Queensland Health

Foodservice best practice

Queensland Health Guideline

QH-GDL-448:2017

1. Statement

This Guideline provides recommendations regarding evidence based best practice for foodservices in Queensland Health facilities to promote the health status of patients/residents/clients by meeting their nutritional, psychological and sociological needs through providing appropriate, safe and nutritionally adequate food and meals through efficient and sustainable processes.

2. Scope

This Guideline provides evidence based guidance for all employees, contractors and consultants within the Health and Hospital Services involved in operating or overseeing food services.

Compliance with this guideline is not mandatory, but sound reasoning must exist for departing from the recommended principles within a guideline.

3. Requirements

3.1. Governance

3.1.1. A governance system shall be in place for Food and Nutrition Services through a multidisciplinary committee including at least – the Foodservice Manager/Coordinator, Foodservice Dietitian, a Speech Pathologist, a representative of Infection Control, a CNC ward/unit manager, Dietetic/Nutrition Assistant, a representative of Quality and Safety Unit – that meets at least 6 times a year [1, 2, 3].

3.1.2. Strategies are in place to support, promote and improve consumer partnerships in foodservices [4].

3.1.3. A foodservice dietitian is available to sites to provide assessment of menus for nutrition adequacy, therapeutic diets, allergens and standard recipes and to support foodservices in maintaining a safe and patient focused service through training, audits and quality improvement activities [5].

3.2. Nutrition and menus

3.2.1. All facility menus shall be reviewed and assessed biennially, or following a major menu change, by a dietitian, food service manager, speech pathologist and include consumer input through review of consumer feedback and/or engagement with local cultural groups to ascertain local

food practices (eg. Aboriginal & Torres Strait Islander, Muslim). [6] These reviews will include a focus on:

- maximising nutritional intake [2, 6, 11],
- access to texturally appropriate foods and fluids applicable to therapeutic requirements (compliant with the IDDSI - International Dysphagia Diet Standardisation Initiative) [2, 10, 11],
- access to culturally appropriate foods and fluids (according to the local patient population) [2, 6, 11],
- maximising therapeutic diet integration into the main menu. [2, 6, 11, 38],
- minimising allergic food reactions (maximising low allergen foods to allow greater menu integration) [2, 7, 8, 9],
- maximising quality and value [4, 38, 39],
- sustainability through utilisation of locally grown and sourced foods, minimising packaging [40].

3.2.2. Menus are assessed against the Queensland Health Nutrition Standards for Meals and Menus. [2, 6, 11].

3.2.3. Food allergens and additives should be identified as per the Australian New Zealand Food Standards Code (FSANZ) Standards requiring labelling and any additional allergens considered common for the patient population specific to the site [6, 7, 9].

3.2.4. Where the foodservice provides staff meals, function catering and/or retail foodservices these shall comply with the A Better Choice: Healthier Food and Drinks at Healthcare Facilities [12, 13].

3.3. Food Service Systems

3.3.1. Menu/Meal Ordering will aim to:

- provide choice as close as possible to meal delivery is highly desirable, with at least two meals chosen on the day of service i.e. a choice for lunch and dinner [14, 15, 16, 17, 18, 19, 21],
- avoid advance ordering of meals and mid-meals and provide meal/mid-meal selection at the time of meal service for:
  - paediatric facilities or paediatric wards [15],
  - medium to long stay rehabilitation units or wards [16, 17],
  - long stay mental health facilities or wards [17, 19],
  - residential aged-care facilities [16, 17, 18].

3.3.2. Meal-time environment

- Facilities shall endeavour to provide a meal-time environment to support patient/resident/client to eat and enjoy their meal. This includes but is not limited to:

- putting the patient/resident/client in a comfortable, upright position to eat either sitting in a chair with a tray table in reach or at a dining table [11, 25,]
- providing assistance with setting up for a meal (positioning, putting in dentures, opening packets, setting out cutlery) and enabling to eat in a timely manner (within 10 minutes of meal arriving) [23, 24, 25,]
- avoiding interruptions, improving the social aspect of meals times (with dining areas or rooms), turning on lights, encouraging and prompting [9, 11, 22, 23, 24, 25.]

3.3.3. Foodservice Information Management systems should be used in facilities over 100 beds to promote efficiency, safety, integration and real time diet information. Functionality should include but not be limited to:

- diet order recording and updating in real time ideally integrated with the Patient Information Management system (eg. integrated electronic medical record, Trendcare, Patient Flow Manager) [26, 27, 28.]
- collation and compliance tracking of menu orders to allow for allergen and special diet compliance checking [26, 27, 28,]
- production updates and forecasting [38,]
- meal intake and waste tracking [7 ,11, 26.]

3.3.4. Facilities buying in prepared meals or meal components shall have a contract in place for supply that includes explicit standards that ensure the meals/meal components meet food safety standards, Queensland Health Nutrition Standards for Meals and Menus, IDDSI texture standards and meet food packaging accessibility guidelines if a portion container item; or if using cook-and-serve production, should have standardised recipes with standard serves, that meet the Queensland Health Nutrition Standards for Meals and Menus, IDDSI texture standards and identify all declarable allergens [6, 7, 8, 9, 10, 29, 37, 39, 41.]

3.3.5. A review of the foodservice model of care shall occur when there is a significant change to the patient/resident/client cohort planned, there is a planned kitchen refurbishment or new kitchen. This review will include all key stakeholders with opportunity for input eg. Consumers, consumer feedback surveys, Foodservices, Dietitians, Nursing, Speech Pathology, Allied Health, Medical Leads and shall consider the best foodservice system for the planned patient cohort to ensure a patient centred foodservice system [2, 4, 11, 30, 32, 40.]

3.4. Quality and Safety

3.4.1. Facilities shall engage in ongoing service review and improvement through an established Quality Improvement/Operational Plan that is reviewed and reported on regularly through the Food and Nutrition governance committee. Consumers should be engaged in the quality

improvement process, with a variety of opportunities for consumer feedback to be provided on the safety and quality of foodservices [1, 4, 30, 32, 38, 39].

3.4.2. A risk management approach is taken in managing foodservices including:

- regularly reviewing and maintaining policies, procedures and work instructions [30, 31, 32, 38,]
- a 3 point identification process is in place for foodservice staff delivering meals to identify the correct client is the receiving the meal [28,]
- identifying and reporting risk. Clinical incidents related to foodservices are reported and action is taken to eliminate or reduce risk [32].

3.4.3. A system is in place, ideally electronic and integrated with the patient management/medical record, that identifies a patient/resident/clients' diet code and communicates this to the kitchen in real time. [26, 27, 28].

3.4.4. Agreed Statewide standard diet codes will be used that are compatible with the ieMR (integrated electronic medical record) [33].

3.4.5. An allergen management process for identifying and preparing allergen free/low meals for susceptible clients will be documented, implemented and audited (both internally and during a 3rd party food safety audit). [7, 8, 9].

3.4.6. All facilities should endeavour to use moulded texture modified meals.

- All texture modified meals made on site will have standardised, nutritionally assessed recipes with a review of recipe and texture compliance by either a speech pathologist, dietitian or dietitian/nutrition/clinical assistant at a minimum twice per month [10, 32, 34, 35, 36].
- Foodservice staff preparing texture modified meals will have training annually on preparing and testing using IDDSI methodology [2, 8].

3.4.7. Regular audits should be undertaken to ensure continual quality improvement and safety of food service delivery. It is recommended that the following audits be conducted according to the Statewide Foodservice Key Performance Indicators [2, 7, 8, 29, 37, 38].

- Patient/resident satisfaction audit annually (using a validated tool).
- Meal quality audit at least 2 per month (using a validated tool).
- Plate waste/production waste/mid-meal waste at least annually (using recommended/validated tool)
- Internal food safety audits (2 per year)

- External 3rd party food safety audit annually.

3.4.8. Regular review of cost, quality and efficiency of the Foodservice, using Statewide Foodservice Key Performance Indicators, shall be undertaken and compared to state averages and like facilities to identify improvements [2, 38, 39].

3.5. Training

3.5.1. All meals, before they leave the kitchen, shall be checked for accuracy by a staff member trained in nutrition to the equivalent of HLTAHA039 and HLTAHA040 either through a Registered Training Organisation or internally by a Dietitian [2, 38].

3.5.2. All foodservice staff shall be appropriately trained in procedures and processes for safe food handling, food allergy awareness and meal provision and quality service. All training will be reviewed regularly to ensure staff continue to meet competence in these areas [2, 6, 7, 8, 9, 10, 38].

3.6. Sustainability

3.6.1. Procurement contracts include weightings favouring locally produced and sourced products with recyclable packaging [29, 40].

3.6.2. A waste management process is in place to separate organic waste from packaging waste and to direct waste away from landfill [40].

3.6.3. Equipment sourced is low emission and minimises energy use [40].

3.6.4. Water use is minimised and where possible grey water is recycled [40].

3.6.5. Planned changes to foodservice systems include an assessment of energy and water use and waste minimisation [40].

4. Compliance

4.1. Legislation

Food Safety

Food Act 2006 (Qld) [7]

Food Standards Australia New Zealand: Standard 1.2, 3.2.1, 3.2.2, 3.2.2A, 3.2.3, 3.3.1 [8]

4.2. Directives

Health and Hospital Service Directive

Queensland Health Directive # QH-HSD-009:2012: Procurement and Logistics - Use of Contract and Supply Arrangements [29]

Queensland Health Directive # QH-HSD-049:2019: Healthier Food and Drinks at Healthcare Facilities [12]

4.3. Standards

Nutrition Standards

Queensland Health Nutrition Standards for Meals and Menus (Revised 2022) [6]

Texture Modification Standards

International Dysphagia Diet Standardisation Initiative (Endorsed by the Dietitians Association of Australia and Speech Pathology Australia in 2018) [10]

5. Supporting documents

Foodservice Best Practice Guideline Evidence Document (2023)

Food Allergen Management in Foodservice – A Best Practice Guideline (2020) [9]

Queensland Health Statewide Foodservice KPIs [38]

6. Definitions

Term	Definition
Allergic food reaction	A reaction that occurs in a sensitive individual if they have a food or food component/ingredient that induces an allergic/ intolerant reaction. Management of food allergens is a requirement under the Food Standards Australia and New Zealand.
Dietitian	A dietitian is eligible to be an Accredited Practicing Dietitian as assessed by Dietitians Australia and has completed an accredited training program at University level and having completed approved professional development on an annual basis.
Dysphagia	Dysphagia is a medical term to describe difficulty in swallowing. This includes problems with • sucking, • swallowing, • drinking, • chewing,

Term	Definition
	• eating, • dribbling saliva, • closing your lips. Dysphagia can lead to dehydration and malnutrition if not managed and can lead to aspiration and pneumonia.
External Food Safety Audit	An audit of a food safety program by an auditor to ensure the business of the food service facility to which the program relates complies with the program and the food safety standards
Foodservices	All meals and mid-meals provided to patients/residents/clients of Queensland Health facilities from a kitchen managed by Queensland Health
HLTAHA039	Assist with planning and evaluating meals and menus to meet recommended dietary guidelines. Certificate IV in Allied Health Assistance – Community Services & Health Industry Skills Council
HLTAHA040	Assist with monitoring and modification of meals and menus according to individualised plans. Certificate IV in Allied Health Assistance – Community Services & Health Industry Skills Council
Menu	Includes all meals, mid-meals and extras including alternate meals offered to patients/residents/clients in a facility on each day of the week for the duration of the menu cycle.
Speech Pathologist	Speech pathologists are university educated allied health professionals that help people with communication and/or swallowing difficulties. Within foodservices, speech pathologists provide advice on the flow and textural characteristics of diets and fluids to ensure that these items are compliant with IDDSI guidelines for patients with dysphagia.

Version Control

Version	Date	Comments
2.1	19th June 2020	Update to latest template. Change to 3.4.1 to reflect the ceasing of the Statewide SOA 6667 Prepared Meal Components. Change to 3.5.3 to reflect the new Standard for Texture Modified Foods and Fluids to IDDSI (endorsed for use in Australia in 2018). Updates to supporting documents latest versions including associated wording changes in the document and the addition of the Food Allergen Management in Foodservices – A Best Practice Guideline (2020). Updates to attached evidence document.
3.0	1 October 2023	Update to latest template. Change 3.1 – add 3.1.2 & 3.1.3 to reflect changes in National Safety & Quality Standards. Change 3.2.1 – modified to include requirement for consumer input and expand menu review focus to include environmental sustainability considerations. Added separate dot points for requirements for Nutrition & Allergens and included the "A Better Choice" Directive and Strategy requirements. 3.3 & 3.4 have been combined under Food Service Systems with wording changes to 3.4 to reflect implementation of Room Service model at Queensland Health sites. Additional dot point to reflect significant number of hospital expansions requiring foodservice reviews with requirement to include consumer consultation. 3.5 is now 3.4 and includes reference to consumer input into foodservice quality improvements. An additional statement to manage risk through correct patient identification and implementation of electronic foodservice management system to manage risk as per National Quality & Safety Standards. Change to auditing requirements of Texture Modified Meals so consistent with Meal Quality Auditing as per KPIs. 3.5 Training requirements moved under a separate heading and updated to latest training packages. 3.6 A new sustainability heading to reflect Queensland Health move to environmentally sustainable systems.

Version	Date	Comments
		Updates to supporting documents to latest versions. Deletion of definitions for terms no longer used in the document and addition of definition for Dysphagia and Speech Pathologist. Updates to evidence document to reflect new supporting evidence.

Foodservice Best Practice Guideline
Evidence Document (2023)

1. National Safety and Quality Health Service (NSQHS), Standard 5.1. Establish and implement governance structures for comprehensive care and minimising patient harm.

2. National Safety and Quality Health Service (NSQHS). Standard 5.27 (Minimising patient harm – Nutrition & Hydration).

The health service organisation that admits patients overnight has systems for the preparation and distribution of food and fluids that include nutrition care plans based on current evidence and best practice.

The multidisciplinary team is responsible for implementing a food and nutrition system.

To be effective, all members of the workforce involved need to understand their roles and responsibilities, as well as the role of nutrition in clinical care. Identify the clinical and non-clinical members of the workforce who need training for the best operation of the system.

Processes for menu and meal planning should:

- Reflect the nutritional requirements appropriate to the age and life stage of patients receiving care
- Reflect the special dietary needs appropriate to the organisation's casemix
- Consider psychosocial, cultural and religious needs
- Offer food and fluid choices that are appealing and that patients enjoy
- Consider flexible meal timing and service arrangements
- Be relevant to patients' length of stay, and to patients who are admitted frequently.

3. Banks, M.; (2013). Improving Working Relationships within Patient Food Services: Development of a Governance Matrix. Nutrition & Dietetics: Volume 70, Issue Supplement S1, pages 4–25.

4. National Safety and Quality Health Service Standard 2 Action 2.11

The health service organisation:

a. Involves consumers in partnerships in the governance of, and to design, measure and evaluate, health care

b. Has processes so that the consumers involved in these partnerships reflect the diversity of consumers who use the service or, where relevant, the diversity of the local community

5. Yona et al. 2020. Improved meals service and reduced food waste and costs in medical institutions resulting from employment of a food service dietitian – a case study. Is. J Health Pol Res.

6. Nutrition Standards for Meals and Menus (Updated 2022) https://www.health.qld.gov.au/nutrition

7. Queensland Government (2006). Food Act (Qld). Food Act 2006 - Queensland Legislation - Queensland Government

8. Food Standards Code (FSANZ) Standard 1.2, 3.1.1, 3.2.1, 3.2.2, 3.2.2A, 3.2.3, 3.3.1 https://www.foodstandards.gov.au/Pages/default.aspx

9. Queensland Health (2020), Food Allergen Management in Foodservice – A Best Practice Guideline. Food_Allergen_Best_Practice_Guidelines.pdf (foodallergytraining.org.au)

10. IDDSI - International Dysphagia Diet Standardisation Initiative (2019) IDDSI - IDDSI Framework

11. National Safety and Quality Health Service (NSQHS). Standard 5.28 - The workforce uses the systems for preparation and distribution of food and fluids to:

a. Meet patients' nutritional needs and requirements
b. Monitor the nutritional care of patients at risk
c. Identify, and provide access to, nutritional support for patients who cannot meet their nutritional requirements with food alone
d. Support patients who require assistance with eating and drinking

12. Queensland Health Service Directive # QH-HSD-049:2019 Vs 3. Healthier Food and Drinks at Healthcare Facilities. Healthier food and drinks at healthcare facilities | Health service directive | Queensland Health

13. Queensland Government (2022). A Better Choice Food and Drink Supply Strategy for Queensland Healthcare Facilities. A Better Choice Strategy for Healthcare (hw.qld.gov.au)

14. Banks et al. (2012); Does choosing meals closer to serving increase patient intake? Nutrition & Dietetics: 69 (Suppl. 1): 50.

15. Wadden et al. (2006); Traditional versus room service menu styles for pediatric patients. Can J Diet Prac Res 67:92-94.

16. Wright et al. (2011); Determinants of foodservice satisfaction for patients in geriatrics/ rehabilitation and residents in residential aged care. Health Expectations, 16 pp.251-265.

17. Mahoney, S et al., (2009). Patient Satisfaction and energy intakes are enhanced by point of service meal provision, Nutrition & Dietetics: 66: 212-220.

18. Wang et al (2018) Access to food choices by older people in residential aged care: An integrative review. Collegian, 25, 457-465.

19. Porter, J., and Collins, J. (2021) Nutritional intake and foodservice satisfaction of adults receiving specialist inpatient mental health services. Nutrition & Dietetics, 79: 411 – 418.

20. McCray, S. et al. (2018). Room service in a public hospital improves nutritional intake and increases patient satisfaction while decreasing waste and cost. J. Hum Nutr Diet. 31. 734-741.

21. Neaves, B. et al. (2021). Impact of room service on nutritional intake, plate and production waste, meal quality and patients satisfaction and meal costs: A single site pre-post evaluation. Nutr & Diet, 1 – 10.

22. Young, A., et al. (2018). Improving nutrition care and intake for older hospital patients through system-level dietary and mealtime interventions. Clinical Nutrition ESPEN. 24 (140 – 147).

23. Munsterman, E. Newcomb, P., (2022). Upright positioning associated with increased mealtime intake for hospitalized older adults. MedSurg Nursing 31:5 (316-322).

24. Kozica-Olenski E., et al. (2021). Patient-reported experiences of mealtime care and food access in acute and rehabilitation hospital settings: a cross-sectional survey. J Hum Nutr & Diet. 34:4 (687-694).

25. Young, A., et al. (2016). Assisted or protected mealtimes? Exploring the impact of hospital mealtime practices on meal intake. J Adv Nurs. 72:1616-25.

26. Prgomet, M., et al. (2019). The impact of electronic meal ordering systems on hospital and patient outcomes: A systematic review. Int J Med Info. 129 (275-284).

27. Rattray, M., et, al. (2018). Identifying errors in meals provided to and sourced by patients on therapeutic diets in hospital. Asia Pac J Clin Nutr. 27:3 (533-539).

87. NSQHS Standard 6.04 The health service organisation has clinical communications processes to support effective communication when:
a. Identification and procedure matching should occur
b. All or part of a patient's care is transferred within the organisation, between multidisciplinary teams, between clinicians or between organisations; and on discharge
c. Critical information about a patient's care, including information on risks, emerges or changes

29. Queensland Health Directive # QH-HSD-009:2012: Procurement and Logistics - Use of Contract and Supply Arrangements:
All Hospital and Health Services shall procure a range of goods and services from the following contracts and supply arrangements:

30. National Safety and Quality Health Service (NSQHS), Standard 1.08 – The health organisation uses organisation -wide quality improvement systems that: Identify safety and quality measures, and monitor and report performance and outcomes
a. Identify safety and quality measures, and monitor and report performance and outcomes
b. Identify areas for improvement in safety and quality
c. Implement and monitor safety and quality improvement strategies
d. Involve consumers and the workforce in the review of safety and quality performance and system

31. National Safety and Quality Health Service (NSQHS). Standard 1.07 (The health service organisation uses a risk management approach
a. Set out, review, and maintain the currency and effectiveness of policies, procedures and protocols
b. Monitor and take action to improve adherence to policies, procedures and protocols
c. Review compliance with legislation, regulation and jurisdictional requirements

32. National Safety and Quality Health Service (NSQHS). Standard 1.10
The health service organisation:
a. Identifies and documents organisational risks
b. Uses clinical and other data collections to support risk assessments
c. Acts to reduce risks
d. Regularly reviews and acts to improve the effectiveness of the risk management system
e. Reports on risks to the workforce and consumers
f. Plans for, and manages, internal and external emergencies and disasters

33. Queensland Health, (2022). Statewide Agreed Diet Codes. Dietetic resources (health.qld.gov.au)

34. NSW Food Authority (2010) - Vulnerable Persons Food Safety Scheme. Phase II evaluation - Benchmarking the microbiological quality of food served by Vulnerable Persons businesses.
Good hygienic practice is required during the preparation of texture modified and puréed foods because the extra handling increases the potential for cross contamination.

Contamination of blenders and mixers has been identified during audits as a potential problem area because they are difficult to clean. Poor cleaning and sanitation of this equipment has led to outbreaks of foodborne illness in the past and close attention should be paid to this area.

35. Dodrill & Bassett, Thickened Fluids and Modified Diets Project Report, (2010)
Pureed diets prepared on site
- 76% of facilities prepared pureed diets at the facility.
- 55% tested consistency of pureed diets but only when new items were added to the menu.
- 64% encountered problems with pureed meals prepared on site including variations in thickness and texture, poor mouth-feel, poor taste, and not well liked.

36. Dahl et al (2007); Protein content of puree diets: Implications for planning. Can J Diet Prac Res 68 (2)

37. Wright et al (2005) Comparison of energy and protein intake of older people consuming a texture modified diet with a normal hospital diet. J Hum Nutr Diet, 18.

38. Queensland Health, (2023) Key Performance Indicators. Statewide Foodservice 2016 KPI's (Standards) (health.qld.gov.au)

39. Gregoire, M.B., (2015). Practice Paper - Principals of productivity in food & nutrition services: applications in the 21st century health care reform era. Academy of Nutrition & Dietetics 115:1141-1147.

40. Queensland Health Climate Risk Strategy 2021-2026. (State of Qld 2021).
- Fair and ethical sourcing practices are applied through the selection of suppliers that
- Comply with sustainable and socially responsible practices without compromising supply chain surety.
- Maximize opportunities to reduce, reuse and recycle existing products.
- Ensure infrastructure and assets are climate resilient through management strategies that embed effective adaptation responses to climate risks.

41. Arthritis Australia (2018), Food Packaging Design Accessibility Guidelines. Food-Packaging-Design-Accessibility-Guidelines_Arthritis-Australia_18.pdf (arthritisaustralia.com.au)