

Cardiac Education Series

Nutrition and Feeding Considerations

Nutrition in the pediatric cardiac population

- Providing adequate nutrition to our patients has many benefits
 - Supports growth & neurodevelopment
 - Supplies key vitamins, minerals, and electrolytes
 - Promotes wound healing & recovery
 - Optimizes immune function
 - Impacts quality of life for patients & families

Unique nutritional needs in the pediatric cardiac population

- Special considerations for nutrition include:
 - Increased metabolic demands & energy expenditure
 - Balancing nutrition with fluid restrictions
 - Hemodynamic stability
 - Poor feeding tolerance (potentially due to reflux, delayed gastric emptying, or decreased gut perfusion)
 - Fatigue with feeding (monitor work of breathing & endurance)

Potential cardiac specific complications that impact nutrition

- Heart failure- increased energy expenditure, electrolyte imbalances
- NEC (Necrotizing Enterocolitis) risk- especially in ductal-dependent lesions & single ventricle patients
- Laryngeal nerve injury leading to vocal cord paralysis- increases aspiration risk
- Chylothorax- loss of protein, fats, immune cells. Requires fat-restricted diets
- Protein losing Enteropathy- severe protein loss (esp. Fontan patients)
- Poor wound healing or delayed sternal closure- potentially linked to inadequate nutrition

UPMC Resources

Many resources are available on the Infonet

- [Collection, Storage, and Use of Human Milk \(PTC-RN235\)](#)
- [Decompression Tubes \(PTC-RN373\)](#)
- [Enteral Tube Feeding and Care \(PTC-RN325\)](#)
- [Oral Feeding \(PTC-RN315\)](#)

UPMC Resources

Many resources are available on the Infonet

- [Oral Care with Colostrum and/or Breastmilk for Infants in Intensive Care Units/Special Care Nursery \(HS-WH0012 *\)](#)
- [Preparing "Defatted" Human Milk \(PTC-RN246\)](#)
- [Parenteral Nutrition and Fat Emulsion \(PTCMDIV840\)](#)

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