Approaching a New Task when Practising Dietetics

Blenderized Tube Feedings

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Julia, a young child with a neuromuscular disorder, is admitted to hospital for placement of a gastrostomy tube due to a swallowing impairment and growth failure. Sarah, an RD, develops a nutrition care plan and monitors Julia's progress while in hospital. After Julia is tolerating the enteral feedings and feeling well, she will return home with the g-tube. If home care services are not required, Sarah would need to plan to instruct Julia's mother on administering the tube feedings for home use.

Recently, the child's mother requested that Julia receive a blenderized tube feeding (BTF), citing that her daughter is experiencing abdominal discomfort and vomiting from the commercial enteral formula. Being highly processed, commercial products do not align with the mother's health-conscious attitude towards nutrition and food.

Sarah has never developed a nutrition care plan for BTFs and wonders whether she should implement this plan or not.

How can Sarah approach this request?

RD TASK DECISION FRAMEWORK

Blenderized tube feeding (BTF) is whole foods liquefied using a food blender and administered as a bolus through a gastrostomy tube.[1] Before the introduction of commercial enteral formulas in the late 1960s, most tube feedings used in hospitals were made from blended hospital foods.[2] With advancing technology, commercial enteral formulas addressed many concerns associated with BTFs such as high microbial loads, risk of bacterial contamination, tube clogging due to high viscosity, and inadequate macro- and micronutrients delivery.[3]

Over the last few decades, commercial formulas have been the mainstay of tube feedings in North America.[2] However, recently, BTFs have made a comeback as some people believe that they may be more natural, better tolerated and cost-effective than commercial formulas.[2] Increasingly, RDs are being asked to develop nutrition plans for BTFs.

As an RD, Sarah has a professional responsibility to provide safe, ethical and competent client-centered services. Client requests, such as the BTF one, need to be evaluated within this context. The College's *RD Task Decision Framework* will help Sarah determine whether or not to implement the nutrition care plan for BTFs by focusing on principles and values of client-centred services.

The detailed *RD Role and Task Decision Framework (2012)* is on the College website. Enter the word "Task" in the search box to access it.

IS THE TASK WITHIN THE DIETETIC SCOPE OF PRACTICE?

Developing tube feeding nutrition care plans are within the dietetic scope of practice and within the area of expertise of dietitians. When appraising her personal scope of practice, Sarah should not only consider her current skills but also those that could potentially be acquired through further learning, skill development and training. Simply to say "no", based on her existing competence, Sarah would miss an opportunity for continuing education and professional growth in her full scope of practice. She would also fail to tailor the tube feeding recommendation to her client's needs.

WILL DEVELOPING THE NUTRITION PLAN FOR THE BTF SERVE THE CLIENT'S NEEDS?

In this scenario, Julia's mother believes that BTFs are more wholesome and better tolerated feedings than commercial ones; therefore implementing a BTF respects the mother's values, which is a fundamental component of client-centred services.[4] Her attitude is not uncommon amongst BTF consumers whom often believe, compared to commercial formulas, that BTF are more natural, fresh and unprocessed forms of food without synthetic ingredients or preservatives.[2] Other potential benefits include:

- Flexibility and variety in choosing ingredients for BTF recipe;
- Ability to add specific foods to target a nutrition or health concern, such as high fibre foods for constipation;
- Although anecdotal reports, decreased gastrointestinal intolerances and improved tolerance to feeding volumes;
- Psychosocial considerations for clients and their family members, such as relationship bonding between family members when preparing and sharing foods at mealtime; and
- Cost-saving, particularly in situations when the commercial enteral formula is not covered by the client's insurance program.[1,2]

ARE THERE ANY LEGAL OR ORGANIZATIONAL BARRIERS THAT WOULD PREVENT SARAH FROM IMPLEMENTING NUTRITION PLAN FOR BTFS?

Sarah needs to follow her hospital's policies as well as the law (*Regulated Health Professions Act, Dietetic Act, Public Hospitals Act*) before implementing the BTF. A regulation under the *Public Hospitals Act* requires that only a physician, dentist, midwife or nurse in the extended class can write an order for "treatment". Most organizations have interpreted the diet order in a hospital to be a "treatment", therefore, if Sarah wants to start the BTF in hospital, she requires a physician order to change Julia's feedings to a blenderized formulation. If a medical directive for enteral feed orders exists, Sarah should seek authorization for an addendum stating that BTFs are included in this medical directive before proceeding to use it. Otherwise, she could simply request a physician's order.

Practical elements such as kitchen equipment, labour time, and the capacity to develop BTF recipes free of contaminants are also important considerations when assessing the feasibility of BTFs.[3] Sarah can advocate on behalf of her client for the human and equipment resources needed, however, the hospital must be willing to acquire the resources and incur the liability and risk of the BTF delivery. In reality, the hospital may not have the ability to make the BTFs for Julia.

With regard to the implementation of Julia's BTFs at home, Sarah needs to assess if Julia's mother and other family members have the capacity, motivation, resources and the time to safely prepare and administer them.[3] She also needs to determine if the family would require additional support for the management of the BTFs after Julia is discharged from the hospital. A referral to homecare, a private practice RD with BTF expertise or another healthcare provider may be required.[3]

DOES SARAH HAVE THE REQUIRED SKILLS AND COMPETENCE TO PERFORM THE NEW TASK OR ROLE?

A basic principle of the *Code of Ethics for the Dietetic Profession in Canada* [5] is to maintain a high standard of personal competence through continuing education. In keeping with this principle, Sarah has an obligation to obtain the knowledge, skill, and judgment required to effectively implement a BTF nutrition care plan.

To fulfill her professional responsibility to appropriately care for her client, Sarah would need to expand her own knowledge of BTFs and learn how to develop and monitor a nutrition care plan for BTFs. The ability to create, adapt and analyze BTF recipes is critical.

BTF is not an ideal diet option for all tube-fed clients. Sarah will require strong assessment skills to determine whether Julia is a candidate for BTF. Clients who are already tolerating bolus feeds via a g-tube and are otherwise healthy tend to be good candidates.

Contradictions to BTFs include acute illness or immunosuppression, narrow g-tubes, fluid restrictions, jejunostomy tubes, continuous drip feedings, restrictive diets, and food allergies or intolerances.[1]

Given that Julia will require BTFs at home, Sarah must also learn how to teach the nutrition care plan for home use. Working with other RDs or healthcare professionals who are knowledgeable in BTFs would provide Sarah with the support and guidance she needs while learning these new skills. By learning how to implement BTFs in response to her client's needs, Sarah would be meeting her professional obligation for providing safe and competent client-centered services.

WHAT ARE THE INTERPROFESSIONAL COLLABORATION POSSIBILITIES?

In the *Code of Ethics for Dietitians of Canada*, RDs pledge to "work cooperatively with colleagues, other professional, and laypersons."[5] Clients with complex medical issues, like Julia, often require the expertise of numerous healthcare professionals and specialists. Interprofessional collaboration and communication amongst these caregivers can increase the quality of care and improve the client's experience. If disagreement arises amongst colleagues regarding Julia's diet order, Sarah can advocate for her client using evidence-based nutrition practice and client-centred values. With her knowledge of the mother's perspective on feeding her child, Sarah can promote the rights of her client and help the health care team to implement appropriate enteral nutrition therapy.

INFORMED CONSENT

Considering the *Heath Care Consent Act* and the College's *Professional Misconduct Regulations*, Sarah has the legal and professional obligation to obtain an informed consent from Julia's mother (the substitute decision-maker) before providing a nutrition treatment. Based on the nutrition assessment of her client, Sarah can discuss the suitability of BTFs for Julia with the mother.

Although the mother may want BTF for her child, Sarah needs to clearly convey whether it is a safe option or not. To do this, Sarah must have the competence to effectively communicate and inform the mother of the potential risks and benefits of BTFs as well as any alternative options. Costs, time commitment, equipment, and proper food handling techniques associated with BTFs must also be discussed considering that Julia will go home with a g-tube. Informing Julia's mother of various aspects of the treatment will allow her to make that informed decision. Open communication with Julia's mother can help Sarah to better explore the rationale behind the request and to assess the decision-making capacity of the mother for making an informed consent.

PRACTICING WITHIN THE FULL SCOPE OF PRACTICE

RDs can approach new tasks by working through the questions of the *RD Task Decision Framework*. They have a responsibility to learn new skills, such as developing BTFs, which are within the dietetic scope of practice. This will enable RDs to expand their knowledge and balance their professional obligations for evidence-based and safe practice with that of meeting client needs.

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1. Mortensen, M. J. (2006). *Blenderized Tube Feeding: Clinical Perspectives on Homemade Tube Feeding*. PNPG Post; 17(1): 1-4.
2. Bobo, E., & Stone, K. *Blenderized Formula For Tube Feeding. Frontier,* Fall 2013. https://www.nutritioncare.org/Networking/Sections/Section_Information/
3. Johnson, T. W., Spurlock, A., & Galloway, P. (2013). "Blenderized Formula By Gastrostomy Tube: A Case Presentation And Review Of The Literature". *Topics in Clinical Nutrition*; 28(1): 84-92.
4. Carole Chatalalsingh, PhD, RD, "From the Client's Perspective," *résumé*, Spring 2013, p. 8-9. Access this article at www.collegeofdietitians.org, enter "client's perspective" in the search box.
5. *Code of Ethics For the Dietetic Profession in Canada (1997)*, developed by Dietitians of Canada and adapted by the College. Access the *Code of Ethics* at www.collegeofdietitians.org, enter "code of ethics" in the search box.