

Increasing the value of donor milk in the NICU: Questions and Opportunities

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The current clinical indication for the use of pasteurised donor human milk (PDHM) is as an alternative to artificial formula for the nutrition of preterm and ill, hospitalised infants at increased risk of necrotising enterocolitis. This use of PDHM is supported by the latest systematic reviews of the medical literature. However, it is reasonable to suggest that technical innovation in donor human milk banking (DHMB), since its establishment in the early 1900's has not been prolific. Hence, the product supplied by milk banks has largely not been optimised to meet the needs of its recipients. The overriding focus for DHMB's has been product safety, in some cases to the detriment of product quality. Pasteurisation of donor human milk is an example of a DHMB process, where quality is sacrificed for safety. As the PREM Bank's research programme expands we seek to revisit this balance by increasing product quality without a reduction in safety. However a fundamental principle that drives this process must be to ensure donor human milk (and milk products) must always support mother's feeding their own infants. The PREM Bank is developing a research programme following three aims; to provide better tools for clinicians to manage preterm infant nutrition, to provide a better product that better meets the needs of preterm infants (through the introduction of new technologies and better management practices) and a to provide better understanding of the physiology of initiation of lactation after preterm birth. Since establishment, the PREM Bank has seen much success with a dramatic (almost 10 fold) increase of donor human milk use in our NICU over 5 years. The success of the project will now be judged through our ability to reduce the use of donor milk in the nursery and support mothers' success in feeding their own preterm infants.