Human milk is unique in its capacity to protect against viral and microbiological infections. Complex immunological substances, that work both actively and passively, provide an irreplaceable shield to prevent illness and death during the early years. The protective properties of human milk are thought to have the capacity to save at least 1.3 million infant lives every year worldwide.¹

Breastmilk is packed with intricate growth factors, enzymes, secretory IgA, ligands, T-cells, lactoferrin, oligosaccharides and much more. These unique constituents not only have their individual functions, but also work in synergy to regulate growth and development, while providing life saving protection from infectious agents. Additionally, their impact is both physical and biochemical. For example, the protective lining of a breastfed infant’s gut provides critical and life saving physical protection against the transmission of HIV and the development of enterocolitis.

“The immunological protection that breastmilk affords has been recognized by researchers, medical professionals as well as national and international health organizations. A group of researchers studying the complexities and unique protective capacities of breastmilk noted that “the association we have described provides only a glimpse into the protective role of the innate immune system of human milk.”²

The mechanisms that give breastmilk its protective qualities are so numerous and complex that we have only begun to understand them.
Furthermore, the World Health Organization (WHO) also recognizes the important transfer of immunity from mother to her infant through breastfeeding. This was highlighted at the 2008 World Health Assembly, when the WHO urged governments to: “protect, promote and support early and effective breastfeeding, in order to boost the development of infants’ overall immune system.” (WHA Resolution 61.15)

Breastfeeding and epidemics

When infants are not breastfed they are susceptible to infection from a range of organisms, such as the most recent global H1N1 swine flu epidemic.

The protection of breastfeeding is vital during epidemics. The implementation of the International Code needs strict monitoring and enforcement to prevent unsolicited donations of infant feeding products such as infant formula, bottles and artificial nipples. During emergencies such donations can be even more damaging to infant health than during normal circumstances. The protection of early, exclusive and sustained breastfeeding is needed more than ever in crisis situations when interference in breastfeeding practices can be harmful and even deadly.

When faced with situations that require the unique protection afforded by human milk such as the 2009 H1N1 flu epidemic, breastfed children have the advantage.

References