

Nutrition & Hydration

Current Awareness Bulletin

January 2026

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45 minutes. Learn how to transform a question into a search strategy, and how to find the best evidence in a database.
Next sessions: 13th February 2026 @ 3pm & 2nd March @ 4pm
- **Simple and painless evidence into practice (BMJ Best Practice and the LKS Hub)**
30 minutes. Learn about quick and hassle-free ways to seamlessly incorporate evidence into your daily work.
Next sessions: 2nd February 2026 @ 11am & 10th March @ 12 noon
- **Quickfire health literacy: communicating with patients more effectively**
30 minutes. Learn about the communication barriers patients may encounter, and ways to ensure they get the most from their care.
Next sessions: 19th February 2026 @ 3pm & 27th March @ 4pm

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1. AI-Enabled Precision Nutrition in the ICU: A Narrative Review and Implementation Roadmap

Authors: Briassoulis, George and Briassouli, Efrossini

Publication Date: 2026

Journal: Nutrients

Abstract: Background: Artificial intelligence (AI) is increasingly used in intensive care units (ICUs) to enable personalized care, real-time analytics, and decision support. Nutritional therapy—a major determinant of ICU outcomes—often remains delayed or non-individualized. Objective: This study aimed to review current and emerging AI applications in ICU nutrition, highlighting clinical potential, implementation barriers, and ethical considerations. Methods: A narrative review of English-language literature (January 2018–November 2025) searched in PubMed/MEDLINE, Scopus, and Web of Science, complemented by a pragmatic Google Scholar sweep and backward/forward citation tracking, was conducted. We focused on machine learning (ML), deep learning (DL), natural language processing (NLP), and reinforcement learning (RL) applications for energy/protein estimation, feeding tolerance prediction, complication prevention, and adaptive decision support in critical-care nutrition. Results: AI models can estimate energy/protein needs, optimize EN/PN initiation and composition, predict gastrointestinal (GI) intolerance and metabolic complications, and adapt therapy in real time. Reinforcement learning (RL) and multi-omics integration enable precision nutrition by leveraging longitudinal physiology and biomarker trajectories. Key barriers are data quality/standardization, interoperability, model interpretability, staff training, and governance (privacy, fairness, accountability). Conclusions: With high-quality data, robust oversight, and

clinician education, AI can complement human expertise to deliver safer, more targeted ICU nutrition. Implementation should prioritize transparency, equity, and workflow integration.

2. The effects of climate change on food intake, appetite and dietary choices: From current challenges to future practices

Authors: Cheah, Isaac;Shimul, Anwar Sadat;Rahman, Mahabub and Zlatevska, Natalina

Publication Date: 2026

Journal: Appetite

Abstract: Climate change profoundly impacts human appetite, food intake, and dietary behaviors through multiple pathways. Heat stress suppresses appetite via thermoregulation mechanisms, while climate-induced food insecurity alters availability and nutritional quality of staple crops. This special issue compiles twenty studies examining physiological responses, vulnerable population adaptations, and sustainable dietary transitions, emphasizing the urgent need for climate-resilient food systems and equitable nutrition interventions. (Copyright © 2025. Published by Elsevier Ltd.)

3. Comprehensive obesity care: Leveraging lifestyle modifications, obesity medications, and bariatric procedures to improve clinical and nutrition outcomes

Authors: Ezenekwe, Lotanna and Newberry, Carolyn

Publication Date: 2026

Journal: Nutrition in Clinical Practice : Official Publication of the American Society for Parenteral and Enteral Nutrition

Abstract: Obesity is common, affecting >40% of Americans and increasing at rapid rates worldwide. Defined by the presence of excess body fat, obesity is tied to a multitude of poor health conditions, including cardiovascular disease, insulin resistance, and malignancy. Although lifestyle modifications such as diet and physical activity are cornerstones of management and crucial to enhance the health benefits achieved via targeted treatment plans, highly efficacious obesity medications are also now available. In particular, glucagon-like peptide-1 receptor agonists, have been found to be safe and efficacious, inducing clinically significant weight loss that is sustainable. Their effect on nutrition status is still being defined. In addition to medications, bariatric endoscopy and bariatric surgery are also highly effective options for durable weight loss, although these treatments are associated with malnutrition if they are not appropriately monitored. This review aims to define the current landscape of obesity medicine today, highlighting both current therapies and discussing their associated nutrition considerations, to educate the nutrition-focused provider. Multimodal therapies, combining medications and procedures, are an active area of research and will likely define care in future years. (© 2025 American Society for Parenteral and Enteral Nutrition.)

4. Patient Perspectives on Inpatient Mealtimes: Insights on Swallowing, Mental Wellbeing and Recovery

Authors: Guthrie, Susan; Baker, John; Cahill, Jane and Hemsley, Bronwyn

Publication Date: 2026

Journal: International Journal of Mental Health Nursing

Abstract: Although the prevalence of swallowing difficulties in adults with mental health conditions has been highlighted in research, the relationship between swallowing difficulties and psychosocial aspects of mealtime experiences is not known. In the context of a need for person-centred and holistic approaches to nursing and healthcare, the paucity of research relating to the impact of mealtimes on hospital wards on patient wellbeing and safety reveals a significant gap in knowledge. To understand patient views and experiences of mealtimes on inpatient mental health wards, including both positive and negative aspects affecting their wellbeing and safety, this ethically-approved study was qualitative in design and involved collaboration with service-user groups who co-designed interview questions. Participants were 13 inpatients on mental health wards for working-age adults. Interviews were conducted in person, de-identified and analysed using thematic analysis. Themes were first constructed from transcripts and then verified with service-user groups and the research team. The overarching theme of 'heightened emotions associated with mealtimes' encapsulated four themes: 'experiencing anxiety and stress, connecting with others at mealtimes, loss of autonomy and choice, and experiences of swallowing difficulty'. Heightened emotions, anxiety and stress experienced during mental health ward mealtimes were counter to patients' wellbeing, which impacted on their wider recovery. Mealtime and swallowing safety, particularly when dysphagia is present, may be negatively affected by emotional pressures during mealtimes. These findings suggest a need to address barriers to wellbeing at mealtimes, and to raise awareness around integrating mealtimes into recovery pathways and person-centred care. (© 2026 The Author(s). International Journal of Mental Health Nursing published by John Wiley & Sons Australia, Ltd.)

5. Nutrition Screening and Assessment Tools for Adult Patients with Cancer and Survivors of Cancer: A Systematic Review

Authors: Kring, Sara Klöczl; Beck, Anne Marie; Wessel, Irene; Ustrup, Kim Skov; Dieperink, Karin B.; Zwisler, Ann-Dorthe and Kristensen, Marianne Boll

Publication Date: 2026

Journal: Nutrition & Cancer

Abstract: Malnutrition and nutrition impact symptoms are common during and after anticancer treatment. This systematic review aimed to identify nutrition screening and assessment tools validated in patients with cancer and/or survivors, and to provide an overview. Comprehensive

searches were conducted. Covidence was used for reference screening, data extraction, and quality assessment by two reviewers independently. Studies were included if they tested concurrent validity of a tool reporting: sensitivity, specificity, area under the curve (AUC), Pearson's/Spearman's correlation coefficient, or kappa. Data were summarized in tables and described narratively. Of 6,332 screened records, 486 were full-text reviewed, and 98 articles covering 161 validation studies of 47 tools were included. Most articles included mixed cancer diagnoses, followed by head and neck and gastrointestinal cancer; few included survivors. The most frequently validated tools were Nutritional Risk Screening 2002 (NRS 2002), Malnutrition Screening Tool (MST), Malnutrition Universal Screening Tool (MUST), and the Scored Patient-Generated Subjective Global Assessment (PG-SGA). Several reference standards were used. Sensitivity ranged from 6% to 100%, specificity from 11% to 100%, and validity from 'Poor' to 'Good'. The absence of a universal gold standard complicates identification of a superior tool. Nonetheless, rather than ranking tools, this review provides an overview of their validity across different reference standards, offering guidance for clinicians. PROSPERO: CRD42018096678.

6. In-depth exploration of 'therapeutic mealtime experiences' in inpatient rehabilitation: mixed-methods multiple case studies

Authors: Pashley, Alice;Young, Adrienne;Doig, Emma;Moore, Janette and Wright, Olivia

Publication Date: 2026

Journal: Disability & Rehabilitation

Abstract: Purpose: To explore how mealtime planning and delivery practices in inpatient rehabilitation influence therapeutic mealtime experiences. Methods: This multiple case study used convergent mixed methods analysis of case-specific data across two metropolitan general rehabilitation sites. Interviews, patient reported experience measures, and a chart audit were conducted at two timepoints for participants. Within-case analysis involved descriptive and qualitative analysis, and across-case analysis involved identifying patterns and differences across cases, with findings organised to Donabedian's structure-process-outcome model. Results: The dining room was the most discussed mealtime structure to promote therapeutic mealtime experiences, enabling access to care, therapy activity, and social engagement. Mealtime structures with built-in flexibility and staff knowing their patients supported tailoring of experiences and enabled person-centred care. Compassionate and attentive interactions with staff created a genuine approach to care, positively influencing patients' psychosocial well-being. Most patients self-initiated using mealtimes for additional therapeutic activity, but mealtimes were also a time of rest and an opportunity to maintain personhood. Conclusion: Mealtimes have substantial potential to contribute positively to patients' rehabilitation and offer clinicians opportunities to engage patients in rehabilitation. Flexible mealtime systems enable staff to provide person-centred care, but improvements are needed to ensure this is delivered consistently for all patients. **IMPLICATIONS FOR REHABILITATION:** Patients often self-initiate using mealtimes as therapeutic activity, particularly around upper limb therapy with self-feeding and meal preparation or mobilisation to dining rooms, indicating this concept is acceptable and should be supported by clinicians Meal service times for main and mid meals are important to promote nutritional intake, person-

centred care, and a sense of routine Dining rooms can support increased therapeutic activity, independence, social engagement, and access to assistance and supports Patients conceptualise mealtimes as therapeutic for different reasons, including nutrition, functional recovery and independence, social engagement, rest for healing, or opportunities to maintain personhood.

7. General disease symptoms and their impact on appetite and food intake in older hospitalized patients

Authors: Pourhassan, Maryam;Daubert, Diana;Sieske, Lars;Giehl, Chantal;Neuendorff, Nina Rosa and Wirth, Rainer

Publication Date: 2026

Journal: Appetite

8. A comparative evaluation of the Global Leadership Initiative on Malnutrition vs the Patient-Generated Subjective Global Assessment in assessing nutrition status in patients diagnosed with terminal cancer: A retrospective study

Authors: Sakaguchi, Tatsuma;Maeda, Keisuke;Takeuchi, Tomoko;Tsuchida, Mika;Ishida, Yuria;Kawamura, Koki;Amano, Koji and Mori, Naoharu

Publication Date: 2026

Journal: Nutrition in Clinical Practice : Official Publication of the American Society for Parenteral and Enteral Nutrition

Abstract: This study aimed to evaluate the clinical utility of the Patient-Generated Subjective Global Assessment (PG-SGA) as a nutrition screening tool and the Global Leadership Initiative on Malnutrition (GLIM) criteria as a diagnostic framework in a cohort of patients with terminal cancer. This single-institution, retrospective cohort study included adults who were diagnosed with cancer and a predicted life expectancy <3 months intolerant to anticancer treatment who received palliative care between October 2023 and March 2024. Of 104 patients screened, 78 (54% male) were included in the analysis and 26 were excluded because of a terminal condition that precluded completion of the PG-SGA. The median age, body mass index, and survival were 73 years, 20.4, and 32 days, respectively. Weight loss occurred in 46% of patients within the previous 3 to 6 months, whereas 17% gained weight. Within the previous 2 weeks, 28% exhibited weight gain. The GLIM classified 35% of patients as well nourished, whereas the PG-SGA identified none as such. Agreement between the two tools was low (kappa coefficient = 0.037). Between the nutrition status screened by PG-SGA and assessed by the GLIM, no significant differences of all symptoms in Edmonton Symptom Assessment Systems or of survival outcomes were observed. In contrast, fluid retention and low handgrip strength emerged as significant predictors of mortality in Cox proportional hazards models. These findings suggest that, in patients with terminal cancer, PG-SGA may serve as a

sensitive screening tool, whereas GLIM may have limited diagnostic applicability in end-of-life settings. (© 2025 American Society for Parenteral and Enteral Nutrition.)

9. The impact of nutrition status on the quality of life of patients with advanced cancer treated in a multidisciplinary palliative care unit: A longitudinal study

Authors: Santos, Larissa Pereira;Calixto-Lima, Larissa and Wiegert, Emanuely Varea Maria

Publication Date: 2026

Journal: Nutrition in Clinical Practice

Abstract: Background: Nutrition impairment negatively affects quality of life (QoL). Methods: A longitudinal cohort study was carried out with patients with advanced cancer evaluated in the palliative care unit of a reference center for cancer in Brazil. Nutrition risk (NR) was evaluated using the Patient-Generated Subjective Global Assessment Short Form score (≥ 9 points) (PG-SGA SF), and QoL was assessed using the Quality-of-Life Questionnaire Core 15. Data were collected at baseline (T0) and during follow-up periods up to 40 days (T1). The association between the PG-SGA SF score and QoL changes over time was analyzed using generalized estimating equations (GEEs), adjusted for covariates. Results: A total of 160 patients were included. The prevalence of NR at baseline (T0) was 55.6%, decreasing significantly to 36.3% at follow-up (T1) ($P < 0.001$). Most QoL symptom domain scores worsened over time. Patients with NR experienced significantly greater declines in mean scores compared with those without NR ($P < 0.001$ for all). In the multivariate GEE model, NR was a significant negative predictor for physical function ($\beta: -0.227$, 95% confidence interval 95% CI]: -0.322 to -0.133), emotional function ($\beta: -0.181$, 95% CI: -0.267 to -0.096), pain ($\beta: 0.185$, 95% CI: 0.073 to 0.296), and global health ($\beta: -0.100$, 95% CI: -0.173 to -0.026). Conclusion: NR prevalence significantly decreased during follow-up. However, NR had a persistent negative impact on multiple QoL domains, including physical and emotional function, pain, and global health. These findings underscore the critical role of nutrition status in maintaining QoL in palliative care patients receiving nutrition support therapy.

10. The Hospital Menu as a Tool for Nutrition Education for Patients, Healthcare Workers, and the Broader Hospital Community

Authors: Utter, Jennifer;Brennan, Kaitlin and McCray, Sally

Publication Date: 2026

Journal: American Journal of Lifestyle Medicine

11. A nomogram for predicting short-term parenteral nutrition-associated liver disease in hospitalized adults – A population-based analysis

Authors: Wu, Shiyang;Peng, Gang;Zhong, Xiaolan;Yan, Dapeng;Chen, Meina;Huang, Zehua and Chen, Jiyun

Publication Date: 2026

Journal: Nutricion Hospitalaria

Abstract: Background: parenteral nutrition-associated liver disease (PNALD) is a common complication in patients receiving total parenteral nutrition (TPN). Our study aimed to establish a nomogram to predict short-term occurrence of PNALD patients and implement intervention early as far as possible.; Methods: 187 patients who met the eligibility criteria were retrospectively screened May 2020 to May 2022. They were further divided into the training cohort and validation cohort. The univariate and multivariate analysis were used to select risk factors for the predictive model which was presented with a nomogram. Model building and validation were done using R version 4.4.0. The discrimination and calibration of the nomogram were evaluated using receiver operating characteristic (ROC) curve analysis and calibration plots. The net benefits of the nomogram at different threshold probabilities were quantified using decision curve analysis (DCA).; Results: the incidence of PNALD in patients who received TPN was 22.99 %. The logistic regression model equation was constructed based on the three factors of fasting time, glycolipid ratio and ALT by the univariate and multivariate analysis: $\text{Logit}(p) = 0.056 \times \text{fasting time} - 3.721 \times \text{glycolipid ratio} + 0.044 \times \text{ALT} + 0.518$. The AUC value (0.695) indicated satisfactory discriminative ability of the nomogram. The calibration plots showed favorable consistency between the prediction of the nomogram and actual observations in both the training and validation cohorts. Furthermore, DCA showed that the nomogram was clinically useful and had discriminative ability to recognize patients at high PNALD risk.; Conclusions: a nomogram was developed and validated to assist clinicians in predicting possibility of PNALD patients in short term.

12. A triad strategy of rehabilitation, nutrition, and oral management for malnutrition, sarcopenia, and frailty in super-aged societies

Authors: Yoshimura, Yoshihiro;Wakabayashi, Hidetaka;Matsumoto, Ayaka;Nagano, Fumihiko;Shimazu, Sayuri and Shiraishi, Ai

Publication Date: 2026

Journal: Nutrition

Abstract: Background: Rapid population aging has intensified the prevalence of malnutrition, sarcopenia, frailty, and oral dysfunction, significantly affecting healthcare outcomes and quality of life in older adults. A growing body of evidence suggests that integrating rehabilitation, nutrition support, and oral health management-a "triad" approach-may yield superior clinical outcomes compared to isolated interventions.; Objective: This narrative review synthesizes existing research on this integrated approach, highlighting its theoretical foundation, clinical

implications, and implementation strategies.; Results: Evidence underscores that combined multidisciplinary interventions yield superior outcomes compared to single-domain approaches by effectively improving muscle mass, swallowing function, activities of daily living, and nutritional status. Recent policy developments, such as those in Japan, endorse this triad approach, reflecting its growing recognition; however, significant barriers to widespread clinical implementation remain.; Conclusion: The triad approach is a promising cornerstone of modern geriatric care. Future research should focus on optimizing intervention delivery, overcoming implementation barriers, such as challenges in interdisciplinary coordination, and assessing long-term outcomes to firmly establish this approach within comprehensive care systems as a cornerstone of geriatric healthcare. (Copyright © 2025 Elsevier Inc. All rights reserved.)

13. Eating Disorders: Service Mapping Report 2025 (NAED)

Report: National Audit of Eating Disorders (NAED)

Publication Date: 2025

Healthcare Quality Improvement Partnership

This report shares the first findings from the new National Audit of Eating Disorders (NAED), detailing data provided about services in England between January and May 2025. In its first year, the audit focused on mapping services to understand the breadth and depth of current provision, achieving an outstanding 97% participation rate from eligible teams.

Sources Used:

The following databases are used in the creation of this bulletin: Amed, British Nursing Index, Cinahl & Medline.

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