

IMAGE

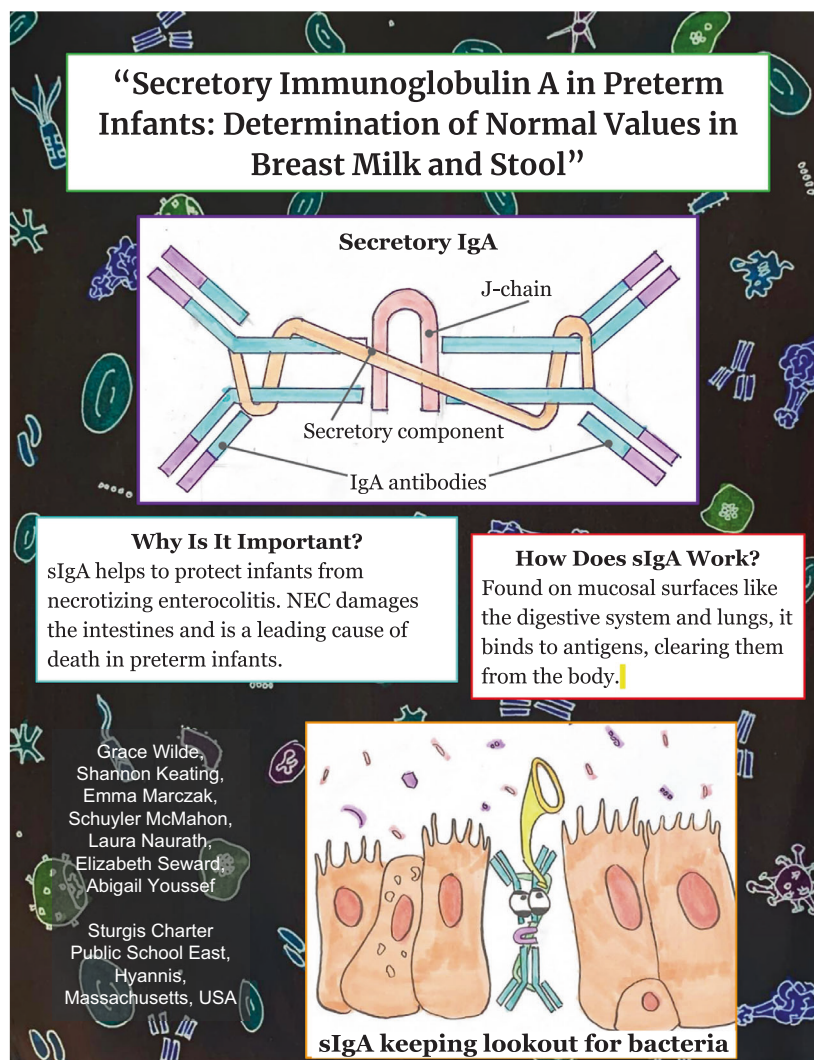


Science for Kids: Secretory immunoglobulin A in preterm infants: determination of normal values in breast milk and stool

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Results for Granger, Lamb, Embleton, <i>et al.</i> Study	
Results	So what?
sIgA levels are highest in colostrum and not affected by time in womb	Mothers who give birth as early as 23 weeks have robust levels of sIgA
MOM in the 3 weeks after birth has highest levels of IgA and sIgA	Early MOM is best to maximize levels of sIgA and IgA given to infants
IgA is not found in formula fed infants until 3 weeks after birth	Infants begin to produce their own IgA after 3 weeks
IgA and sIgA are halved when MOM is fed via tubing or stored cold	Suggests the benefits of directly feeding infants, when possible

Did you know that there are ~500 different substances in human breast milk? It's very complex!

Helpful Vocab
Preterm infant: Born before 37 weeks of pregnancy
Immunoglobulin: protein [antibody] that kills pathogens
MOM: Mother's Own Milk
Colostrum: Milk secreted in the days after childbirth

Sources
 Granger, C. L., Lamb, C. A., Embleton, N. D., et al. "Secretory Immunoglobulin A in Preterm Infants: Determination of Normal Values in Breast Milk and Stool." *Pediatric Research*, 13 Dec. 2021.
 Aryal, Sagar. "Immunoglobulin A (IGA)- Structure, Subclasses and Functions." *Microbe Notes*, 4 Feb. 2021, <https://microbenotes.com/immunoglobulin-a-iga-structure-subclasses-and-functions/>.