Human milk is a 'life-saving intervention' for infants with congenital heart disease

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With a lower risk of serious complications and improved feeding and growth outcomes, human milk is strongly preferred as the best diet for infants with congenital heart disease (CHD), according to a research review in *Advances in Neonatal Care*, official journal of the National Association of Neonatal Nurses.

Jessica A. Davis, BSN, RN, CCRN, IBCLC, of UPMC Children's Hospital of Pittsburgh and Diane L. Spatz Ph.D., RN-BC, FAAN, of University of Pennsylvania School of Nursing, Philadelphia, reviewed and analyzed six studies on the benefits of human milk and breast-feeding for infants with CHD. They conclude, "Due to the overwhelming evidence of improved outcomes related to human milk feeding for critically ill infants, human milk should be considered a medical intervention for infants with CHD."

'Mother's Own Milk' Is Recommended Feeding for Babies with CHD.

Congenital heart disease is the most common category of birth defects, diagnosed in an estimated 1 in 1,000 newborns and infants each year. But while the benefits of human milk for premature and healthy infants are well documented, there is limited data on its role in improving outcomes for infants with CHD. The researchers examined evidence on the benefits of human milk on key outcomes for infants with CHD.

- **Necrotizing enterocolitis** (NEC) is a serious complication in which there is damage to the intestines. Based on studies showing that an exclusively human milk diet can reduce the incidence of NEC in premature infants, the same recommendation applies to infants with CHD.
- **Chylothorax** is a rare complication of chest surgery characterized by abnormal drainage of lymph fluid around the lungs, with a risk of severe adverse outcomes.

Studies have shown that skimming the fat from the mother's own milk allows infants to continue receiving a human milk diet during treatment for chylothorax.

- Infants with CHD are also at risk of feeding difficulties leading to inadequate growth and weight gain. Studies have shown that a diet of human milk can improve weight gain in infants with heart disease. But due to other pressing concerns in these critically infants, breastfeeding or alternative approaches to providing human milk are often not viewed as a high priority.

"Human milk is important to protect the infant with CHD from infection, decrease the risk of NEC, improve feeding tolerance, and protect the infant's brain/improve developmental outcomes," Ms. Davis and Dr. Spatz write. Based on this evidence, they believe that healthcare professionals have an ethical duty to help families make an informed decision about feeding for their infant with CHD.

The authors outline Dr. Spatz’s 10-step model to promote and protect human milk feeding and breastfeeding for infants with CHD. Recommendations include steps to ensure initiation and maintenance of the mother's milk supply, either by breastfeeding or pumping. If necessary, pasteurized donated human milk can serve as a bridge to the mother's own milk.

Other steps including ensuring skin-to-skin contact as soon as possible after birth and supporting mothers' ability to breastfeed and monitor their infant's milk intake and growth. For further information on the "10 Steps to Promote & Protect Human Milk and Breastfeeding in Vulnerable Infants," visit [http://www.aannet.org/initiati...rofiles/edge-runners—10-steps-to-promote-and-protect-human-milk](http://www.aannet.org/initiati...rofiles/edge-runners—10-steps-to-promote-and-protect-human-milk)

"Human milk is a life-saving intervention for infants with CHD and health professionals must prioritize
helping families to make an informed feeding
decision and ensure that mothers of infants with
CHD can reach their personal breastfeeding goals,"
states Dr. Spatz.

**More information:** Jessica A. Davis et al, Human
Milk and Infants With Congenital Heart Disease,
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