

Is a Blenderized Diet Right for My Child with CdLS?

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Many individuals with Cornelia de Lange Syndrome (CdLS) are unable to eat by mouth and therefore require long-term home tube feedings. While most families use standard commercial formulas for meals, a growing number of patients want fresh unprocessed whole foods instead of, or in addition to, the typical commercial formula. Talk to your medical team before making any changes to your child's feeding plan.

Blenderized feeding is creating a meal with whole foods that are liquefied in a blender with broth, water, juice, or various types of milk, and given directly via syringe bolus in feeding tubes. This practice is flexible, ranging from adding one small blended food per day with a standard commercial tube-feeding regimen to consuming a diet consisting solely of blenderized foods. To achieve balanced nutrition, blend ordinary meals in quantities similar to what they'd normally eat orally, using the government's "ChooseMyPlate" system. The nutrient content of more than 8,000 foods can be found on the USDA National Nutrient Database for Standard Reference at <http://ndb.nal.usda.gov/ndb/foods>.

Pros

If done properly, blenderized foods through a feeding tube can be safe, healthful and often cost less than commercial formulas. Children and their caregivers report that blenderized food is more appealing than commercial formula because of the family aspect, the variety of diet, the sight and aroma of foods which may allow a taste of real food again through smelling (and burping). This "tasting" is especially beneficial if you are planning to introduce table food to a child that has never eaten before. There are many nutrients, phytochemicals and fibers present in fruits, vegetables, whole grains and other foods that are not present in commercial formula. These may help with reflux, constipation, and diarrhea. Another benefit is that processed ingredients such as corn syrup, maltodextrin, sucrose, casein and whey proteins and oils found in formulas are not present. Lastly, blenderized food allows you the joy of cooking your own food again and it is a benefit to children with intolerances or who are allergic to certain ingredients in standard formulas.

Risks

While many patients report positive experiences with the use of blenderized foods in tube feedings, there are some risks involved, such as inadequate or unbalanced nutritional intake, microbial contamination and tube clogging.



Caregivers need to make safe and appropriate food choices. Without knowledge and guidance, caregivers can unintentionally cause harm. I recall a family adding table sugar or excessive un-measured amounts of protein powder to a child's formula to help him gain weight. There are many recipes for blenderized food on the Internet, but that doesn't mean they're well balanced, healthy or appropriate to go through a tube. Also think about the quantity in the recipe: If this quantity of food were on a plate, is it enough or too much for the person you are feeding?

Food safety is a huge concern because unlike standard prepackaged tube feeding products, freshly blenderized foods don't undergo the canning process. Blenderized foods need to be refrigerated to prevent spoilage. Wash all produce before use and ensure routine cleaning of blenders, utensils, and syringes to prevent microbial contamination. For continuous tube feeding via a feeding pump blenderized foods should be completed in less than two hours to minimize the risk of spoilage.

Tube clogging is a risk, but with proper care it can be avoided. Choose a modern high-speed blender to liquefy foods, and then strain mixtures if necessary. Use sufficient amounts of liquid in blends and frequently flush tubes with water.

Conclusion

While the use of blenderized foods for tube feeding is uncommon, it's becoming more popular among home tube feeding patients. However, it isn't for everyone, so discuss it with the patient's physician and medical team before switching nutritional regimens. For example, blenderized foods are medically inappropriate for people with severe maldigestion or malabsorption disorders who require elemental nutrition formulas. They're also unsuitable for those who lack the skills and motivation to prepare them.

Yet, for many people who have the desire, skills, and nutrition knowledge or a dietitian's guidance, and the ability to purchase the right foods and equipment, blenderized foods are a healthful alternative to tube feeding. As with any type of feeding, monitor your child's progress and ensure he or she is tolerating the blenderized foods well and meeting weight goals. For individuals with CdLS, adequate growth is important.