

# The value of mother's milk in the NICU

Mother's milk is not only nutrition, it is a medical intervention. Providing this milk is the most helpful thing mothers can do for their infant in the NICU. Empowering parents with evidence-based information about human milk can help families to give their preterm or sick infant the best possible start<sup>1,2</sup>.

## Protective components



### Powerful colostrum

Colostrum is packed with factors that promote intestinal development and reduce the infant's infection risk. The earlier the infant is born, the higher the concentration of these components<sup>2,3</sup>!



### Antibody boost

While touching or holding her infant, a mother starts to make specific antibodies against germs in her infant's surroundings. Infants then receive these protective antibodies through their mother's milk<sup>4,5</sup>.



### Living cells

Fresh milk contains thousands to millions of live cells per milliliter. Among these are leukocytes that protect the infant from infection, and stem cells that may act as an internal building and repair system<sup>6</sup>.



### Fats for brain development

Many different fats in mother's milk, like omega-3 fatty acids, optimize brain growth and development in the preterm infant who missed crucial growth occurring in the last trimester<sup>7,8</sup>.



## Improving early life outcomes



### Dose-response relationship

Increasing doses of human milk result in a decreasing risk of disease<sup>2</sup>. Each additional 10 mL/kg/day of mother's milk reduces the infant's risk of sepsis by 19%<sup>9</sup>. Every drop counts!



### Enhancing early development

Mother's milk enhances neurodevelopment beyond the NICU stay<sup>2</sup>. Infants receiving  $\geq 110$  mL/kg/day of mother's milk have a 5-point IQ increase and 14% improvement in behavioral scores at 18 months<sup>10</sup>.



### Fewer short-term morbidities

Compared with formula feeding, human milk reduces the risk of necrotizing enterocolitis (NEC), sepsis, SIDS and many other diseases in the first year of life<sup>11-15</sup>.

**6 – 10 x**  
NEC reduction  
by exclusive human milk<sup>12</sup>

**3 x**  
NEC reduction  
by human milk and formula<sup>12</sup>



### Returning home earlier

Preterm infants fed human milk and not formula are more likely to be discharged earlier and have a reduced risk of rehospitalization the first year after discharge<sup>10,11</sup>.

**2 weeks**  
earlier discharge  
from hospital<sup>11</sup>

**6.8 %**  
reduced risk  
of rehospitalization<sup>10</sup>

## Lifelong benefits



### Fewer long-term morbidities

Compared with formula, human milk feeding reduces the risk of disease over a lifetime. This includes a reduction in neurological impairment, childhood obesity and subsequent type 2 diabetes<sup>14,16,17</sup>.



### Better quality of life

Since human milk decreases morbidity and mortality compared to formula feeding, it reduces health care costs, increases the productivity of society and improves quality of life<sup>14</sup>.

A mother's milk is specifically designed for her infant. Mothers should be encouraged to express colostrum and breast milk for as long as possible, since this is something that only they can do for their child. Supporting mothers to pump early and frequently will help them to provide their infant with the lifelong benefits of an exclusive human milk diet<sup>18</sup>.

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