

Why choose own mother's milk over donor human milk?

When own mother's milk (OMM) is not available, pasteurised donor human milk (DHM) has become the standard of care.^{1,2} While OMM and DHM are often collectively called "human milk", there are significant differences not only in bioactivity, but in health outcomes, the maturity of the mammary gland (preterm milk vs term milk), stages of lactation (colostrum, transitional or mature milk) and provision costs.²

Own mother's milk (OMM)

Donor human milk (DHM)



Improved health

OMM reduces the risk of multiple morbidities, including NEC, sepsis, BPD, ROP, neurodevelopmental problems and rehospitalisation,³⁻⁷ compared to formula.

DHM has been shown to reduce NEC when it replaces early formula, but has not been shown to reduce the risk of other morbidities.^{2,8}



Faster growth

OMM achieves faster growth outcomes than DHM. In order to achieve this growth, OMM requires significantly less fortification than DHM.^{2,8}

DHM-fed infants experience slower growth than those fed OMM. DHM needs to be highly fortified with bovine protein to improve growth rates.^{2,8}



More suitable composition

Preterm milk has more components for immune and nutritional programming than term milk. Fresh early preterm milk (colostrum and transitional) is the best match for the preterm infant.^{2,9-13}

DHM is commonly collected from mothers producing term mature milk. Frozen term pasteurised DHM contains the least amount of protective components.^{2,10,11,14}



Lactoferrin in fresh preterm colostrum



Lactoferrin in pasteurised frozen term milk



Better bioactivity retention

There are only a few steps required to obtain freshly expressed OMM. This means live cells and bioactivity of milk components are preserved.^{2,11,14,15}

Many steps are required to obtain DHM. Storage, freeze/thaw cycles, heat and, in particular, pasteurisation compromise bioactivity and destroy the living cells.^{2,16,17}



Higher cost-effectiveness

OMM reduces the costs associated with NEC and multiple morbidities. Additionally, OMM is ~2.5x cheaper than formula and ~12x cheaper than DHM, when mothers provide 300-399 ml daily.^{2,18}

DHM acquisition costs are significantly higher than those of OMM as long as mothers provide at least 100ml per day. Moreover, when compared to formula, DHM only reduces the costs associated with NEC.^{2,18}



Own mother's milk should be a NICU priority

Obtaining OMM should always be the first choice over acquiring DHM.¹ Although DHM is a valuable resource for compromised infants as it is superior to formula, it cannot be considered equivalent to OMM.² All efforts to help mothers of preterm and compromised infants to initiate, build and maintain their own milk supply effectively, should be prioritised.

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