

LEGISLATION

Purpose

Restricted Activities for Registered Dietitians are stated in the Dietitians Regulation. They are further defined in this Interpretive Guide to clarify registrants' practice and the need for registration with specific Restricted Activities.

Legislation

Dietitians Regulation, sections 1 and 5.

- Section 5 states:
 - “Subject to section 14 of the Act [Health Professions Act], no person other than a registrant who meets the additional qualifications set out in the bylaws of the College may:
 - a) design, compound, or dispense therapeutic diets if nutrition is administered through enteral means,
 - b) design therapeutic diets if nutrition is administered through parenteral means, or
 - c) administer a substance to a person by instillation through enteral or parenteral means”.

Note: for registration purposes, the Registration Committee separated section 5(c) of the Dietitians Regulation into two Restricted Activities, Restricted Activities C and D. They are defined as:

- **Restricted Activity C** - administer a substance to a person by instillation through enteral means.
 - **Restricted Activity D** - administer a substance to a person by instillation through parenteral means.
- Section 1 includes the following definitions:
 - **Compound:** to mix ingredients for enteral or parenteral nutrition.
 - **Design:** the selection of appropriate ingredients for enteral or parenteral nutrition.
 - **Dispense:** to fill a prescription for enteral nutrition.
 - **Enteral:** administration of a nutritional substance to a patient by means of a feeding tube into the gastrointestinal tract.
 - **Parenteral:** administration of a nutritional substance to a patient directly into the blood stream.

Background Information

- “Administer” is not defined in the Dietitians Regulation. To assist registrants, the following definition has been approved by the CDBC Registration Committee and Board:
 - **Administer:** to physically provide a nutritional or non-nutritional substance via an enteral or parenteral access device or system or provide instruction for same.

Practice Setting

- The Restricted Activities may be performed in all practice settings (e.g., community, residential care, acute care, critical care) and in both the pediatric and adult population.

Registration and Competence

- When a Registered Dietitian (RD) practices one or more of the aspects of any of the Restricted Activities, they are required to be registered with that Restricted Activity.
- A RD *practicing* a Restricted Activity is competent to perform each aspect of the Restricted Activity.
 - **Example:** An RD who designs and compounds enteral products, even though that RD never supervises the dispensing of such products by non-registered staff members, must be registered with Restricted Activity A.
- A RD who *instructs* others to perform a Restricted Activity **is** required to be registered with the Restricted Activity.

- A RD who *supervises* a registered health care professional who performs the Restricted Activity (for example another RD who is registered with the Restricted Activity) is **not** required to be registered with the Restricted Activity.
- A RD who *directly supervises* a non-regulated health care worker (for example, a food service worker) **is** required to be registered with the Restricted Activity and is responsible for that person's practice.
 - *Example: An RD who does not design or compound enteral products, but who is responsible for the supervision of a non-registered staff member who dispenses enteral products, must be registered with Restricted Activity A.*

Interpretive Guideline

Below are competencies that are included but not limited to a specific Restricted Activity. As per the Code of Ethics and Standards of Practice, it is the duty of the Dietitian to be practice ready before providing nutrition support.

Restricted Activity A – Enteral Nutrition (EN)

Action	Interpretation and Practice Guidelines
	<p>If Enteral Nutrition is indicated, the RD:</p> <ul style="list-style-type: none"> • Assesses the need for nutrition through enteral means with the ability to weigh risks and benefits. • Selects the appropriate EN formulation (design). • Demonstrates knowledge of products available on formulary, including standard polymeric, hydrolyzed, and modular products. • Accurately identifies published guidelines and designs EN recommendations with published guidelines. • Accurately identifies initial feed rate and advancement of rate to goal. • Accurately identifies IV fluids and accounts for this in calculation of EN delivery. • Identifies and/or recommends the appropriate EN feeding route. • Determines +/- teaches/imparts knowledge of the appropriate EN delivery method (i.e., intermittent/continuous feed, volume, rate, etc.). • Is proactive in EN problem solving, includes monitoring and analyzing changes in the enterally fed patient, and adjusting as needed. • Communicates (verbally or in writing, as appropriate) with the patient/caregiver and EN order recommendation and rationale verbally and in medical record with the interdisciplinary team. • Compounds the EN ingredients. • Supervises/instructs others to compound EN ingredients. • Fills an EN order. • Distributes an EN order. • Supervises other staff filling an EN order. • Understands and is able to +/- teach/impart knowledge of appropriate methods to instill medications enterally and potential associated complications. • Demonstrates ability to impart knowledge of food safety concerns (e.g., hang times, temperature, storage) for EN formulations and home blenderized formulations. • Demonstrates ability to consider multiple factors +/- to impart knowledge and rationale for determining appropriate home tube feeding schedule. • Demonstrates ability to transition patient from EN to oral. • Demonstrates ability to judge when situation has turned from chronic to acute, or stable to critical. • Demonstrates knowledge of when to refer to alternate health care professional (e.g., MD, RN, RPh, etc) +/- impart knowledge of referral rationale. • Collaborates with other team members/practitioners with regards to EN. • Demonstrates commitment to EN accuracy. • Shows confidence in own EN skill level.

Action

Interpretation and Practice Guidelines

Example A:

An individual is not eating well. The client's physician writes the following order: "enteral nutrition as per Dietitian". The RD:

- (a) identifies the metabolic concerns that influence the nutritional requirements;
- (b) selects a formula (home, blenderized, or commercial) that meets the client's energy, macronutrient (protein, carbohydrate, fat and fluid), and micronutrient (vitamins, minerals and trace elements) needs; **or**
- (c) selects a formula and determines modifications needed to meet the client's specific macronutrient requirements (for example, addition of protein powder to the feeding regimen); **or**
- (d) recommends that the client's needs be met through the mixing of formulas, and the appropriate ratio (for example, one container of product X to one container of product Y); **and/or**
- (e) identifies the need for a multi-vitamin and mineral supplement.

Example B:

The RD analyzes a patient's formula adequacy with respect to macro and micronutrients and the total volume per 24 hours to meet the client's nutrient needs.

Example C:

The RD physically mixes enteral ingredients to enhance one or more component of the nutrition formula, such as:

- (a) physically adding protein powder to an enteral formula;
- (b) physically adding water to a powdered formula.

Example D:

The RD supervises food service staff who mix enteral ingredients (for example, addition of modular products or reconstitution of powdered formulas), such as:

- (a) supervising a kitchen staff member who physically adds protein powder to an enteral formula or water to a powdered formula;
- (b) advising kitchen staff to mix two enteral products to create a new formula that best meets the patient's needs.

Example E:

The RD:

- (a) instructs clients who are being trained to mix ingredients;
- (b) instructs a client to add protein powder to his or her enteral formula.

Example F:

The RD:

- (a) physically fills a physician's order (like a pharmacist dispensing a medication as per the physician's prescription).
- (b) supervises staff who distribute or deliver the physician prescribed product to a client.
- (c) oversees the release from a controlled distribution area (for example, kitchen or stores) of the enteral product (commercially packaged or RD modified specialty product) in the required amount for the required time frame, as ordered by the prescribing physician.

Restricted Activity B – Parenteral Nutrition (PN)

Action	Interpretation and Practice Guidelines
	<p>If Parenteral Nutrition is indicated, the RD:</p> <ul style="list-style-type: none">• Appropriately identifies indication for PN with ability to weigh risks and benefits.• Identifies type of PN formulation available to the worksite (2 in 1, IVFE, TNA).• Demonstrates knowledge of lipid formulations available to the worksite.• Accurately identifies published guidelines and designs PN recommendations consistent with published guidelines.• Appropriately determines starting points for electrolytes based on medical condition, nutrition assessment, and physical examination.• Accurately identifies IV fluids and accounts for this in calculation of PN formulation.• Demonstrates knowledge and rationale for lipid-free PN.• Demonstrates knowledge of appropriate lines and filters for specific PN formulations.• Demonstrates knowledge of pump use for PN formulation.• Reviews PN order for osmolarity and appropriate route of administration.• Recognizes safe zones for dextrose (mg/kg/min) and lipid administration (mg/kg/min, EFA deficiency, triglycerides).• Is proactive in PN problem solving, monitoring and analyzing changes in the PN patient, including complications, and adjusting PN as needed.• Communicates (verbally or in writing, as appropriate) with the patient/caregiver, and communicates PN order recommendation and rationale verbally and in medical record with the interdisciplinary team.• Accounts for insulin administration in designing PN and weaning of PN.• Demonstrates knowledge of hang times for PN formulation.• Provides appropriate education to patient and family with respect to PN.• Demonstrates ability to transition patient from PN to EN/oral.• Demonstrates ability to judge when situation has turned from chronic to acute, or stable to critical.• Collaborates with other team members/practitioners with regards to PN.• Demonstrates commitment to PN accuracy.• Shows confidence in own PN skill level.• Acquires new skills and knowledge related to PN, as applicable. <p><u>Example:</u></p> <p>An individual with high serum potassium levels requires parenteral nutrition. The client's physician writes the following order: "Dietitian to assess". The RD:</p> <ol style="list-style-type: none">(a) identifies the metabolic concerns that influence the nutritional requirements and selects the appropriate energy, macronutrient (protein, carbohydrate, fat, and fluid) and micronutrient (vitamins, minerals, and trace elements) for the parenteral solution to meet the client's nutritional needs, and/or(b) recommends that the client's needs be best met through a modification of the vitamin, mineral and/or trace element components of the parenteral solution.

Restricted Activity C – Administration of Enteral Nutrition (EN)

Action	Interpretation and Practice Guidelines
"Administer"	<p>If a substance is being administered by instillation through enteral means, the RD:</p> <ul style="list-style-type: none"> • Demonstrates ability +/- imparts knowledge of how to connect feeding bag to enteral delivery device. • Demonstrates ability +/- imparts knowledge related to programming pump with appropriate volume, rate and flushes. • Demonstrates ability +/- imparts knowledge of troubleshooting complications (e.g., pump issues, unclogging tube, etc.). • Understands +/- demonstrates ability to impart knowledge/demonstrate care and use and replacement of tubes, bags, pumps, etc. • Understands +/- imparts knowledge of basic stoma site care. <p><u>Example A:</u> An RD: (a) connects the feeding bag to the enteral delivery device and sets the appropriate volume and rate on the pump. (b) physically changes an enteral feeding bag to infuse a nutritional or non-nutritional substance to a client.</p> <p><u>Example B:</u> An RD flushes a feeding tube with water in order to prevent tube obstruction.</p> <p><u>Example C:</u> An RD: (a) instills pancreatic enzyme when the tube is obstructed. (b) instructs clients, caregivers, RDs or other health care professionals to infuse a nutritional or non-nutritional substance to a client.</p> <p><u>Example D:</u> The RD instructs the client and/or caregiver to connect the feeding bag to the enteral pump, adjust the delivery system as required, and flush the enteral feeding tube with water or deliver other non-nutritional substances.</p> <p><u>Example E:</u> The RD demonstrates to the client and/or caregiver, in simulation or directly, how to clear a feeding tube occlusion.</p>

Restricted Activity D – Administration of Parenteral Nutrition (PN)

Action	Interpretation and Practice Guidelines
"Administer"	<p>If a substance is being administered by instillation through parenteral means, the RD:</p> <ul style="list-style-type: none"> • Physically manipulates or adjusts the parenteral delivery device or system. • Physically changes a parenteral feeding bag to infuse a nutritional substance or non-nutritional substance to a client. • Instructs clients and/or caregivers, RDs or other health care professionals to infuse a nutritional or non-nutritional substance to a client. <p>Note: RDs do <u>not</u> administer a substance to a person by instillation through parenteral means unless they have had additional supervised education and practice. This procedure is generally performed by Registered Nurses.</p>

The CDBC policy *Rc-13: Restricted Activities – Declaration to Practice* requires Dietitians who practice enteral and/or parenteral nutrition to declare competence with this practice annually. Additionally, such Dietitians must maintain their currency to practice any RAs by annually completing *Learning Reports* (Learning Activities and comments on the Learning Outcome) through the CDBC's annual Quality Assurance Continuing Competence Program (CPP).

Suggestions for suitable learning activities include, but are not limited to:

- Courses, workshops, and seminars:
 - National Board of Nutrition Support Certification (NBNSC) established by the American Society of Parenteral and Enteral Nutrition (ASPEN)
 - Dietitians of Canada, Learning on Demand, Critical Care Nutrition
 - Basic Five Enteral Workshop
 - Basic Five Parenteral Workshop
 - Fraser Health Authority Parenteral Nutrition Training Course
 - Health Authority Specific Training & Education
- On the job training in Enteral or Parenteral Nutrition
- PEN literature reviews
- Presenting on current issues in Enteral or Parenteral Nutrition
- Writing articles/papers on current issues in Enteral or Parenteral Nutrition
- Unusual EN/PN cases presented to colleagues at complex care rounds
- Case Studies
- Webinars (i.e, ASPEN).

Annually, one learning plan for Restricted Activity A/C and one learning plan for Restricted Activity B will be required if practicing with Restricted Activities. For further examples of Learning Reports and activities, please review the examples in your online continuing competency program.

Example 1 – Restricted Activity A/C

- A. *Competency Chosen to Develop Goal*: “Demonstrates ability to consider multiple factors +/- imparting knowledge and rationale for determining appropriate home tube feeding schedule.”
- B. *Standard and Indicator*:
- Standard 12: A Dietitian provides quality professional services that reflect the unique needs, goals, values and circumstances of the client.
 - Indicator 5: Monitor client outcomes and adapt the service plan as clients' needs change.
- C. *SMART Goal*: “This year, I will increase my knowledge level regarding home blenderized tube feeds to confidently aid appropriate home tube feeding clientele who use commercially prepared tube feed formula, but who have difficulty accessing commercialized tube feeding product (due to remote living conditions and/or budgetary constraints), to transition to blenderized tube feeding”.
- D. *Learning Activities*:
1. PEN access: Reviewed “The Use of Blended Diet with Enteral Feeding Tubes” from BDA, the Association of UK Dietitians. This included considerations on food safety, jejunal vs gastric feeding differences, and involving other members of the healthcare team as well as members of the client's support team in the blenderized tube feed care plan.
 2. Discussion with RD colleagues who have been working with home blenderized tube feeds to glean tips such as recipe modification/development to ensure that clients receive adequate macro/micronutrients and hydration.
 3. Attended education session that included pump training, including adjustment of pump settings and feeding bag modification.

4. Prepared trials of different blenderized viscosities to determine appropriateness for pump use vs syringe feeding. Samples for taste-tested for acceptability.
4. Literature review. A small example of literature reviewed:
- Elizabeth Bobo, Reemergence of Blenderized Tube Feedings. Exploring the Evidence, *Nutrition in Clinical Practice*, 31,6 (730-735), (2016).
 - Claire Kariya, Katherine Bell, Celise Bellamy, Jason Lau and Kristy Yee, Blenderized Tube Feeding: A Survey of Dietitians' Perspectives, Education, and Perceived Competence, *Canadian Journal of Dietetic Practice and Research*, 10.3148/cjdp-2019- 007, (1-5), (2019).
 - Teresa W. Johnson, D. L. Milton, Kelly Johnson, Holly Carter, Ryan T. Hurt, Manpreet S. Mundi, Lisa Epp and Amy L. Spurlock, Comparison of Microbial Growth Between Commercial Formula and Blenderized Food for Tube Feeding, *Nutrition in Clinical Practice*, 34, 2, (257-263), (2018).
- E. *Learning Outcome*: "I am confidently able to speak to the use of blenderized tube feeding as a viable and appropriate alternative to using expensive and difficult to access commercially prepared formulations. I have become a resource in my community and am able to share my information with other Dietitians and healthcare providers in my small community who are looking to reduce the cost and improve the accessibility of appropriate home tube feeding."

Example 2 – Restricted Activity B

- A. *Competency Chosen to Develop Goal*: "Aware of lipid formulations available to the worksite."
- B. *Standard and Indicator*:
- Standard 14: A Dietitian uses critical thinking to obtain assessment data, determine practice problems, plan, implement and evaluate professional services.
 - Indicator 3: Analyze/interpret data using critical thinking, professional judgement and best practice knowledge
- C. *SMART Goal*: "Now that SMOF lipids are available at my worksite, I will become comfortable within the next six months in assessing each appropriate nutrition support patient to determine whether SMOF can be implemented as the lipid formulation of my TPN recommendations."
- D. *Learning Activities*
- Reviewed site-specific policies and procedures that were recently updated with information about SMOF lipid availability for nutrition support plans that include TPN.
 - Attended a Lunch and Learn hosted by Fresenius Kabi regarding the literature available supporting the use of SMOF lipid products. Presentation included discussion of the benefit of transition to a 3-in-1 TPN bag for potential future use at my worksite.
 - Consulted a member of the TPN resource dietitians in the first several TPN nutrition assessments since undertaking the SMOF implementation to ensure that SMOF was appropriate, especially in circumstances where complex medical diagnoses and food allergies were present.
- E. *Learning Outcome*: "I am now able to write TPN recommended orders with the knowledge and skill set to determine when SMOF lipid should be used versus when it is best to use Intralipid (the other lipid emulsion available to my worksite). I find I am now able to confidently advise other dietitians and dietetic students in my workplace who are looking for TPN guidance in their practices."