Hospital Foodservice Standards & Practices to Prevent Malnutrition

PSNM Education Day
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Outline

- Background
- CMTF Food in Healthcare Working Group
- Hospital food service to prevent malnutrition
- Current practice & challenges
- Models for standards & advocacy tools
- Discussion

Hospital foodservices is…..

Culturally Acceptable

Cost / benefit

Good taste

Healthy

Appealing Appearance

Individualized

LIMITED WASTE

Acceptable/Liked/Enjoyable

Environmentally sustainable

Sustainable

Meets clinical needs

Treats disease

Role model for health eating

Culinary excellence

Familiar

Religious

RESTRICTIONS

Cost effective

Community

Efficient resource allocation

Seasonal

Eaten by the patient

Human Right

Social

Prevents disease

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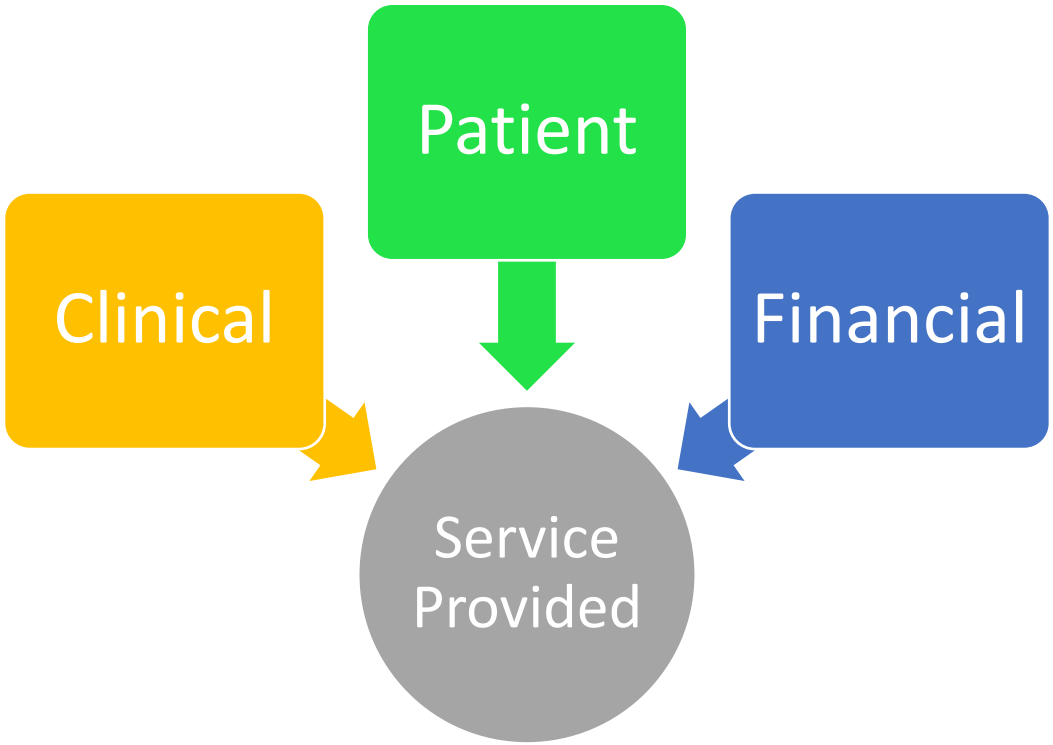
Standards help keep the balance



Hospital Foodservice Standards in Canada

- **No national standards** > healthcare is a provincial/territorial matter.
- Some healthy eating guidelines in institutional foodservice[1]
  - Menu planning based on Canada's Food Guide
  - Quebec framework for healthy food policies in healthcare
  - BC commitment to reduce salt in patient meals (2300mg/d for adults)
- **Provincial/territorial standards do not address malnutrition.**[1]

"Given that meals are medically necessary hospital services under the Canadian Health Act, re-classify nutrition & foodservices from operations (cost focus) to patient care (health focus)." [2]

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1. Food-EPI Canada 2017. http://labbelab.utoronto.ca/food-epi-canada-2017/
2. Raine K, et al. Healthy food procurement and nutrition standards in public facilities: evidence synthesis & consensus policy recommendations. Health Promotion and Chronic Disease Prevention in Canada. 2018;38(1).

Practice & priorities in Ontario

- Hospital foodservice standards lacking & inconsistent practice
  - *Standards in LTC influence practice in hospitals with LTC*
- Challenges meeting the diverse needs of patients
- Budget & labor constraints driving practice

" . . . there are no formal standards, menus haven't been reviewed for a long time, . . .
***we need standards & reliable comparisons**"*

" . . . lobbying for adequate staff would be easier with standards such as those in the LTC Act"

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Greig S, et al. Current Practices and Priority Issues Regarding Nutritional Assessment & Patient Satisfaction with Hospital Menus. Can J Diet Pract Res.2018 Mar 16; 79:1-7.

Canadian Malnutrition Task Force (CMTF)

- Conducted the Nutrition Care in Canadian Hospitals (NCCH) cohort study (2010-2013).
  - Evidence from 18 hospitals across Canada for best practice to prevent, identify & treat malnutrition in hospitals.
- Standing committee of the Canadian Nutrition Society (CNS)
- Vision: advance nutrition care in patients through research, education & interdisciplinary collaboration in Canada.

http://nutritioncareincanada.ca/

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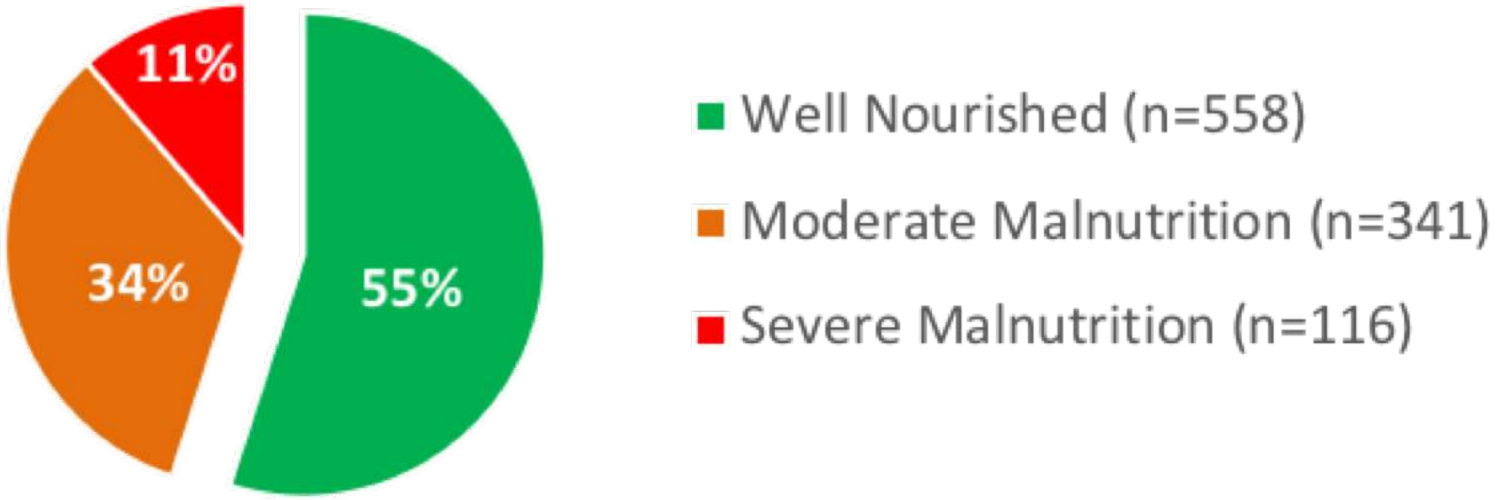
Malnutrition in Canadian Hospitals

Malnutrition at admission assessed by Subjective Global Assessment.

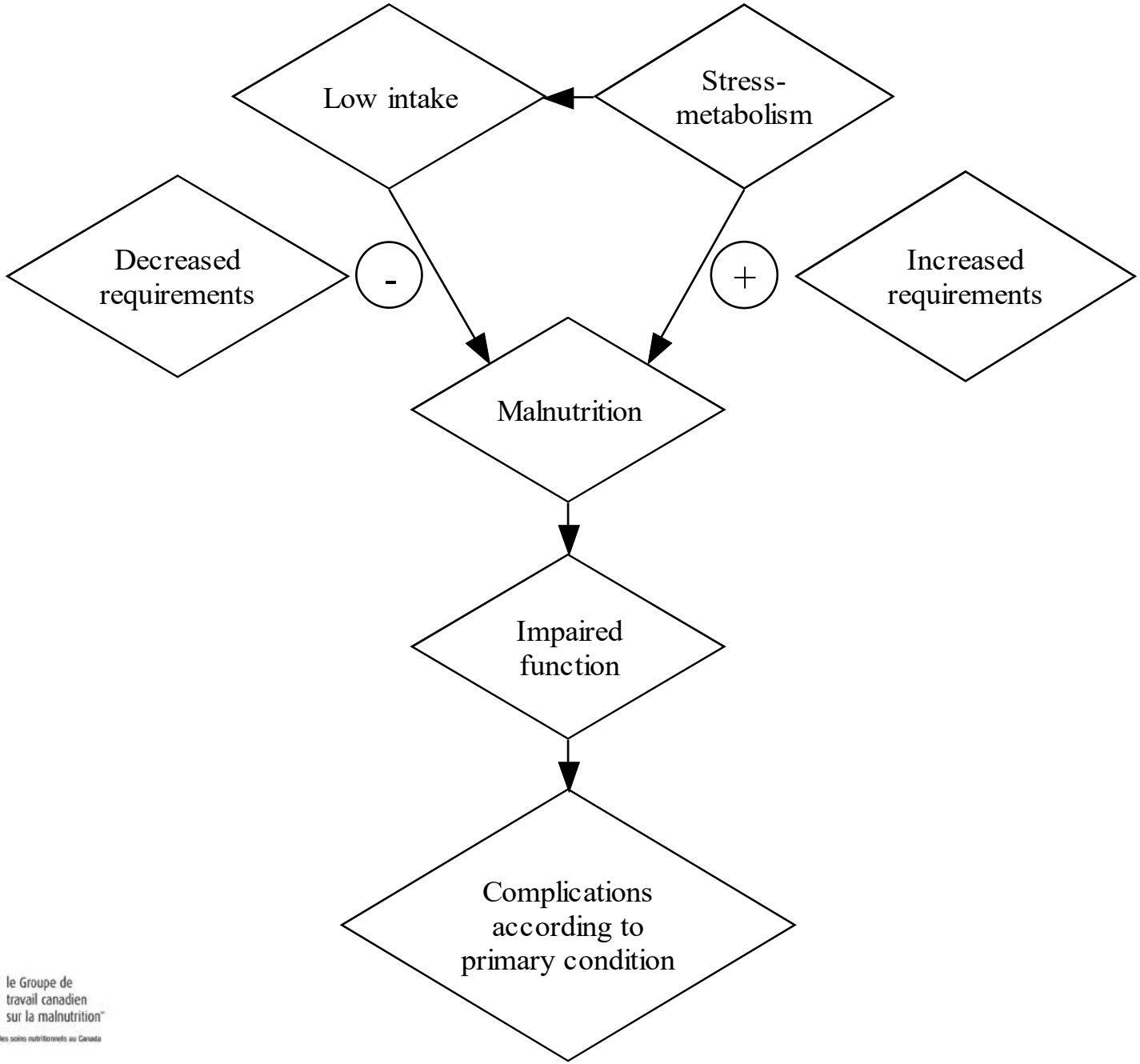


Allard JP, et al. Malnutrition at hospital admission—contributors and effect on length of stay. JPEN. 2016;40(4):487-97.

Food Intake in Canadian Hospitals

- ~ 1/3 patients with poor food intake in 1st week of hospital stay
- Food intake < 50% & malnutrition at admission predicts hospital length of stay when adjust for other covariates.
- Nutritional status deteriorates in hospital for 20%
  - Most malnourished leave hospital with no improvement
- Nutrition care to improve intake not common (37% of patients)

Allard JP, et al. Malnutrition at hospital admission—contributors and effect on length of stay. JPEN. 2016;40(4):487-97.
Allard JP, et al. Decline in nutritional status is associated with prolonged length of stay in hospitalized patients admitted for 7 days or more: A prospective cohort study. Clinical nutrition. 2016 Feb 1;35(1):144-52.
Valaitis R, et al. Need for the Integrated Nutrition Pathway for Acute Care (INPAC): gaps in current nutrition care in five Canadian hospitals. BMC Nutrition. 2017;3(1):60.

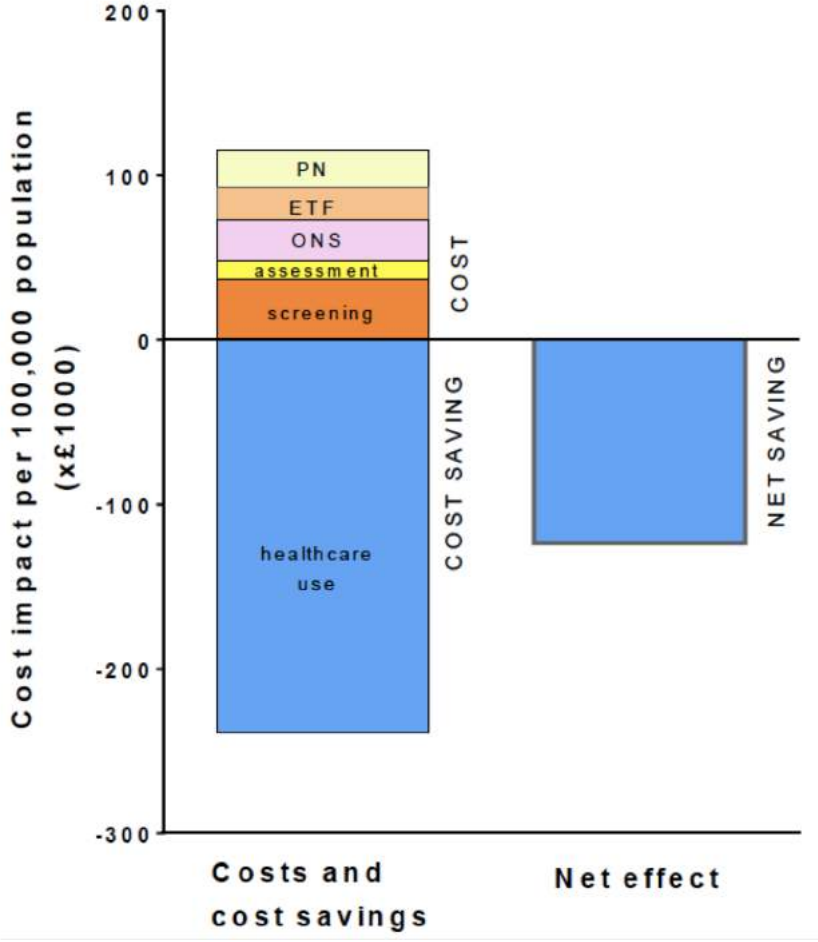

Low intake
Stress-metabolism
Decreased requirements
-
+
Increased requirements
Malnutrition
Impaired function
Complications according to primary condition

Cost of Hospital Malnutrition

- Malnourished patients cost $1500 - $2000 more per hospitalization in Canada
- $1.56 - $2.1 billion / year (national hospital cost)

"It costs more NOT to manage malnutrition that it does to manage it."

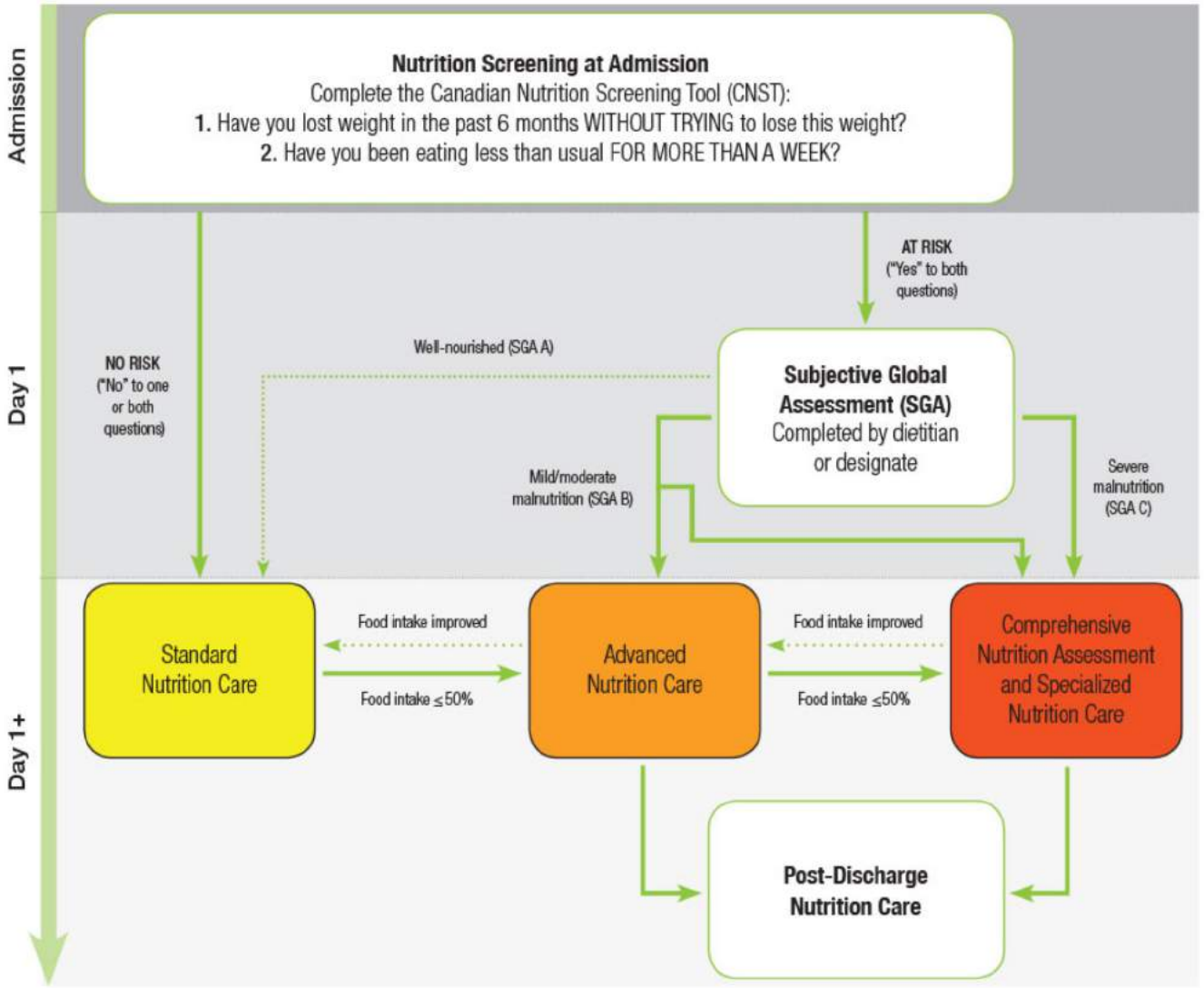
Rebecca Stratton, UK



Curtis, L. J., et al. (2017). Costs of hospital malnutrition. *Clinical Nutrition*, *36*(5), 1391-1396.

Elia, M. (2015). The cost of malnutrition in England & potential cost savings from nutritional interventions. https://www.nutriciacongresses.com/congresses/presentation/62/new-evidence-on-the-costs-of-malnutrition-and-the-benefits-of-nutritional-support/

INPAC



http://www.nutritioncareincanada.ca/inpac

INPAC Calls for a Foodservice Response

- Standard Nutritional Care
  - Ensure food is available at all times
  - Assist opening packages and bed side table clear for tray set-up
  - Family to bring preferred foods.
- Advanced Nutrition Care
  - Identify barriers to food intake
  - Promote food intake
    - Nutrient dense diet, liberalized diet, preferred foods, snacks between meals and high energy/protein shakes/drinks
- Specialized Nutrition Care
  - Identification of barriers to food intake
  - Identify eating behaviours to support food intake
  - Individualized treatment and monitoring

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http://www.nutritioncareincanada.ca/inpac

CMTF Food in Healthcare Working Group

- Best practices for hospital foodservice through research, education & interdisciplinary collaboration across Canada.
- Develop & advocate for the adoption of the food service standards in practice
  - Evidence-based (research, existing international standards)
  - Current & best practice across Canada (survey)
  - *Consensus building (experts & stakeholders)*

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CMTF Food in Healthcare Working Group

Co-Chairs: Janice Sorensen (Academic/Research) & Heather Fletcher (Foodservice Operations Rep.)

Brenda MacDonald	Nova Scotia
Jacqueline Noseworthy	New Brunswick
Michel Sanscartier	Quebec
Elma Hrapovich	Ontario
Maggie Schmidt	Manitoba
Stephanie Cook	Saskatchewan
Heather Truber	Alberta
Elaine Chu	BC
Leslie Carson	Yukon
Leslie Whittington-Carter	Dietitians of Canada
Jennifer Reynolds	Nourish
Bridget Davidson	Director, CMTF
Leah Gramlich	Co-Chair, CMTF

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Guiding Principles for Standards

- Promotes food intake & decreases the potential for iatrogenic malnutrition.
- Menu offerings are driven by the needs of the population. (vs. population health standards)
- Optimize food service for the patients at highest nutritional risk, while incorporating broad practices that meets needs of most patients.
- Objectively addresses food quality & menu planning to promote food intake.
- Addresses eating related challenges patients may experience.
- Recognizes food services as a key provider of treatment, care & dignity to patients to promote a culture of nutrition in collaboration with the clinical teams.
- Designed to support nutritional health & treatment.
- **Feasible & practical in acute care hospitals in Canada.**
- Balances clinical credibility with culinary quality.
- Is based on best/better practice & evidence where it exits.
- Is specific enough so that it can be recognizable & evaluated when implemented.

Canadian Hospital Foodservice Practice Survey

- Demographics
- Foodservice organization & interdisciplinary collaboration
- Foodservice system – food production & meal service
- Menus & diet types / standards
- Malnutrition – screening & foodservice initiatives
- Diets & meal offers
  - regular, therapeutic, practices to prevent malnutrition, diet ordering
- Outcome assessment, barriers & comments

Hospital Foodservice to Prevent Malnutrition

• 'Regular' menu (population health standards)	• Menus for malnourished (↑energy & protein density, fortified foods, preferred foods)
• ++ Therapeutic diets	• Liberalized diets
• Non-selective menus; lack of focus & support at mealtimes	• Selective menus & flexible mealtimes; protected meal times & feeding support
• Focus on nutrient content of plate	• Focus on optimized patient food intake

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Current Challenges

- Defining a 'Regular' Menu (rationale & evidence-base)
- Role of Canada's Food Guide in menu planning
- Role of population health nutrition policy in hospitals
  - e.g., salt reduction targets, limit free sugars, lower saturated fat
- Implementing recommendations to prevent malnutrition
- Meeting nutrient targets vs. patient menu choices
- Perceptions of patients & health care professionals

UK Department of Health

Eating for Health and Healthy Eating

The NHS has a responsibility to promote good health, and the food it serves is a part of that. But what is 'healthier food'? For some, it might be fresh fruit and salads, but for the frail and underweight, it may well be a high calorie, nutritionally dense snack. The best food services can meet both those needs – whilst delivering great flavour for everyone. For patients, we are concerned about 'eating for health' whilst for staff and visitors it is important that we set an example of how to support tasty and satisfying 'healthier eating'.

Jeffrey D. The Hospital Food Standards Panel's report on standards for food and drink in NHS hospitals. Department of Health. 2014. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/523049/Hospital_Food_Panel_May_2016.pdf https://www.gov.uk/government/publications/establishing-food-standards-for-nhs-hospitals

Canada's Food Guide Revisions (2017)

Guiding Principles and Recommendations

Guiding Principle 1: A variety of nutritious foods and beverages are the foundation for healthy eating.
Health Canada recommends:

- Regular intake of vegetables, fruit, whole grains and protein-rich foods, especially plant-based sources of protein
- Inclusion of foods that contain mostly unsaturated fat, instead of foods that contain mostly saturated fat
- Regular intake of water

Guiding Principle 2: Processed or prepared foods and beverages high in sodium, sugars or saturated fat undermine healthy eating.
Health Canada recommends:

- Limited intake of processed or prepared foods high in sodium, sugars or saturated fat
- Avoidance of processed or prepared beverages high in sugars

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Guiding Principle 3: Knowledge and skills are needed to navigate the complex food environment and support healthy eating.
Health Canada recommends:

- Selecting nutritious foods when shopping or eating out
- Planning and preparing healthy meals and snacks
- Sharing meals with family and friends whenever possible

Considerations

- Determinants of health
- Cultural diversity
- Environment

The Guidelines apply to all healthy Australians

The Guidelines aim to promote the benefits of healthy eating, not only to reduce the risk of diet-related disease but also to improve community health and wellbeing. The Guidelines are intended for people of all ages and backgrounds in the general healthy population, including people with common diet-related risk factors such as being overweight.

The Guidelines do not apply to people with medical conditions requiring specialised dietary advice, or to frail elderly people who are at risk of malnutrition.

Older people

Low fat diets are not suitable for convalescent older people and frail elderly people (to whom these Guidelines do not apply) because of the possible adverse effects of energy restriction in these groups. However, for those aged 65–75 who are well, the type and amount of fat in the diet deserves consideration. Although the increased relative risk of raised plasma cholesterol for coronary heart disease tends to be lower in older people than in younger adults, lowering lipid levels can reduce risk of ischaemic heart disease regardless of age.[722]

Including a moderate amount of added sugars as a flavour enhancer can increase variety and palatability for older people and may not compromise nutrient intake if added to nutritious foods. Sugars are also a readily absorbed source of energy for frail elderly people.

Taste perception decreases with age and can be a factor in decreased food intake and malnutrition. For a chronically ill older person who has hypertension, clinicians need to weigh up the benefit of adding salt to food to improve flavour (with improved intake and quality of life, and reduced risk of malnutrition) against the risks of hypertension and its management. For chronically ill older people who do not have hypertension, salt intake can be determined by personal preference and maintaining food intake is a priority.

Danish Food Pyramid for Malnourished Patients & Elderly

EAT LEAST:

- Fruit & vegetables
- Whole grain bread
- Water

EAT MORE:

- Fish salads; tuna & herring in dressing & mayonnaise
- Dry fruit, fruit juice & fruit porridge with cream
- Marzipan
- Avocado
- Almonds, nuts & peanuts

EAT MOST:

- Danishes, croissants
- Buttermilk dessert, chocolate milk
- Snacks of crackers, cookies, chocolates, cakes, milkshake, cheese or ice cream
- Butter
- Cream
- Creamy pâtés, luncheon meats & meat salads with mayonnaise
- Egg

Kostpyramiden er lavet på baggrund af råd fra kliniske diætister givet til underernærede syge og ældre. Kilder: Sygeforsikring.dk og Cancer.dk.

In how far are dietary standards to be followed?

"**A dietary standard is an indication, not a rule.** (…) And even if it be accurate for a given individual, it does not follow that that individual should regulate his diet for each day by the standard."

"One principle, too often forgotten, is that **appetite is not necessarily the measure of the demand for nutriment.** A normal appetite might be such a measure, but our appetites are not always normal."

"The modern doctrine of food & nutrition (…) is in **danger of being misapplied**.

1. the failure to recognize what feeding & dietary standards are & ought to be
2. the setting up of incorrect standards
3. the blind & thoughtless use of standards in the calculating of rations & dietaries"

Atwater WO. The demands of the body for nourishment and dietary standards. Annual Report of the Storrs Agricultural Experiment Station. 1903;15:123-46.

Liberalizing Therapeutic Diets: Evidence

Mixed	Davidson B. Liberalizing Hospitalized Patients' Diets Will Go a Long Way to Preventing Malnutrition. CMTF. 2015. Available from: http://www.nutritioncareincanada.ca/sites/default/uploads/files/Liberalizing-Hospitalized-Patients%E2%80%99-Diets.pdf
	Sriram K, et al. Special postoperative diet orders: Irrational, obsolete, and imprudent. Nutrition. 2016;32(4):498-502.
	Rattray M, et al. Comparing nutritional requirements, provision and intakes among patients prescribed therapeutic diets in hospital: An observational study. Nutrition. 2017;39:50-6.
Texture modified	Wright L, et al. Comparison of energy & protein intakes of older people consuming a texture modified diet with a normal hospital diet. J Hum Nutr Diet. 2005;18(3):213-9.
	Shimizu A, et al. Texture-modified diets are associated with decreased muscle mass in older adults admitted to a rehabilitation ward. Geriatr. Gerentol. Int. 2018;18:698-704.
Diabetes	Modic MB, et al. Do we know what our patients with diabetes are eating in the hospital? Diabetes Spectrum. 2011;24(2):100-6.
	Whitham D. Nutrition management of diabetes in acute care. Canadian journal of diabetes. 2014;38(2):90-3.
	Ryan DB, et al. The mealtime challenge: nutrition and glycemic control in the hospital. Diabetes Spectrum. 2014;27(3):163-8.
Sodium restricted	Taylor S. Rethinking sodium: Reflections on research and implications for practice [Internet]. Dietitians of Canada Practice Blog. March 2016. Available from: https://www.dietitians.ca/Learn/Practice-Blog/March-2016/Rethinking-sodium--Reflections-on-research-and-imp.aspx
	Lelli D, et al. Association Between Sodium Excretion & Cardiovascular Disease & Mortality in the Elderly: A Cohort Study. J Am Med Dir Assoc. 2018;19(3);229-34.
	Alencar M, et al. Do spices & condiments increase food intake of patients with low sodium diet? Demetra. 2014;9(3);795-809.
	Liem DG, et al. Reducing sodium in foods: the effect on flavor. Nutrients. 2011 Jun 20;3(6):694-711.
Elderly LTC	Darmon P, et al. Restrictive diets in the elderly: never say never again?. Clinical Nutrition. 2010 Apr 1;29(2):170-4.
	Dorner B et al. Position of the Academy of Nutrition and Dietetics: Individualized Nutrition Approaches for Older Adults: Long-Term Care, Post-Acute Care, and Other Settings. J. Acad. Nutr. Diet. 2018 30;118(4):724-35.

Salt Reduction Targets in Hospitals

- WHO salt guideline "**does not provide recommendations for individuals with illnesses** or taking drug therapy that may lead to hyponatraemia or acute build-up of body water, or require physician-supervised diets…"

- B.C.'s Experience (2016) > without ↓ Na+ in the national food supply:
  - patients experience difference in sodium content in hospital vs. home.
  - challenges procuring low sodium products

- Lack of consensus on salt targets among nutrition experts
  - Proposed controlled trial in prisons
  - Debate ethical concerns & feasibility

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World Health Organization. Guideline: Sodium intake for adults and children. World Health Organization; 2012.
Government of British Columbia, Sodium reduction in health-care facilities: B.C.'s experience. 2016. https://www.health.gov.bc.ca/library/publications/year/2016/sodium-reduction-health-care-facilities.pdf
Jones DW, et al. Can we end the salt wars with a RCT in a controlled environment?. Hypertension. 2018 Jul 1;72(1):10-1.

Models for Standards

- International > National > Regional > Hospital
- General (principle-based) vs. Specific (operational)
- Broad in scope vs. Limited in scope

Council of Europe* Survey (2001)
Nutrition Programmes in Hospitals

1. Lack of clearly defined responsibilities in planning & managing nutritional care.
2. Lack of sufficient education for all staff groups.
3. Lack of influence & knowledge of patients.
4. Lack of cooperation between staff groups.
5. Lack of involvement from hospital managers.

**The Council of Europe is a political organisation with the aim to reinforce democracy, human rights & the rule of law as well as to develop common responses to political, social, cultural & legal challenges in its member States.*

https://www.nutritionday.org/cms/upload/pdf/11.resolution/Resolution_of_the_Council_of_Europe.pdf

Beck AM, et al. Food & nutritional care in hospitals: how to prevent undernutrition. Clin Nutr. 2001;20(5):455-60.

Beck AM, et al. Practices in relation to nutritional care and support. Clin Nutr. 2002;21(4):351-4.
https://pdfs.semanticscholar.org/bcfc/b9cd5c0de06a3016e1a1eb99b2fdf7373d4b.pdf

Council of Europe's Committee of Ministers

Resolution on food & nutrition care in hospitals, 2003

- Access to a safe & healthy variety of ***food in hospitals is a fundamental human right.***
- Unacceptable number of malnourished patients leading to poorer outcome & increased health care costs.
- Proper food service & nutritional care in hospitals improves recovery of patients & their quality of life.

Initiate implementation of national guidelines & standards in member states for nutritional care in hospitals, with special focus on undernutrition.

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https://www.nutritionday.org/cms/upload/pdf/11.resolution/Resolution_of_the_Council_of_Europe.pdf

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https://pdfs.semanticscholar.org/bcfc/b9cd5c0de06a3016e1a1eb99b2fdf7373d4b.pdf

Council of Europe's Committee of Ministers

Resolution ResAP(2003)3 on food & nutrition care in hospitals, 12 November 2003

Includes ~ 100 specific **recommendations** on:

1. Nutritional assessment and treatment in hospitals
2. Nutritional care providers
3. Food service practices
4. Hospital food
5. Health Economics

1.4.i. *Ordinary food by the oral route should be the first choice to correct or prevent undernutrition in patients.*

Council of Europe's Committee of Ministers

Resolution ResAP(2003)3 on food & nutrition care in hospitals, 12 November 2003

3. Food service practices recommendations

1) Organisation of hospital food service

iv. All hospital staff – clinical & non-clinical – should acknowledge food service as an important part of the treatment & care of patients.

2) Contract food service

iv. Department/committee/person should be given the responsibility for ensuring that the contract reflects nutritional standards.

3) Meal service & eating environment

ii. All patients should have the possibility to choose their eating environment.

iii. …possibility to sit at a table when eating their main meals.

iv. …focus on surroundings & the presence of personnel & free from unpleasant smell/odours.

4) Food temperature & hygiene

Council of Europe's Committee of Ministers

Resolution ResAP(2003)3 on food & nutrition care in hospitals, 12 November 2003

3. Food service practices recommendations

5) Specific improvements in food service practices to prevent undernutrition

iv. Standards for food service systems, based on patient needs rather than hospital needs, should be developed.

v. Regardless of serving system, close collaboration between the patient, relatives & the nursing, dietetic & food service staff is required to get the patient to eat.

vi. The provision of meals should be flexible and individualised… possibility to order food at any time.

vii. Menus should be specifically targeted to different patient categories.

viii. Proper feeding-aid should be provided.

ix. Successful measures to prevent undernutrition should be given publicity.

Council of Europe's Committee of Ministers

Resolution ResAP(2003)3 on food & nutrition care in hospitals, 12 November 2003

4. Hospital food recommendations

1) Hospital menus & diets on medical indications

i. …development of national standards for food in hospitals to meet the needs of all categories of patients including diets on medical indications, & vegetarian, texture modified and energy & protein dense menus.

vi. Immediate feedback from the patients to the kitchen and ward staff...

vii. The nutrient content, the portion size of the food and food wastage should be audited annually.

2) Meal pattern

i. Serving hours should be reviewed for sufficient time between meals to allow for in-between snacks in the morning, afternoon & late evening.

ii. Mealtimes should be spread out to cover most of the hours spent awake.

iii. Interruption of patients' meal times should be minimised.

3) Monitoring of food intake

4) Informing & involving the patient

Council of Europe's Committee of Ministers

Resolution ResAP(2003)3 on food & nutrition care in hospitals, 12 November 2003

5. Health Economics recommendations

2) Food service & food wastage costs

i. The influence of food service practice on food wastage should be examined.

ii. Flexibility with regard to the patient's menu choice & serving size should be ensured.

iv. The food budget should be valued as part of the budget spending on clinical support & treatment services.

v. … take into account the potential cost of complications & prolonged hospital stay due to undernutrition when assessing the cost of nutritional care and support.

vi. … reduce wastage of food, sip feedings & artificial nutrition products.

Danish Recommendations

- Recommendations for the Danish institutional Diets (2015, 5th Ed.)
- Diet Handbook https://kosthåndbogen.dk (2016, 3rd Ed.)
- For use in public institutions
  - Hospitals, long-term care, residential care, day care, etc.
  - Interdisciplinary focus
- Official national recommendations on food for:

➢ *Healthy to prevent illness*

➢ *Sick to treat illness*

Sundhedsstyrelsen

kost & ernæringsforbundet
mestre i mad & sundhed

Miljø- og Fødevareministeriet

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Healthy to prevent illness vs. Sick to treat illness

- Normal Diet – based on recommendations for healthy populations.
- Hospital Diet – aims to meet nutrition risk patients' energy & protein requirements in smaller portions.
  - 3 main meals (75% E) & 3 snacks (25% E) & multivitamin per day
  - Good culinary quality & appetising.
  - Staff are aware of food choices to offer patients.

Energy Distribution (E%) for Different Diet Types

	Hospital Diet	Average Diet*	Normal Diet
Protein	18	16	15
Fat	40	38	32-33
Carbohydrate	42	46	52-53

**Average Diet* – based on national surveys of typical diets.*

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Recommendations for the Danish institutional Diets (2015, 5th Ed.)

Diet Handbook https://kosthåndbogen.dk (2016, 3rd Ed.)

Healthy to prevent illness vs. Sick to treat illness

- ‘Small Eaters’ Diet – nutrition risk patients with challenges to eat sufficiently (e.g., fatigue, loss of appetite, mouth problems, taste changes, nausea/vomiting, diarrhea, pain).
    - Very small portions
    - 6-8 meals daily + energy- and protein-rich drinks
    - Snacks (30-50% E)
    - High energy density & same protein as hospital diet
    - Attention to food consistency for individual eating ability.
    - Consider individual preferences
    - Collaboration with dietitian.

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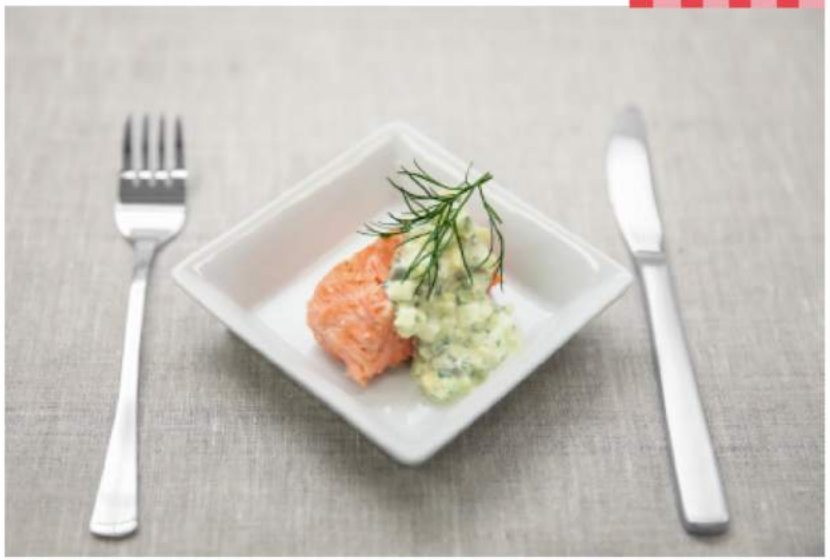
http://vbn.aau.dk/files/220703626/Tina_Munk_EPUB.pdf

1

Letrøget laks med æg og dild

Dette er en uimodståelig lille platte. Røget laks og hjemmerørt æggesalat, tilsat mild karry.



2

Pastasalat med bacon og kylling

Pastaskruer, bacon og kylling i let og lækker creme med purløg og sprød kyllingesvær. Retten er mild og let at spise.

3

Bagt laks med coleslaw og hjemmesyltet agurk

Et let sansemættende lille måltid med flot farvespil. Frisk smag fra havet og haven.

4

Sellerisuppe

Selleri er en af Nordens mest karakteristiske og næringsrige grøntsager. Den har hjulpet os gennem de kolde vintre og holdt os sunde i århundreder. Her serverer vi knoldselleri i en lækker suppe med hønsefond og fløde.

5

Svampesuppe med purløg og KarlJohanolie

En fyldig og rund smag af svampe og olie, som aldeles stiller smagssansen tilfreds.

6

Klar suppe med kød- og melboller

En af favoritterne i det danske køkken. Melboller er i sammenspil med fyldige lækre kødboller og en kraftfuld suppe en kulturel og klassisk smagsoplevelse.

7

Rodfrugtmos med brunet smør

Nyd denne lille lune puré af sødlige rodfrugter, nøddeagtigt brunet smør og fintsnittet purløg. Simpelt, ædelt og næringsrigt.

8

Blomkålscreme med ristede nødder

En lækker kombination af blød og cremet blomkål, syltede østershatte, ristede mandler og hakket persille. Masser af smag og et spændende spil mellem blødt og sprødt.

9

Lille æggekage med sprød bacon

Vores æggekage er bagt i smør og serveret med små stykker sprød bacon samt toppet med frisk kørvel. Skøn lille godbid som nok ikke behøver nærmere introduktion.

10

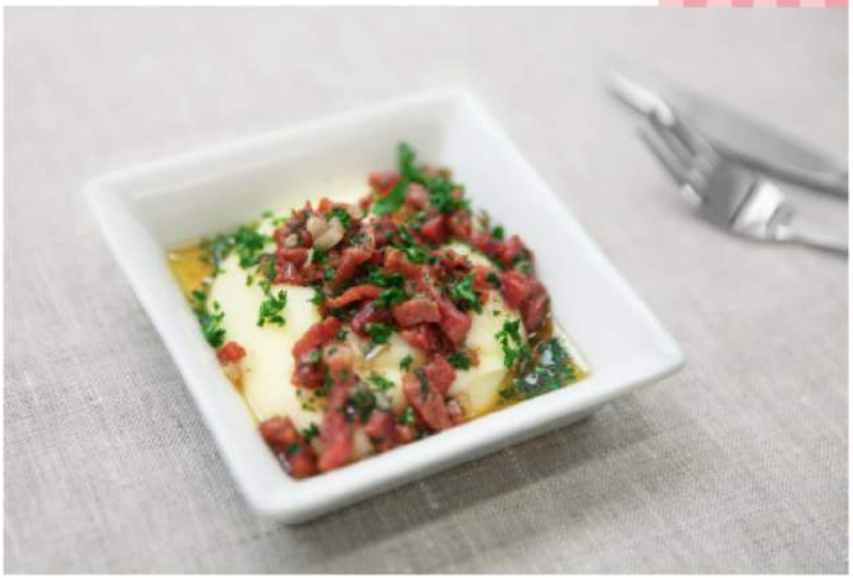
Risotto med stegte svampe

Cremet risotto med parmesanost i en sprød brødkrumme. På toppen er der stegte svampe og frisk kørvel.

11

Brændende Kærlighed

Vores version er en luftig kartoffelmos med sprød gylden bacon, skalotteløg og friskhakket persille. Klassisk og god.



12

Fiskekrebinet med jordskokke

Saftig krebinet lavet af torsk og laks serveret med jordskokker i creme. Jordskokker har en artiskoklignende smag, der passer formidabelt til fisk.

13

Lille tartelet med høns i asparges

Tartelette betyder "lille tærte" på fransk. Vi tilbyder her den nordiske version. En dejlig hjemmelavet høns i asparges serveret med sprød kyllingesvær og kørvel.

14

Kalvefrikadeller med fintsnittet stuvet hvidkål

Der er lige så mange dyrebare og hemmelige familieopskrifter på frikadeller i Danmark, som der er husstande. Dette er vores version af den mest traditionsbundne ret her i landet.

15

Forloren hare med vildtsauce og tyttebær

Frøken Jensens Kogebog fra 1901 gav Danmark denne ret for første gang. Her serverer vi denne vellidte veteran med slagkraft i en cremet vildsauce med tyttebær og kartofler.

16

Ost

Lille osteanretning med en mild og en fyldig ost. Kirks økologiske flødeost med purløg, Danbo 45+ mellemlagret, digestive kiks og grønne vindruer.

17

Jordbærparfait

Let og luftig jordbæris, serveret med chokolade. "Parfait" betyder perfekt på fransk og denne dessert lever fuldt op til navnet.

18

Mild kærnemælksfromage

Blød og luftig dessertfromage på kærnemælk, serveret med mørk chokolade og pynt. Det syrlige i kærnemælk bliver opvejet af sukker, limeskal og vanilje, der giver et perfekt spil mellem det søde og det syrlige.

19

Stikkelsbærgrød med vaniljecreme

Stikkelsbær i symbiose med vanilje og fløde. En ny klassiker er født.

20

Rødgrød med vaniljecreme

Klassisk dansk dessert lavet af ribs, hindbær, jordbær og sukker. En dejlig afslutning på et godt måltid.

21

Æblekage

Æblekagen vi kender i dag blev født i midten af 1800 tallet, hvor komfuret blev mere almindeligt. Her byder vi på vores luksusversion af den klassiske dessert med Cox Orangeæbler, nøddeknas, vaniljecreme og flødeskum.

22

Konfekt af marcipan og nougat

Små hjemmelavede godbider. Nougat drysset med pistacie nødder samt ægte marcipan tilsmagt med appelsinskal og overtrukket med mørk belgisk chokolade.

23

Koldskål med kammerjunkere

Koldskål med hjemmebagte kammerjunkere, smager måske mest af sommer, men undlad dog ikke at spise denne forfriskning om vinteren. Dette får med garanti tankerne frem mod en lysere og varmere årstid.

Rigshospitalet - Super Diet

(1,361 beds)

- A menu card with a choice of dishes:
  - 20 appetizers/interims/snacks
  - 15 main courses for supper
  - Side dishes
  - 12 sauces
  - 14 desserts
  - Seasonal variation

- Dietitian 3 times per week:
  - motivation, care, follow-up.
- Distributed fresh - prepared within 30 min.

Super Diet


490kcal, 20g protein

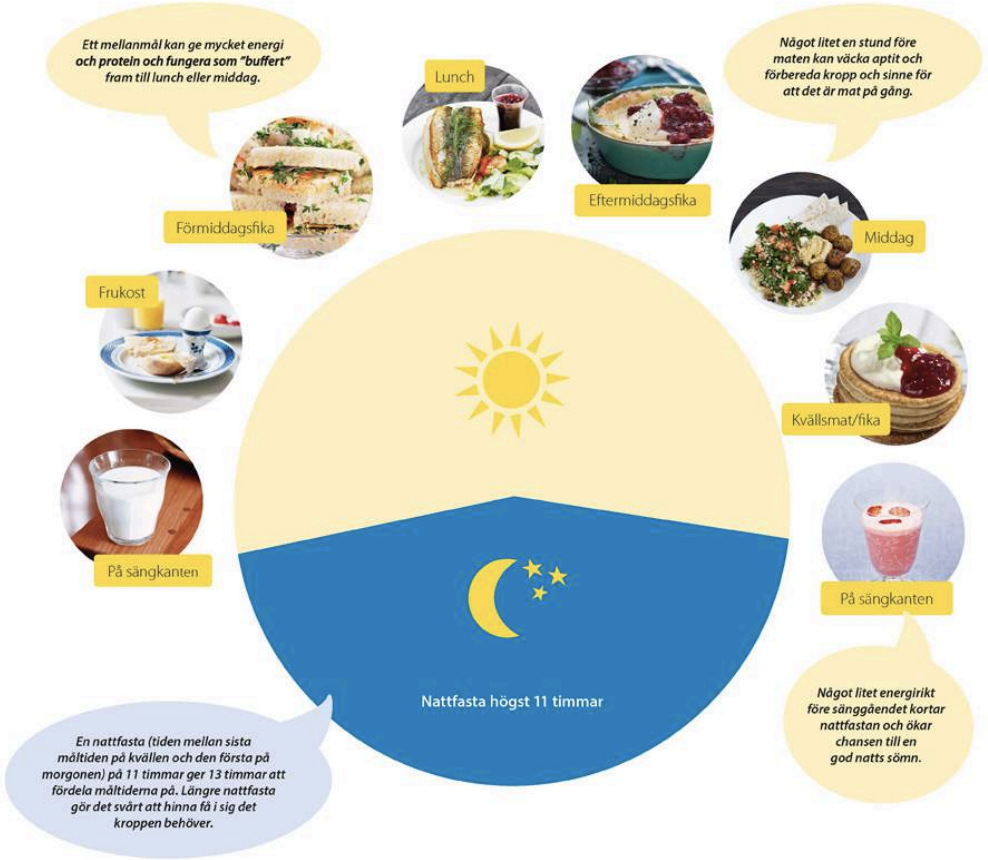

620kcal, 21g protein


380kcal, 15g protein

Swedish Recommendations

A change in focus…

- Diet > Meals
- Tables > Models
- Details > Holistic



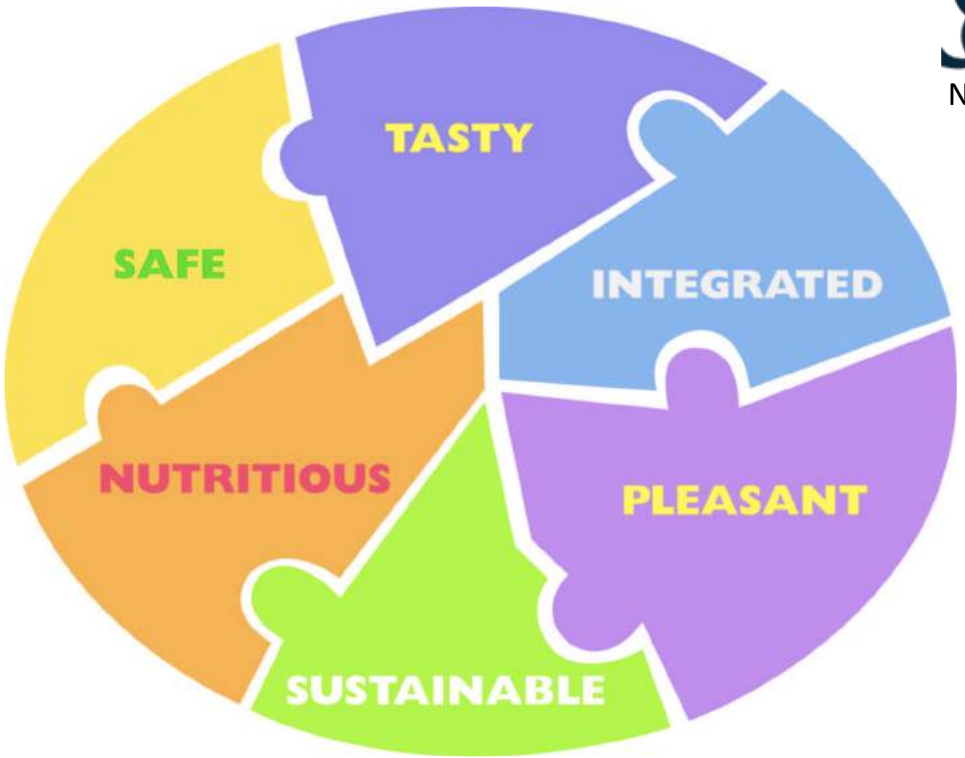
Swedish Recommendations

Livsmedelsverket
NATIONAL FOOD AGENCY, SWEDEN

Socialstyrelsen
National Board of Health & Welfare

Public meals In:

- Preschools
- Schools
- Elderly care
- **Hospitals**



Shared responsibility to prevent & treat malnutrition in hospitals.

https://www.livsmedelsverket.se/en/food-habits-health-and-environment/maltider-i-vard-skola-och-omsorg

Sporre C, et al. The Five Aspects Meal Model, FAMM. From Michelin Guide to public meal sector. In: Culinary Arts and Sciences: Global, Local and National Perspectives / [ed] Rodrigues S, et al. Porto, 2013, p. 188-197. Available from: http://www.diva-portal.org/smash/get/diva2:641411/FULLTEXT01.pdf

Gustafsson IB, et al. The Five Aspects Meal Model. Journal of foodservice. 2006; 17(2):84-93.

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Integrated

1. There is a consensus that **meal is part of the medical treatment.**
2. The meal organization is **flexible** & based on **patient needs & wishes**.

Nutritious

1. The food is **nutritious & individualized**.
2. The patient is offered thoughtful & varied **snacks**.
3. Simple meals are offered in the **emergency & ambulatory care**.
4. The patient is prepared for meals & **offered assistance**.
5. Period of **fasting is minimized**.

Pleasant

1. The patient may choose to **eat individually or with others**.
2. The **room is prepared** & suitable for serving meals.
3. The **meal time is flexible**.
4. The patient can eat his meal with **no disturbances**.
5. The meal is presented & served in an **appetizing & enticing** way.
6. There is the opportunity for **close relatives** to eat food with the patient.

Safe

1. Controls are in place to ensure **safe food & safe meals**.
2. Practices ensure that the **right food is served to the right patient**.
3. Patients have the opportunity to **wash hands** before meal.

Sustainable

1. **Environmental requirements for procurement & purchasing** of food.
2. Work is ongoing to **minimize food waste**.
3. **Minimise energy use** in all sectors.

Tasty

1. The patient **appreciates the meal**.
2. There are **suitable dishes & snacks** for the patient to choose from.
3. The patient is given the **opportunity to choose** from the food available.
4. The food is of **high quality**.
5. The food system **logistics promote good meals**.
6. The food is **presented & served in an enticing way**.

Overall

Regulatory documents

1. There are regulations / visions for food & meals determined by the **county council / region management**.

2. There are regulatory documents for food & meals set by the **hospital management**.

3. There are local routines to **customize** the overall guidelines according to conditions of **individual wards**.

Knowledge & Competence

There is a **guaranteed level of knowledge**:

1. of foodservice staff.
2. of staff who order, serve & present food on wards.
3. about food hygiene in the hospital kitchen.
4. of staff who prescribe diets.

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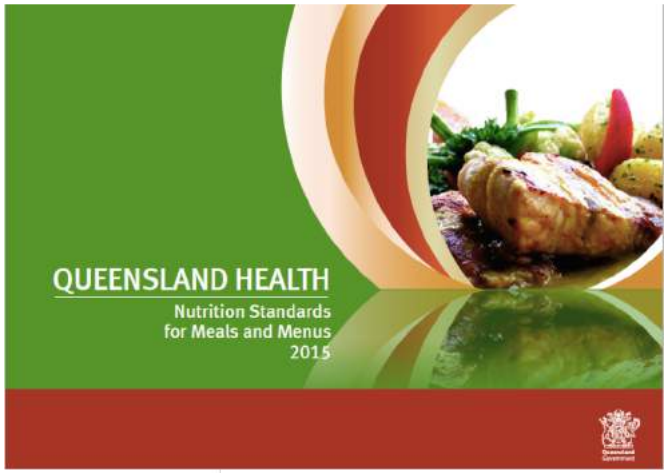
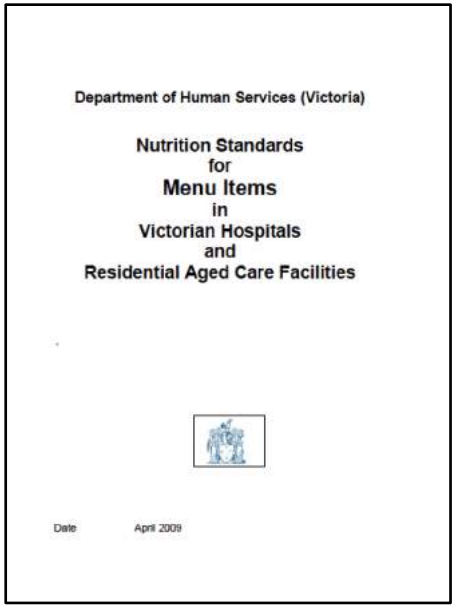
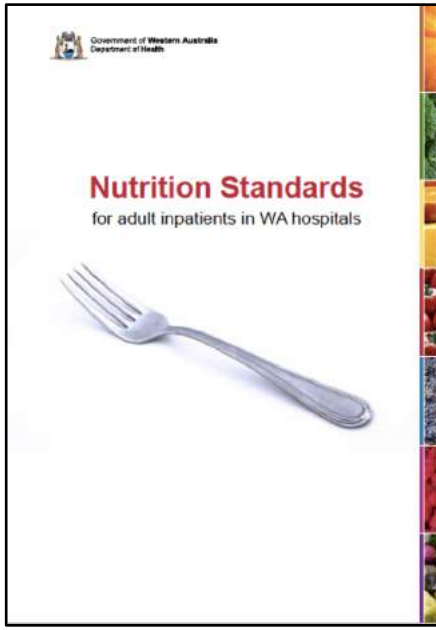
Platform for sharing meal projects in Sweden, e.g., flexi-meal: http://maltidsverige.se/projektverkstad/aktuella-projekt/fleximat/

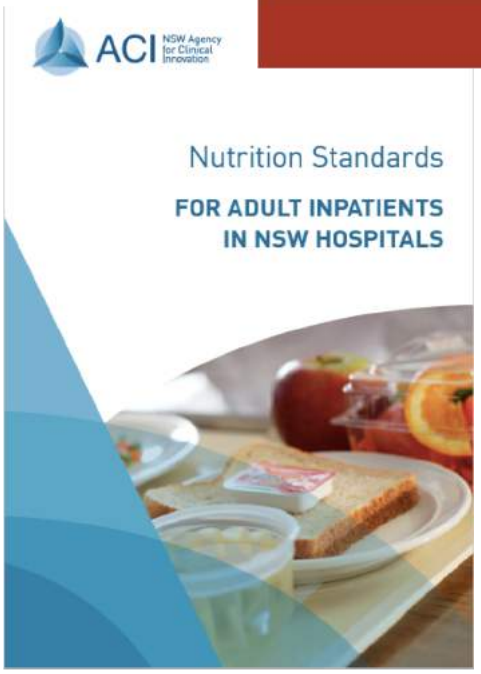
Hedman S, et al. Individually prescribed diet is fundamental to optimize nutritional treatment in geriatric patients. Clin. Nutr.. 2016;35(3):692-8.

Australian Standards









New South Wales Australia

- https://www.aci.health.nsw.gov.au/__data/assets/pdf_file/0004/160555/ACI_Adult_Nutrition_web.pdf

*Queensland Australia

- https://www.health.qld.gov.au/__data/assets/pdf_file/0030/156288/qh-nutrition-standards.pdf

Western Australia

- http://www.health.wa.gov.au/circularsnew/attachments/1108.pdf
- http://www.health.wa.gov.au/circularsnew/attachments/1109.pdf

Victoria Australia

- http://www.health.vic.gov.au/archive/archive2011/patientfood/nutrition_standards.pdf

Queensland: User Guide

1. Nutrition Standards: Aim, Background & Rationale
   - Measurable to assess site compliance per setting
2. Meal Component Specifications
   - Meal Categories including main protein, soup, sandwiches, desserts, hot breakfast protein, fortified cereals, fortified vegetables & mid-meal snacks.
   - Meal Component Specs (groups 1-4); serving size, energy, protein
3. Minimum Menu Choice
   - Across the meal group > Per day > Across the menu cycle

Queensland: Meal Categories & Group Levels

- Main Dishes – 4 groups
- Soups – 2 groups
- Sandwiches – 2 groups
- Desserts – 4 groups
- Hot breakfast – 1 groups
- Snacks – 4 groups.
- Fortification targets – Hot cereal, starchy vegetables, vegetables.

Queensland: Meal Component Specifications

	Group 1	Group 2	Group 3	Group 4
Desserts	Fortified dessert- May have vitamins & minerals	Dessert with significant energy & moderate protein	Moderate energy & protein	Varying nutrients
Example	Protein enriched pudding	Cheesecake	Rice pudding	Apple crumble
Serving size	Max. 180g	90 - 120g	90 - 120g	Min. 50g
Energy	> 192 kcal	> 192 kcal	> 121 kcal	> 72 kcal
Protein	Min. 8g	Min. 4g	Min. 4g	No target
Fat	No restriction	No restriction	Max. 7g	No target

Queensland: Minimum Menu Choice

- Length of menu cycle influences how many menu choices should be offered per day
  - e.g., 35 choices per cycle for standard acute menus

Adult Acute, Residential Aged Care, Mental Health & Acquired Brain Injury : Long stay menu

MAIN MEAL *Hot Protein*	MENU CYCLE				
	7 day	14 day		21 day	
Lunch	2 choices	1 choice	2 choices	1 choice	1 choice
Dinner	3 choices	2 choices	2 choices	1 choice	2 choices
Possible Repeats*	No repeats	7 repeats	21 repeats	7 repeats	28 repeats

Models for Standards: Discussion

- International > National > Regional > Hospital
- General (principle-based) vs. Specific (operational)
- Broad in scope vs. Limited in scope

Standards & tools for advocacy?

Which approach is best?

Questions & Comments.

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