

Appendix 5



Appendix 5: Tools for menu revision (specific to the paediatric population)

These tables are amended from the NSW Agency for Clinical Innovation's *Nutrition and mental health toolkit* <https://aci.health.nsw.gov.au/__data/assets/pdf_file/0008/257552/ACI_Nutrition_and_Mental_toolkit_guideline-web.pdf>.

Note that these tools apply to children aged over 1 year.

Hospital and patient information

Table 5.1: Site information

Information required	Reasons/prompts
Date:	Evidence of: <ul style="list-style-type: none"> • compliance • change over time • governance • collaboration • quality improvement cycle
Name of hospital:	
Name and role of person conducting the audit:	
Name of facility nutrition care committee: (dietitian, speech pathologist, nurse, quality representative, consumer representative, food service manager and food safety officer)	
Date of last menu review:	
Type of facility (specialist paediatric hospital, metro, regional, subregional, rural):	Provides essential insight into paediatric patient numbers, which can help to inform the need for a paediatric-specific menu
Number of paediatric overnight beds:	
Number of paediatric day beds:	

Table 5.2: Demographic information (request this information from your hospital ICT for the last 3 months)

Information required	Reasons/prompts
Describe the number (or percentage) of admissions according to age groups	Helps identify the age groups for which the menu needs to cater
Describe the average length of stay and lengths of stay more than 7 days according to age groups	Helps determine the length of the menu cycle and/or menu choice available on the short order menu
<p>If there are multiple paediatric units: Which units recorded the longest admissions (more than 7 days)?</p> <p>Which units had the highest rates of admissions?</p>	Helps determine the need to focus and provide more options to specific units / age groups
Describe any cultural or religious needs	The menu needs to be culturally appropriate
What are the most common therapeutic diets the site(s) requires?	Needs to be considered into menu design to ensure food/fluid items are available either on request or incorporated into the full menu
From this information, have you assigned an appropriate number of meal options ('nourishing', 'vegetarian', 'cultural' and 'paediatric finger foods')?	Helps ensure the menu reflects the needs of the population and provides goals for menu review

Table 5.3: Food service information

Information required	Reasons/prompts
Who is the food service provider (e.g. external provider, central production kitchen, internal food service department)?	Need to identify all stakeholders and ensure everyone works together to review the menu
Who is responsible for providing all menu review information (e.g. nutritional breakdown, costing detail)?	
Who is the key contact for the food service provider at the site?	
Is there a food service dietitian (e.g. associated with a central production kitchen or external provider if not available through the hospital)?	

Table 5.4: Food service systems: menu design, production and delivery

Information required	Reasons/prompts
How many hours/days in advance does the menu need to be completed?	Impact on forecasting, meal production and kitchen ordering Orders longer in advance have a negative impact on patient satisfaction, plate and production waste
What is the current length of the menu cycle?	Do some units need different lengths?
Is the current length of the menu cycle appropriate for the site?	
How is food delivered to consumers (e.g. bulk and plated at point of service, plated in the kitchen and tray service)?	Potential practical considerations may arise
What is the type of food service at the facility (e.g. cook-chill, cook-fresh, cook-freeze, pre-packaged meals and/or combination)?	Impact on meal production, kitchen ordering, storage and stock levels Consideration for menu options/limitations (e.g. cook-chill works best with wet dishes but poorly with grilled/ crispy meals)
Have recipes been analysed and ingredients documented (including documentation of allergens)?	Evidence of meeting: <ul style="list-style-type: none"> • nutritional profile for different meal options • nutrient goals for specific age groups • allergen management safety protocols
Are there other potential food service-related considerations for the site (e.g. BBQ days, assisted daily living kitchen, special events catering, cooking programs)?	Impact on kitchen ordering and possibly in revising the menu

Table 5.5: After-hours service

Information required	Reasons/prompts
Is there less than 14 hours between serving the last meal of the day and the first meal of the following day?	This is the recommended maximum timeframe and may affect food service and nursing staff
Do patients have access to food after hours (e.g. sandwiches, fruit, milk)?	Consider patients with admissions after hours or after a meal service Consider patients who miss a meal due to a procedure or nap
Does the site provide access to additional foods for patients who are hungry or require large serves?	Consider younger patients in particular who have smaller, less predictable appetites and may require access to small snacks throughout the day and also teenagers who are experiencing growth spurts and require larger serves

Minimum menu choice gap analysis

Table 5.6: Minimum menu choice gap analysis

Menu item	Serve size	Minimum choice	Range of age-appropriate serve available	Nutrition Standards & menu design considerations	Meets the Standards (Yes/No)	Minimum menu choice gaps identified
Fruit Fresh, canned or dried	1 medium banana, apple or orange 2 small apricots, mandarins or kiwi fruits 1 cup (150 g) diced/canned fruit 30–40 g dried (e.g. 4 prunes or PC sultanas)	1/meal Offered at all meals	0.5–1	Developmentally appropriate texture Cut up where possible for younger children; canned fruit in natural juice (not syrup) or water Variety at consecutive meals Local, seasonal and fresh preferred		
Juice	~ 125 mL	1/day Not appropriate for the default menu	1	100% fruit juice No added sugar 1 per day maximum		
Hot cereal Examples: porridge, semolina, congee	120 g cooked weight	1/breakfast meal	0.5–1	No added salt or sugar		
Cold cereal Examples: muesli, corn flakes, wheat biscuits	30–45 g	2/breakfast meal	1–2	Cereals to contain \leq 30 g sugar / 100 g \geq 1 cereal should contain at least 3 g fibre per serve Higher fibre option should be provided as default Large (double) serves available for older teenagers		
Milk for cereal	PC serve ~ 140 mL	2/breakfast meal	1–2 PC	Children aged under 2 years only offered full cream milk Offer a choice of full cream and reduced fat milk to children aged over 2 years Soy milk on request with \geq 100 mg calcium / 100 mL		

Menu item	Serve size	Minimum choice	Range of age-appropriate serve available	Nutrition Standards & menu design considerations	Meets the Standards (Yes/No)	Minimum menu choice gaps identified
Protein at breakfast Continental or traditional cooked	Examples: 1 egg with toast soldiers 1 egg with congee 75 g baked beans on toast Pancakes with fruit	1/breakfast meal	1–2	Vegetables offered for variety Note: They can be counted towards dietary vegetable serves Eggs must be well cooked to reduce risk of salmonella Nutrient profile: • ≥ 700 kJ per serve minimum • ≥ 5 g protein per serve minimum Aim for ≤ 600mg sodium per serve maximum		
Bread Toast/bread or bread roll	30–45 g Examples: 1 slice bread 1 bread roll	2/meal Offered at all meals	1–2	Offer at least one choice of wholemeal or multigrain bread; white bread can be available Wholemeal or wholegrain bread should be the default choice For variety offer small bread roll, raisin bread, crumpets, English muffins, wraps, roti, naan bread Nutrient profile: • ≤ 400 mg sodium / 100 g		
Margarine	PC serve Margarine ~ 10 g	1/meal Offered at all meals with bread	1-2 PC	Poly- or mono -unsaturated margarine is the default choice Butter (PC ~ 7 g) may be offered on request		
Spreads	PC serve Honey ~ 13 g Jam ~ 13 g Vegemite ~ 5 g Peanut butter ~ 11 g	3/breakfast meal	1–2 PC	Include a selection of jams, Vegemite and honey Peanut butter and other nut spreads offered according to hospital allergy policy Artificially sweetened spreads are not offered		

Menu item	Serve size	Minimum choice	Range of age-appropriate serve available	Nutrition Standards & menu design considerations	Meets the Standards (Yes/No)	Minimum menu choice gaps identified
Cold beverage – milk	PC serve ~ 140 mL	2/meal Offered 6 times over the day: twice at breakfast; once at all other meals and mid-meals	1–2 PC	Offer only full cream milk to children aged 1–2 years. Offer a choice of full cream and reduced fat milk to children aged over 2 years Calcium fortified soy milk should be available on request as an alternative to dairy Nutrient profile (soy milk): • ≥ 100 mg calcium / 100 mL minimum		
Sugar and sugar substitutes	PC serve Sugar sachet ~ 4 g	Not available on the standard or default menu	0	Not available on the standard menu Not provided on default menu Available on request Sugar substitutes are not necessary		
Soup	~ 180 mL	1 soup / day	0.5–1	Soups for young children are offered according to hospital policy A proportion of 'nourishing', 'vegetarian', 'culturally diverse', 'easy-chew' has been nominated according to hospital population need Broth can be offered as a fluid source and for appropriate therapeutic diets Variety is maintained at consecutive meals 'Nourishing option' nutrient profile: • ≥ 400 kJ per serve minimum • ≥ 5 g protein per serve minimum Aim for ≤ 600 mg sodium per serve maximum		

Menu item	Serve size	Minimum choice	Range of age-appropriate serve available	Nutrition Standards & menu design considerations	Meets the Standards (Yes/No)	Minimum menu choice gaps identified
Hot main meal (lunch and dinner)	Plain cooked meat: <ul style="list-style-type: none"> • Red meat 50 g minimum (beef, lamb, kangaroo) • White meat 70 g minimum (pork, poultry) • Fish 90 g minimum (fresh or canned) Portion sizes can vary; the onus is on meeting the specified nutritional profile	4 hot dishes per day (2/meal) as per pre-determined local need	0.5–1.5	Variety of hot meals offered as per pre-determined hospital need including nourishing, vegetarian, paediatric finger food, easy-chew and culturally diverse options (one meal can incorporate different options) Include a variety of proteins (meat, fish, egg, tofu, legumes) and types of meals at consecutive meals and on consecutive days Oven-baked, grilled, or steamed cooking techniques used in preference to frying with oil A vegetarian option is available at every eating occasion Fish is offered twice a week Nourishing option nutrient profile: <ul style="list-style-type: none"> • ≥ 700 kJ per serve minimum • ≥ 10 g protein per serve minimum • Aim for ≤ 600mg sodium per serve maximum If vegetarian main meals don't meet the minimum protein per serve, ensure adequate protein is offered over the day (e.g. nourishing side dishes or mid-meals) Variable nutrient value nutrient profile: <ul style="list-style-type: none"> • not specified; included for variety Variable nutrient value should not comprise more than 20% of the menu		

Menu item	Serve size	Minimum choice	Range of age-appropriate serve available	Nutrition Standards & menu design considerations	Meets the Standards (Yes/No)	Minimum menu choice gaps identified
Starch/ grains	Serve ~ ½ cup or 75–120 g cooked Hot chips (60 g serve)	1–2/meal Note: some mixed dishes do not require additional starch	1–2	Starch should match the main dishes (e.g. roast potato with roast meat) Variety is included within consecutive meals and on consecutive days A variety of grain dishes are offered to enhance menu cultural diversity and interest Lower GI options are offered (e.g. basmati or doongara rice) Hot chips are only offered occasionally for variety		
Vegetables	Serve ~ 75 g cooked weight or 1/2 cup	2 different coloured vegetables with hot main meal offered twice per day	1–2	Vegetables should match the main dishes Variety is included with consecutive meals and on consecutive days Seasonal vegetables are used where possible Presentation and flavour of vegetables are enhanced (e.g. roasted/grilled, finger food options or with herbs and spices or sauces) Note: Soup and other mixed dishes with high vegetable content can contribute to the daily vegetable requirement		
Side salad or raw vegetables	Serve ~ 1 cup raw vegetables (75 g)	1/day	1–2 serves	A minimum of 3 coloured vegetables provided within the salad Offer unsaturated fat PC salad dressings Raw vegetables/salad can be offered as an alternative to cooked vegetables Seasonal vegetables are used where possible Note: Soup and other mixed dishes with high vegetable content can contribute to the daily vegetable requirement		

Menu item	Serve size	Minimum choice	Range of age-appropriate serve available	Nutrition Standards & menu design considerations	Meets the Standards (Yes/No)	Minimum menu choice gaps identified
Condiments	Gravy/sauce: according to the size of the meal	According to the dish	0.5–1.5	Gravy and/or sauces may be offered when deemed an appropriate accompaniment to a dish (e.g. roast meat and vegetables)		
	PC condiment/ sauce	According to the dish	1–2	A range of condiments may be offered as an accompaniment to a dish Condiments should be offered to match the dish		
	PC serve Salt sachet = 1 g	Not available on the standard or default menu	0	Salt is not deemed necessary and shouldn't be offered on the standard or default menu, but it may be available on request		
Sandwiches/ wraps	1 serve = 1 sandwich / wrap Nourishing fillings: Egg × 1 Cheese (20 g minimum) Lean meat / chicken / fish (50 g minimum) Hummus ~ 30 g Falafel ~ 50g	2/day 1 nourishing option / day minimum	0.5–2 sandwich	A variety of sandwiches are offered at consecutive meals and on consecutive days A variety of breads and wraps included (e.g. wholemeal, wholegrain, white, sourdough, roti.) Mono- or poly- unsaturated margarine, avocado or hummus are used as spreads Sandwiches made on wholemeal or wholegrain bread are the default choice Sandwiches are presented as wedges for a paediatric finger food option Sandwiches and wraps are toasted to improve acceptance/interest Large (double) serve available for older children Half sandwiches are offered to younger children and as a snack option for all patients Sandwiches are readily available on the ward for patient access Nourishing nutrient profile: <ul style="list-style-type: none"> • 800 kJ per sandwich minimum • 8 g protein per sandwich minimum Variable nutrient value nutrient profile: <ul style="list-style-type: none"> • not specified; included for variety 		

Menu item	Serve size	Minimum choice	Range of age-appropriate serve available	Nutrition Standards & menu design considerations	Meets the Standards (Yes/No)	Minimum menu choice gaps identified
Desserts	<p>Nourishing option: Portion controlled serve: 150g minimum Creamy yoghurt Dairy dessert (e.g. Fruche), custard</p> <p>Variable nutrient value option Portion control serve: Ice cream 100 mL minimum Jelly 110 g minimum</p> <p>Portion sizes can vary; the onus is on meeting the specified nutritional profile</p>	<p>4/meal</p> <p>1 nourishing option / meal minimum</p>	2	<p>Offer a variety of nourishing desserts on consecutive days</p> <p>Nourishing nutrient profile:</p> <ul style="list-style-type: none"> • ≥ 500 kJ per serve minimum • ≥ 4 g protein per serve minimum <p>Variable nutrient value nutrient profile:</p> <ul style="list-style-type: none"> • not specified; included for variety 		
Standard snacks	<p>Fresh fruit:</p> <ul style="list-style-type: none"> • 1 banana • 1 medium apple • 2 apricots • 2 kiwi fruits 	2/day	0.5–1	<p>Developmentally appropriate texture modification is considered</p> <p>A number of different types of fruits are offered to ensure variety</p> <p>Where possible seasonal fruit is offered</p>		

Menu item	Serve size	Minimum choice	Range of age-appropriate serve available	Nutrition Standards & menu design considerations	Meets the Standards (Yes/No)	Minimum menu choice gaps identified
High-energy and nourishing snacks	<p>High-energy examples and serve sizes:</p> <p>Fruit cake ~ 40 g</p> <p>Small muffin ~ 40 g</p> <p>Small muesli/ breakfast bar ~ 30 g</p> <p>Cheese (~ 20 g) & biscuits (2–3 savoury)</p> <p>Flavoured milk ~ 150 mL</p> <p>Yoghurt ~ 160 g</p> <p>Portion sizes can vary; the onus is on meeting the specified nutritional profile</p>	1/day		<p>A variety of snack options is offered on consecutive days</p> <p>High-energy snacks nutrient profile:</p> <ul style="list-style-type: none"> • ≥ 500 kJ per serve minimum <p>Nourishing snacks nutrient profile:</p> <ul style="list-style-type: none"> • ≥ 500 kJ per serve minimum • ≥ 5 g protein per serve minimum <p>At least one snack option is a nourishing option (e.g. high protein)</p>		
Water		Unlimited	N/A	<p>Water is readily and easily available at all times</p> <p>Tap water is preferred</p>		

Macro and micronutrient gap analysis

Table 5.7: Children 1–3 years – macronutrient gap analysis

Nutrient	Macronutrient goal	Average daily menu comparison	Average daily menu comparison (% of RDI met by menu)	Identified areas for improvement
Energy	4,200 kJ			
Protein	14 g			
Fat	Ideally no more than 10% energy from saturated or trans fatty acids			
Fibre	14 g			

Table 5.8: Children 1–3 years – micronutrient gap analysis

Nutrient	Macronutrient goal	Average daily menu comparison	Average daily menu comparison (% of RDI met by menu)	Identified areas for improvement
Vitamin C	35 mg			
Folate	150 µg			
Calcium	500 mg/d			
Iron	9 mg			
Zinc	3 mg			
Sodium	1,000 (UL)			

Table 5.9: Children 4–8 years – macronutrient gap analysis

Nutrient	Macronutrient goal	Average daily menu comparison	Average daily menu comparison (% of RDI met by menu)	Identified areas for improvement
Energy	5,500 kJ/d			
Protein	20 g			
Fat	Ideally no more than 10% energy from saturated or trans fatty acids			
Fibre	18 g			

Table 5.10: Children 4–8 years – micronutrient gap analysis

Nutrient	Macronutrient goal	Average daily menu comparison	Average daily menu comparison (% of RDI met by menu)	Identified areas for improvement
Vitamin C	35 mg			
Folate	200 µg			
Calcium	700 mg			
Iron	10 mg			
Zinc	4 mg			
Sodium	1,400 mg (UL)			

Table 5.11: Children 9–13 years – macronutrient gap analysis

Nutrient	Macronutrient goal	Average daily menu comparison	Average daily menu comparison (% of RDI met by menu)	Identified areas for improvement
Energy	7,500 kJ			
Protein	40 g			
Fat	Ideally no more than 10% energy from saturated or trans fatty acids			
Fibre	24 g			

Table 5.12: Children 9–13 years – micronutrient gap analysis

Nutrient	Macronutrient goal	Average daily menu comparison	Average daily menu comparison (% of RDI met by menu)	Identified areas for improvement
Vitamin C	40 mg			
Folate	300 µg			
Calcium	1,300 mg			
Iron	8 mg			
Zinc	6 mg			
Sodium	2,000 mg (UL)			

Table 5.13: Children 14–18 years – macronutrient gap analysis

Nutrient	Macronutrient goal	Average daily menu comparison	Average daily menu comparison (% of RDI met by menu)	Identified areas for improvement
Energy	9,400 kJ/d			
Protein	65 g			
Fat	Ideally no more than 10% energy from saturated or trans fatty acids			
Fibre	28 g			

Table 5.14: Children 14–18 years – macronutrient gap analysis

Nutrient	Macronutrient goal	Average daily menu comparison	Average daily menu comparison (% of RDI met by menu)	Identified areas for improvement
Vitamin C	40 mg/d			
Folate	400 µg			
Calcium	1,300 mg			
Iron	15 mg			
Zinc	13 mg			
Sodium	2,300 mg/d			

Appendix 5 of the Nutrition and quality food standards for paediatric patients in Victorian public hospitals.

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In this document, 'Aboriginal' refers to both Aboriginal and Torres Strait Islander people.

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