

## **Leveraging the economic perspective of the value of human milk**

### **Prof Tricia Johnson**

Department of Health Systems Management, College of Health Sciences, Rush University,  
Chicago, IL, USA

Human milk is one of the most effective and low cost preventive health measures with short and long-term benefits for the infant and mother, yet it is often not viewed as a primary public health intervention. Should we view human milk as a primary prevention measure, similar to how childhood vaccinations and smoking prevention programs are viewed from the public health perspective? What is the economic investment needed to support the acquisition of human milk, and what is the return on investment of these efforts?

A substantial body of research has shown that infants receiving higher doses of human milk for longer durations are less likely to experience childhood diseases including gastrointestinal infections,<sup>1</sup> upper and lower respiratory infections,<sup>1</sup> acute otitis media,<sup>2</sup> acute lymphoblastic leukemia,<sup>3</sup> and Sudden Infant Death syndrome.<sup>4</sup> Additionally, research has demonstrated a dose-response relationship between lifetime amount and duration of breastfeeding and maternal outcomes, including a reduced risk of type 2 diabetes,<sup>5</sup> breast and ovarian cancers,<sup>5</sup> and cardiovascular disease.<sup>6</sup> Reducing the incidence of these childhood and maternal diseases thereby reduces costs by reducing the need for expensive medical care to treat the diseases. Additionally, the short-term health benefits of human milk for very low birth weight (<1500 g birth weight) infants are well-documented,<sup>7-10</sup> and there is growing evidence that human milk also improves neurodevelopment,<sup>11-16</sup> thereby reducing the need for special education services. Recent research has demonstrated that the investment needed by a hospital to acquire mother's own milk is relatively small, particularly when compared to the cost of hospital-based interventions for other patients.<sup>14</sup>

This presentation will summarize the current state of knowledge regarding the short- and long-term health benefits of human milk, cost of acquiring mother's own milk<sup>17</sup> and cost savings<sup>18,19</sup> associated with human milk from a global perspective.

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