Winnipeg Regional Health Authority / Office régional de la santé de Winnipeg Caring for Health / À l'écoute de notre santé	**Long Term Care Program**	
	Nutrition & Hydration	Page: 1 of 16
Operational Guideline	**Approval Signature:**	Supercedes: **NEW**
	Date of Approval: **April 23, 2021**	
	Date of Revision: **April 2024**	

1.0 **PURPOSE:**

1.1 To facilitate an interdisciplinary approach related to assessment, intervention and evaluation to minimize the likelihood and reduce the impact of malnutrition and dehydration for residents living in long term care.

1.2 To provide guidance on how to approach rehydration needs for residents experiencing emesis, diarrhea and fever.

1.3 To provide guidance to promote nutrition and hydration when additional infection control measures are in place during an outbreak related to illness.

2.0 **DEFINITIONS:**

2.1 Dehydration: A complex condition resulting in a reduction in total body water. This can be due primarily to a water deficit (water loss Dehydration) or a salt and water deficit (salt loss Dehydration).

2.2 Malnutrition: Inadequate intake of protein and/or energy over prolonged periods of time resulting in loss of fat and/or muscle stores including starvation-related Malnutrition, chronic disease or condition-related Malnutrition and acute disease or injury-related Malnutrition.

2.3 Oral Rehydration Solution: Oral Rehydration Solutions (ORS) are aqueous solutions composed of glucose and electrolytes, including sodium, potassium, chloride, magnesium, and phosphorus, with dehydration preventative and rehydration activities. Upon oral administration of the oral rehydration solution (ORS), water, electrolytes and glucose are absorbed from the gastrointestinal (GI) tract into the systemic circulation. This replenishes the body's supply of water, carbohydrates and electrolytes, and prevents both dehydration and renal dysfunction.

ORS is available through pharmacy as a powder or in ready to use format. Powdered format is most economical, however there is increased staff time in preparing the ORS.

2.4 Prescriber: Refers to a health care professional who is permitted to prescribe medications or treatments as defined by Provincial and Federal legislation, his/her regulatory college or association, and practice setting.

2.5 Rehydration: The process of restoring lost water (Dehydration) to the body tissues and fluids. Prompt Rehydration is imperative whenever Dehydration occurs, from diarrhea, exposure, lack of drinking water, or medication use. While Rehydration can be by the oral route or by the intravenous administration of fluids, within this guideline oral route is the intended route.

3.0 OPERATIONAL GUIDELINES

3.1 Nursing will complete a base care plan based on transfer information, safety risks and observation of consumption within the first 24 hours of admission.

3.2 Nutrition referral criteria to be used by nursing to identify need for dietitian assessment. Dietitians should be consulted if one of the following exists:

- Unintentional weight loss and/or cachectic appearance (wasting)
- Chewing and/or swallowing difficulty (send consult to Speech Language Pathology as well)
- Diarrhea and/or constipation
- Food allergy or intolerance
- Nausea and/or vomiting (persistent and/or greater than 3 days)
- Nothing by mouth (NPO) or clear fluids (greater than 5 days)
- Nutrition education
- Nutrition support (Tube feed or TPN in acute sites and some LTC sites)
- Poor oral intake (greater than 3 days)
- Wounds
- Management of restraints (in long term care setting)

Further detail located at:
https://professionals.wrha.mb.ca/old/extranet/nutrition/contact.php

3.3 Registered Dietitian (RD) will complete an initial nutrition assessment, developing an individualized nutrition care plan, within 2 weeks of admission as feasible (Nutrition & Food Services guideline) (note that during an outbreak this time frame is 2 to 8 weeks to limit contacts). The need for enhanced nutrition will be considered for residents displaying or at high nutrition and hydration risk.

3.4 Staff will promote nutrition and hydration for all residents according to diet order and individual goals of care.

3.4.1 Awareness of risks of residents consuming food and beverage outside of congregate areas is required including risks of choking/aspirating food and beverages, risks of food spoilage, etc.

3.5 A variety of fluids as per resident preference will be actively provided throughout the day, including at meals, medication passes, and fluid and nourishment passes.

3.6 Staff will encourage independence in consumption but will provide assistance as required to promote enhanced intake.

3.7 Staff will assess/monitor acute situations that could lead to Dehydration such as vomiting, diarrhea and fever. See Dehydration Risk Assessment Tool (Appendix A)

4.0 **PROCEDURE**

4.1 All members of the interdisciplinary team have a role in supporting nutrition and hydration. A key requirement in monitoring resident status is being familiar with day-to-day resident functioning in order to be aware of subtle change in status.

Team member specific roles below reflect requirements during day to day practice:

4.1.1 **Director of Care or Designate**:

4.1.1.1 Facilitates the implementation of nutrition and hydration management procedures for each resident; ensures that the nursing components are implemented.

4.1.1.2 Seeks advice from experts to support team decisions (e.g. RD, SLP, etc.).

4.1.1.3 Supports education for clinical processes/treatments relating to hydration management (e.g. hypodermoclysis, IV therapy)

4.1.1.4 Ensures there is a written policy that defines significant weight change.

4.1.1.5 Ensures there is a written procedure for formally notifying the Registered Dietitian of a significant change in a resident's weight.

4.1.2 Nurses

4.1.2.1 Assesses and documents resident's general nutrition and hydration status:
- On admission
- Re-admission
- Quarterly
- Change in condition and seasonal conditions that may cause resident to be at risk for Malnutrition and Dehydration

4.1.2.2 Initiates, communicates, and reviews the plan of care with the interdisciplinary team to address each individual resident's nutrition and hydration needs.

4.1.2.3 Documents and monitors weights monthly or more often as indicated
- Weights are retaken if significant change in weight to ensure accuracy

4.1.2.4 Refers to the Registered Dietitian following set criteria, recommended criteria as per https://professionals.wrha.mb.ca/old/extranet/nutrition/contact.php (See 3.2).

4.1.2.5 Consults other allied health disciplines as required.

4.1.2.6 Reinforces resident and family education provided by the dietitian re: nutrition and Dehydration.

4.1.2.7 Monitors and evaluates the plan of care, and updates as necessary. Completes the Dehydration Risk Assessment Tool (Appendix A) when resident status changes and there are potential indicators of Dehydration. Determine frequency of re-assessment using this tool based on resident response to interventions and status.

4.1.2.8 Initiates site specific intake and output recording as needed.

4.1.2.9 Notifies Prescriber if there are changes in medical condition, symptoms of malnutrition and dehydration, oral intake and/or per clinical judgment.

4.1.3 Health Care Aide (HCA):

4.1.3.1 Provides and assists with meals and snacks as per care plan, including assisting residents with fluids while awaiting meal service and replenishing fluids during meal service.

4.1.3.2 Prepares nourishment cart including fluids at am, pm and bedtime (dependent upon site distribution of duties this may be Diet Aide task).

4.1.3.3 Provides fluids and snacks between breakfast and lunch, between lunch and supper and not less than two hours after the evening meal.

4.1.3.4 Provides encouragement, cueing and assistance to consume food and fluid when applicable.

4.1.3.5 Utilizes assistive devices as identified in the care plan.

4.1.3.6 Weighs residents, as per care plan and nurse direction. Records and reports weight to nurse, as per facility process.

4.1.3.7 Observes for symptoms of Dehydration, food/fluid intake or other concerns. Use site tools for intake recording of both food and fluid. Report observations to nurse.

4.1.3.8 Observes and reports as needed resident verbal and non-verbal behaviours that may impact oral intake (such as pain).

4.1.3.9 Promotes good oral hygiene as per individual care plan.

4.1.3.10 Documents resident's intake and output (as determined by resident's care plan) and reports changes to nurse.

- Record intake as percentages rather than subjective terms such as poor, fair, etc.

4.1.4 **Registered Dietitian:**

4.1.4.1 Completes nutrition assessment for all residents within 2 to 8 weeks of admission.

4.1.4.2 Calculates resident's nutrition requirements (including fluid) and documents in the care plan.

4.1.4.3 Works in collaboration with the Interdisciplinary team to develop an individualized care plan for nutrition and hydration care plan. Considers need for enhanced nutrition and initiates nutrition and hydration strategies if within goals of care.

4.1.4.4 Orders appropriate diet and supplements as needed and make recommendations to physicians re: vitamin/mineral supplements and other interventions related to nutrition.

4.1.4.5 Monitors weight results monthly.

4.1.4.6 Reassesses resident's nutritional and hydration status and updates the nutrition care plan as required.

4.1.4.7 Recommends intake and output recording or usual food intake recording.

4.1.4.8 Assesses residents who are ill or in an unstable condition (not including all residents during an outbreak).

4.1.4.9 Follows up on residents who are ill or in an unstable condition.

4.1.4.10 Assesses resident's swallowing and chewing ability and completes/recommends referral to other members of the team as needed.

4.1.4.11 Provides education to resident/family/designate and staff as required.

4.1.5 **Nutrition Services Manager:**

4.1.5.1 Organizes meal and snack preparation to ensure proper meal and fluids are prepared and offered to the resident.

4.1.6 **Dietary Staff / Diet Aides (where applicable):**

4.1.6.1 Encourages/assists residents with fluids while awaiting meal service.

4.1.6.2 Replenishes fluids during mealtime.

4.1.6.3 Accommodates food preferences, as able.

4.1.6.4 Prepares nourishment cart including fluids at am, pm and hs.

4.1.6.5 Notifies the dietitian if resident food/fluid intake changes

4.1.6.6 Maintain all departmental communication diet lists and dining room table cards, and other tools outlining diet needs.

4.1.7 **Recreation Facilitator:**

4.1.7.1 Involves the resident in activities or programs.

4.1.7.2 Encourages intake of foods and fluids appropriate for resident's therapeutic diet/texture/viscosity during activities or programs.

4.1.7.3 Reports resident's verbal and non-verbal behaviours indicating discomfort.

4.1.7.4 Reports resident changes to nurse.

4.1.7.5 Reports or documents fluid and food intake at activities when assigned.

4.1.7.6 Assists with feeding residents as appropriate.

4.1.8 **Speech Language Pathologist:**

4.1.8.1 Responds to consults, completes a comprehensive swallowing assessment and collaborates with the site team to optimize safety with intake.

4.1.8.2 Educates residents, family and staff on care plan recommendations.

4.1.8.3 Monitors and documents resident's outcome related to recommendations for safe consumption of food and drink as required.

4.1.9 **Occupational Therapist**

4.1.9.1 Evaluates and advises the interdisciplinary team on seating and assistive devices to maximize independence and promote good intake.

4.1.9.2 Educates residents, family and staff on proper use of equipment/devices/aids.

4.1.9.3 Monitors and documents resident's outcome in the use of seating and assistive devices.

4.1.10 **Rehabilitation assistant:**

4.1.10.1 Carries out assigned treatments relating to seating and comfort.

4.1.10.2 Teaches or works with resident to properly utilize assistive devices or recommended self-feeding techniques as per plan of care and as delegated by OT/PT.

4.1.10.3 Monitors resident responses and reports responses to OT/PT & interdisciplinary team.

4.1.11 **Pharmacist:**

4.1.11.1 Reviews and recommends changes, if required, to medications that have an impact on nutrition and hydration, such as medications that cause dry mouth, change the taste of food, contribute to constipation, or affect level of responsiveness.

4.1.12 **Prescriber:**

4.1.12.1 Identifies, implements, and monitors medical interventions to address nutrition and hydration, risks and management.

4.1.13 **Social Worker/Spiritual Health:**

4.1.13.1 Provides support to resident's psychosocial needs promoting nutrition and hydration.

4.1.13.2 Forwards concerns about intake to the health care team.

4.1.14 **Family/Caregiver:**

4.1.14.1 Family and visitors are an important part of nutrition and hydration care and should be encouraged to provide food and fluids during visits, in accordance with the resident's diet order(s) and overall care plan.

4.1.14.2 Confirms with the nurse on duty as to appropriate items to provide.

4.1.14.3 If accessible, obtains food/fluids from designated locations (e.g. dining room or ward stock fridges).

4.1.14.4 May provide favourite food/fluids from home if they follow food safety and diet recommendations (therapeutic and texture/viscosity) for the resident.

4.1.14.5 Participates in the interdisciplinary conference.

4.1.14.6 Collaborates with staff and resident to support the plan of care

4.2 Special considerations during outbreak:
Every resident who is isolated during an outbreak is at higher risk of Malnutrition and Dehydration. To reduce spread of an infection, refer to Infection Prevention and Control guidelines.

Consider the following for maintaining hydration and nutrition:

4.2.1 Plan Ahead: Have plans ready for seating strategies in case the dining room needs to close. This may include seating plans, staggering mealtimes, meal changes, staff distribution plan, or in-room dining. Consider extra dedicated cleaning shift for increased sanitation of commonly touched surfaces.

In case of staff shortages due to absences or limiting cross over between sites, have a plan to reassign work duties or adjust shift lengths as needed.

4.2.2 Nutrition Services

4.2.2.1 Hand hygiene both for staff and residents pre and post meal service is crucial. Gloves are not required or recommended during service.

4.2.2.2 Remove communal condiments, such as salt and pepper shakers from the table, and replace with individual portion packs.

4.2.2.3 Incorporate enhanced table and chair sanitation procedures before and after meals.

4.2.2.4 For residents with tray service, ensure there are at least 500 mL of fluid on the tray with 1-2 drinks that can be left at the bedside if not consumed during the meal. Do not leave milk at the bedside.

4.2.2.5 If the facility is in outbreak status, provide a supply of individually portioned beverage choices in the dining room/unit fridges for quick access (e.g. portioned juices or milks, pre-poured beverages of any kind).

4.2.2.6 If a unit is cohorted due to a cluster of cases without a refrigerator, provide shelf-stable fluid and food items that can be stored on that unit, for easy access as required (e.g. bottled water, portioned juice, a variety of flavours of Oral Nutrition Supplements, pudding cups). If cohorting is done in this area, it is recommended that a method be in place to provide chilled beverages, as intake may be enhanced. Options may include using a cooler with ice that beverages are placed in or pouring beverages over ice (where acceptable based on resident needs).

4.2.2.7 There is no need for disposable dishes; commercial dish washing machines will sanitize any pathogens.

4.2.2.8 Food choice remains important for residents during cohorting.

4.2.2.9 Bulk service could be replaced with mobile bulk carts for beverages, main course, and desserts.

4.2.2.10 Increase, stagger, or flex mealtimes as needed to maintain distance of 6 feet, and for staff to be available to assist residents as needed.

4.2.2.11 Consider options for modifying menus in case of staff shortages, such as switching from bulk to tray service, or easy heat and serve foods.

4.2.3 Nursing and Health Care Aides

4.2.3.1 Nursing will refer new admissions requiring more urgent assessment.

4.2.3.2 If it is not possible to take weights, or if intake is inadequate (less than or equal to 50%) for greater than or equal to 3 days, refer to RD.

4.2.3.3 Utilize tools to track intake and provide to the RD.

4.2.3.4 Dispense snacks directly to residents and use pre-packaged snacks and condiments when appropriate.

4.2.3.5 Dispense individual meal trays to residents on isolation.

4.2.3.6 Be aware of the risk of depression due to isolation and continue to provide person-centered care.

4.2.3.7 Residents with high risk of choking can be seated together, (maintaining a distance of 6 feet) and supervised during the meal.

4.2.3.8 Consult with infection control practitioner to determine appropriate outbreak management strategies related to dining (i.e. cancelling congregate meals, serving meals in doorway of resident rooms).

Be aware if and monitor residents with increased choking and aspiration risk.

- Cohort areas should consider use of a dedicated meal cart and develop a process for safe, coordinated meal delivery, including snacks and food stock.

4.2.3.9 With increased isolation, there is a higher risk of Malnutrition, Dehydration, and weight loss. Monitor for risks of Malnutrition and Dehydration and refer residents to the Clinical Dietitian as required.

4.2.4 Registered Dietitians

4.2.4.1 Complete a nutrition assessment following COVID-19 guidelines, including time frame of 2-8 weeks post admission during an outbreak to reduce contacts on the unit during that time, (considering both history and transition to unit). The need for enhanced nutrition will be considered for residents displaying or at high nutrition and hydration risk. For further details see "COVID-19 Guidelines for Nutritional Management of Patients, Residents and Clients" at https://sharedhealthmb.ca/files/covid-19-guideline-for-nutrition-management.pdf. Provide specialized nutrition care as required.

4.2.4.2 If there are barriers for nursing staff in obtaining weights:

- Phone unit regularly for active case finding (e.g. discussion with nursing staff regarding intake and nutrition status).
- Recommend intake recording and review intake and review intake records on a timely basis and adjust care plan as needed.

4.2.4.3 Work closely with food service to find strategies to keep mealtimes enjoyable.

4.3 Gastrointestinal Distress Treatment Options – Oral Rehydration Solutions to Enhance Fluid Intake: Consider use of ORS (Appendix B) to enhance fluid intake where required.

4.3.1 Director of Care to determine feasibility of use of ORS within the site through collaboration with Nutrition & Food Services, Pharmacy and Nursing.

4.3.2 When determined feasible, standard ORS product to be determined.

4.3.3 Nursing and Clinical Dietitian to consider when residents may be candidates for ORS and consult provider for assessment.

4.3.4 Provider to order ORS, including volume, frequency and progression, as per site standard practice or alternative practice (such as other product) when required.

4.3.5 Product to be provided based on source, e.g. pharmacy or food service.

4.3.6 Nursing to monitor for GI symptoms, such as diarrhea, nausea, vomiting.

4.3.7 Clinical Dietitian to monitor fluid intake via ORS, meals and snacks

4.3.8 Plan to be adjusted based on resident status and need

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Operational Guideline Contact:

Jean Helps, Regional Clinical Nutrition Manager – LTC
Kristine Schellenberg, Clinical Nurse Specialist, LTC Program

Appendix A

Dehydration Risk Assessment Tool

This is a tool to help identify individuals at risk for dehydration. Shaded items are particularly associated with dehydration. Add comments as appropriate.
A **Care Plan for Dehydration Risk** should be completed for any individual with 2 or more 'YES' responses, and fax to the Dietitian.

Risk Factors	YES	NO	Comments:
Physiological signs			
Inadequate Fluid Intake/Fluid Restricted Diet			
Diuretic Therapy (i.e. furosemide)			
Meds (laxative, NSAIDS, anti-psychotics, steroids, etc.)			
Acute Disease (fever, infection, vomiting)			
Constipation/Diarrhea			
Swallowing Problems (e.g. on or needs thick fluids)			
Not drinking between meals			
Dry/Sticky Mouth &/or Tongue			
Complaints of Headaches &/or Dizziness			
Dry and Brittle Hair			
Clinical Signs			
Hx of unintended weight loss (weekly weights)			
Recent or history of UTI			
Tube Feeding/Enteral Nutrition			
Skin Turgor (dry or inelastic skin)			
Terminal illness			
Uncontrolled Diabetes Mellitus (HgbA1C >8.5%)			
Decreased kidney function (Urea, Creatinine)			
Concentrated Urine			
Functional Signs			
Functional Impairment (hand dexterity, blindness)			
Cognitive Impairment/Increased Confusion			
Urinary Incontinence/Urinating a small amount			
Impaired decision making			
Unaware of need to drink/Decreased Thirst			
Increased Fatigue or Tiredness (sleeping more)			
Dependent for eating and drinking			
Physical mobility - wandering			
Unable to make needs known			

Completed by: _____ Date:_____ ☐ Faxed to RD
(Signature)

Appendix B

Gastrointestinal Distress Treatment Options
Oral Rehydration Solutions to Enhance Hydration

Definitions:

Dehydration: A complex condition resulting in a reduction in total body water. This can be due primarily to a water deficit (water loss dehydration) or a salt and water deficit (salt loss dehydration) as a result of inadequate intake or vomiting or diarrhea.

Oral Rehydration Solutions (ORS): are aqueous solutions composed of glucose and electrolytes, including sodium, potassium, chloride, magnesium, and phosphorus, with dehydration preventative and rehydration activities. Upon oral administration of the oral rehydration solution (ORS), water, electrolytes and glucose are absorbed from the gastrointestinal (GI) tract into systemic circulation. This replenishes the body's supply of water, carbohydrates and electrolytes, and prevents both dehydration and renal dysfunction. ORS is available through pharmacy as a powder or in ready to use format. Flavoured ORS can increase palatability.

Rehydration: The process of restoring lost water (dehydration) to the body tissues and fluids. Rehydration is imperative whenever dehydration occurs, from diarrhea, vomiting, lack of drinking, or medication use. While rehydration can be by the oral route, subcutaneous route (hypodermoclysis) or the intravenous (IV) route, this guideline focuses on the oral route.

Rehydration Failure: Progression of resident specific signs of dehydration, failure to replace deficit over 8 hours, or the presence of intractable vomiting and severe diarrhea.

Objective:
1. To treat dehydrated residents using an oral rehydration solution to reduce severity/frequency of vomiting and diarrhea. This may be used as:
   - the sole therapy
   - or as complimentary therapy with IV or hypodermoclysis when more timely repletion required.
2. To determine when ORS is required versus simple encouragement of fluid intake
3. To reduce future issues related to dehydration, such as orthostatic hypotension associated falls, arrhythmia associated electrolyte abnormalities, acute kidney injury or skin breakdown.

In cases of dehydration due to inadequate intake, specialized ORS may not be required.

Goal: To replace fluid losses of 1000 mL over 4 to 6 hours to reduce:
- morbidity
- need for IV/hypodermoclysis
- Emergency Department visits for IV or care related to advancing dehydration.

Procedure:
1. **Consult Phase:** Consult prescriber regarding resident's condition before proceeding with an oral rehydration solution (ORS), including goals of care, medication review, contraindications. If medications are to be given for nausea or pain wait 20 minutes after medications to begin drinking ORS**. It is highly recommended that residents not consume food or nutritional supplements during ORS therapy but can resume eating once symptoms are resolved.**

2. **Initiation Phase:**
   - Use containers where total volume is known. If able, use bottles or glasses that have volume measures on the side to assess volume consumed.
   - Serve ORS at temperature preferred by resident, do not dilute or add ice. Provide resident with a straw, if able to use safely. Thicken fluids to appropriate consistency if necessary.
   - Instruct the resident or help the resident as needed to drink **30mL** every **5-10 minutes** (consider using a 30mL medication cup if required for measurement)**.** Use a clock if available as it's important that it is given slowly at first.
   - Log fluid volume consumed and record episodes of vomiting and diarrhea.

3. **Progression Phase:** Consumption Recommendations Modified for PCH

ORS Solution	Total Treatment Time if ~30mL consumed at 5 to 10 minute intervals
1st 250mL consumed	40 minutes to 1 hour 20 minutes
2nd 250mL consumed	1 hour 20 minutes – 2 hours 40 minutes
3rd 250mL consumed	2 hours – 4 hours
4th 250mL consumed	2 hours 40 minutes – 5 hours

   - Residents with vomiting should be encouraged to maintain a slower rate of intake until they tolerate the fluid well. A small amount of vomiting is not an indication to stop oral rehydration.
   - If the first 250mL has been taken without vomiting and nausea is controlled, increase to 60mL every 5-10 minutes. Residents without vomiting may drink faster as tolerated.
   - If symptoms have resolved after 1000 mL of ORS consumed can resume intake of preferred fluids and/or food as tolerated by resident.
   - If the resident is unable to consume the recommended treatment volumes monitor for improvement or progression to rehydration failure.
   - If rehydration failure occurs, consult prescriber.

4. If resident refuses or is unable to consume ORS, reassess and consider alternate means of hydration that are in keeping with the goals of care which may include IV therapy or hypodermoclysis.

5. Preferred solution is commercially produced ORS available from pharmacy. However when there is unavailability of commercial ORS or resident refusal, if there is capacity within the site, alternative options such as homemade ORS recipes are options:

Base Beverage: Water	1 litre water ½ teaspoon table salt 6 level teaspoons sugar Options: If resident dislikes the taste of plain solution, add artificially sweetened drink crystals until acceptable.
Base Beverage: Tomato Juice	625mL plain tomato juice 375mL water
Base Beverage: Orange Juice	360mL unsweetened orange juice 600mL water ½ teaspoon table salt
Base Beverage: Gatorade® G2	1 litre Gatorade® G2 ½ teaspoon table salt

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