "People over 65 have higher unsaturated fatty acid requirements



#### Access to dietitan and dietetic therapy

Ability to consult a qualified nutrition professional

• by employing one at the care home or

• by having access to an external (e.g., itinerant) dietitan

Resources (time and personnel)

- More time to attend to residents' needs, such as time for a deeper exploration of nutritional problems and finding solutions
  More support from doctors
- Interdisciplinary cooperation
- Facilitating deeper dialog, for example by establishing (case) discussions
- Simplifying the sharing of information between the various professions

Further education and training opportunities

• On nutrition-related topics

Aspects to do with residents

- Open attitude towards residents' wishes
- Facilitating needs-based support of residents

Systematic approach to nutritional problems

 $\bullet$  Observation – problem identification – objectives – attempt to solve – evaluation

Table 2: Support that care home staff would like to help them address nutritional problems (n = 23)

than younger people" were incorrect. 9.2% of respondents stated that the first statement was true and 15.8% said the second was true.

#### Working intersectoral with dietitians

In an open-ended question, the respondents were asked to state their reasons for having requested a dietitian (n = 7) or for not having requested one (n = 20). The following answers were given: Reasons the respondents requested a dietitian included eating and drinking refusal, tube feeding, a need for nutrition counseling, malnutrition, high-calorie oral nutritional supplements and an eating disorder. Reasons for not requesting a nutrition professional included that the respondent felt there was no need, the respondents were not authorized to do so, specialist staff were available, the issue was being dealt with, the employer did not implement this procedure, or physicians had made agreements with kitchen staff.

## Discussion

Providing good nursing care and nutrition therapy support for elderly people has been shown to optimize their nutritional situation [7]. Care home staff should play a key role in providing adequate nutrition for residents of care homes for the elderly. Their nursing care expertise and judgment appear to be crucial when it comes to implementing nutritional measures [5].

This study is the first to specifically examine the nutritional care of residents in care homes for the elderly run by a single provider from the perspective of care home staff. It has provided insights into their perspectives on dealing with obstacles to delivering adequate nutrition. The study also investigated how and the extent to which care home staff work with NCDT professionals. The majority of survey respondents were general nursing care staff (53.8% of respondents) but care assistants (27.5%) and daytime attendants (18.8%) also took part. This ratio corresponds to the staffing ratios for care home staff required by the German Care Home Personnel Ordinance (Heimpersonalverordnung) that was in effect in 2022. It requires 50% specialist staff and 50% support staff [23]. With an average of 12.8 years of experience, the general nursing care staff (Pflegefachpersonen) have significantly longer professional experience than their other care colleagues on average.

## The most common nutritional problems among residents from the perspective of care home staff

Almost a quarter of the study respondents did not name the single most frequent nutritional problem, but instead listed several. These multiple answers could not be included in the analysis.

A decrease in appetite is a physiological change that often occurs in older people [24], and lack of appetite was by far the most frequent nutritional problem according to the respondents, with 33.8% mentioning it as the most frequent. Studies from German-speaking countries show that the prevalence of moderate to poor appetite among care home residents is 16-60% [25]. The fact that lack of appetite was reported as the most frequent nutritional problem could be due to the methodology of the study and may be related to the fact that this issue is more readily perceived by care staff, as residents actively refuse to eat and/or verbally express to staff that they have no appetite.

Few of the respondents reported malnutrition as the most frequent nutritional problem (8.8%). These results are consistent with those of *nutritionDay* 2018. In this study, nursing care staff estimated that the proportion of malnourished care home residents was 10.5% [5]. It is difficult to assess in more detail whether these subjective estimates match the actual number of malnourished residents in care homes, as only 5.0% of the respondents reported using a screening tool.



# How care home staff record residents' nutritional problems

According to their statements, care home staff record nutritional problems using a variety of methods, primarily subjectively using observations and discussions, but also using objective methods such as body weight measurements. Both the EEM and the DGE quality standard recommend all residents be screened for malnutrition regularly [4, 6]. Validated screening tools are to be used at least every three months [7]. Malnutrition screenings are not yet fully established in hospitals and care homes and/ or are not carried out regularly [5]. The present study also showed this is the case. Only 5.0% of the respondents said they use screening questionnaires. This survey did not record which screening instruments care homes use regularly or whether screening is carried out regularly and whether it is carried out regularly for all residents.

The frequent recording of residents' food intake and food preferences mentioned by the respondents is in line with the guideline on clinical nutrition in geriatrics [7]. This approach makes it possible to tailor the food and drink offered to the individual and can have a positive effect on the nutritional status of elderly people. The respondents also attach great importance to monitoring residents' weight trends, as specified in the EEM [6]. This makes it possible to detect and, if necessary, treat residents' weight fluctuations and deal with a trend towards underweight at an early stage. Both of these indicators are part of the dietetic assessment in NCDT [16].

Overall, the results (+ Figure 4) show that only selective data from the dietetic assessment [16] are taken into account in the care documentation of the care homes studied. The care home staff stated that for the diet history category, they record the amount of food intake and observe eating behavior, for example (+ Figure 4). They do not record whether food-based recommendations have been implemented or whether energy and nutrient requirements are being met. The respondents sometimes link what they record to data from the Clinical Status category (e.g., body weight). Care home staff reported that when they believe there is a nutritional problem, in most cases, this information is documented and passed on to other employees. Only 56.4% reported that they offer additional food and only 50.0% reported that they offer oral nutritional supplements as dietetic interventions. In terms of outcomes, among the professional groups involved in care, only 58.7% reported that they are able to address nutritional problems frequently or quite frequently. There is a need for improvement here.

To obtain a more robust basis for dietetic interventions in care homes for the elderly, further indicators should be recorded for dietetic diagnosis, in which the nutritional problems are precisely characterized [16]. The diet history is an especially important parameter for developing an understanding of specific nutritional habits and for taking these into account when deciding what food to provide. According to the survey, kitchen staff solve nutritional problems and therefore play an important role in the implementation of dietetic interventions. To address nutritional problems in a well-founded manner, individual energy requirements should be calculated and documented in order to be able to interpret the nutrition/plate logs in a more personalized way, including with regard to food and nutrient intake. Using these evaluations for dietetic diagnosis, it can be determined whether the residents' food intake meets their energy and nutrient needs or whether adjustments should be made, for example, to avoid weight loss or the development of malnutrition.

The care homes in this study reported that they practice comprehensive and continuous interdisciplinary communication of nutritional problems that occur in the care home and that these problems are recorded by various professional groups, in accordance with the recommendations [4, 6]. This represents a crucial step towards improving the nutritional care of residents.

#### Nutrition knowledge among care home staff

The survey showed that 50.0% subjectively rated their expertise as average, while 15.4% rated it as high. Looking at the individual professional groups, it is clear that, as expected, the general nursing care staff rate their expertise the highest, followed by the care assistants and daytime attendants. These results could be related to both the length of training the respective professional groups receive and the nutrition-related content of that training. The professional experience of the general nursing care staff could also play a role. According to the survey, the general care nursing staff have the most professional experience, with an average of 12.4 years. Within this level of professional experience, it is conceivable that these professionals have participated in training courses on nutrition-related topics, for example. In terms of objective determination of expertise, it was found that most of the respondents were able to correctly assess various statements about the nutritional status of older people. One more problematic result was that only a quarter of the respondents were able to answer the question about the BMI value for underweight correctly. Because BMI is a simple and cost-effective way to obtain an initial assessment of weight status, it is important that care home staff be able to not only record BMI but also interpret it correctly. This indicator makes a decisive contribution to identifying and, if necessary, treating the onset or presence of malnutrition in residents.

#### Working intersectoral with dietitians

*NutritionDay* surveys from the last few years have shown that the structural quality of nutritional medicine in German nursing homes does not meet the standards required by professional asso-



ciations and in some cases, does not meet international standards [5]. The care homes in the study did not employ any permanent, qualified nutrition professionals [17], but care home staff had the option of consulting/calling in external nutrition professionals. Despite this option, only one of the respondents had requested the help of an NCDT professional. For cases of enteral nutrition, eating and drinking refusal, and malnutrition or underweight in residents, care home staff consult specialists from enteral nutrition providers. It is unclear how neutral and appropriate their recommendations for dietary interventions would be.

Residents' nutritional problems are identified by care home staff and, based on the staff's self-evaluations, can only be addressed through nursing care expertise alone frequently or quite frequently in 58.7% of cases. These findings strongly suggest that care home residents would benefit from greater integration of qualified nutrition professionals in care homes.

### Limitations

The survey was conducted in the care homes of only one provider, which limits the representativeness of the results. Although the sample is relatively small, the response rate was high at 42%. The open-ended questions in the survey instrument, which required respondents to formulate keywords, may have made it difficult for the respondents to express their ideas clearly and in detail. Selection bias cannot be ruled out in the survey, as care staff with a high level of interest in the topic of nutrition or greater nutrition-related knowledge may have been more motivated to participate. From a methodological point of view, asking about established documentation routines may have led to inaccurate results; observational studies could provide deeper insights here. Overall, it is crucial to note that many of the respondents' statements are based on self-assessments and cannot be independently verified. Due to the relatively small sample size, it is not possible to carry out a differentiated evaluation of the individual professional groups (general nursing care staff, care assistants and daytime attendants) and care homes.

# Conclusions

When recording the nutritional problems of residents in care homes for the elderly, the care home staff in this study use indicators that relate to the amount of food consumed, but not to the quality of the diet as a whole. The care home staff use a variety of methods and instruments to do this, such as observing eating and drinking behavior, and recording food preferences, likes, and dislikes. This selective dietetic assessment process allows only a limited dietetic diagnosis, which affects the chances of implementing an appropriate dietary intervention and thus solving the specific nutritional problem. The care homes studied generally do not place enough emphasis on the dietetic perspective.

The respondents document the nutritional problems identified, and, as recommended in the EEM and the DGE quality standard, they engage in interdisciplinary discussions with caregiving colleagues but also with other professional groups at the care homes. In terms of the support the respondents would like, they mentioned more in-depth discussions, more time to spend on nutrition-related issues, and access to NCDT. The respondents are obviously aware that the complexity of residents' nutritional problems means that they cannot address them alone, and they make suggestions about what support in this area could look like. A potential first step in improving the provision of nutrition to residents in accordance with their needs would be to establish an interdisciplinary nutrition team from within the care homes themselves to address the identified nutritional problems in detail and on an individual basis. More frequent and more targeted involvement of nutrition professionals is recommended for the early and thorough management of residents' nutritional problems.

A comprehensive assessment of the care home staff's nutrition knowledge would be necessary to determine its precise impact on nutritional care. However, this study did not include such an assessment. However, the knowledge-based questions in the survey revealed knowledge gaps, showing that many care staff require training on how to record and interpret the BMI of older adults, as well as on the benefits of oral nutritional supplements. Targeted training on how to record and document residents' eating habits, and how to evaluate them, could raise awareness among care home staff and give them a broader and deeper understanding of nutritional problems. This could also improve cooperation with dietians. Involving a dietitian and a nutrition team could help optimize existing methods, tools, and processes for recording nutritional indicators and problems. This would also ensure that care home staff have a qualified person to contact regarding questions and challenges related to providing elderly people with adequate nutrition.

There is a great need for research to improve the nutritional care of elderly people in care homes. An example of meaningful research that would expand on the study results that are already available would be observational studies on individual steps in the provision of nutrition care, in order to identify challenges more specifically and to identify tailored measures for practical implementation. Involving nutrition professionals more in care homes for the elderly is a great opportunity to improve the nutrition of residents in a more targeted way. Given that the number of people in need of care is growing, this is of great social relevance. Scientific monitoring of this measure could be a decisive step towards more evidence-based care.

### Disclosures on Conflicts of Interest and the use of AI

The authors declare that there is no conflict of interest and that no Al applications were used in the preparation of the manuscript.

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