

Benefits Of Breastfeeding

Do you know the benefits of breastfeeding? There are so many wonderful benefits that are great for both infants and mothers. Breastmilk provides essential nutrition and antibodies for babies to thrive. This helps them build a strong immune system to protect them from illnesses. Breastmilk can help lower the risk of developing asthma, obesity, type 1 diabetes, ear infections, stomach bugs, sudden infant death (SIDS), and some cancers. For moms it can help them recover from child birth by increasing oxytocin (which entices the uterus to contract and reduce bleeding), relax, lose baby weight and even strengthen the bond between a mother and her baby.

There is a protein in breastmilk that can kill cancer cells! HAMLET (Human Alpha-lactalbumin Made Lethal to Tumor cells) was found by researchers in 1995, while doing a study on human milk proteins. They were working to find whether human milk proteins could prevent bacteria from sticking to cancer cells. HAMLET is a protein-lipid complex that is found in breast milk that can kill bacteria and cancer cells. There are two naturally occurring molecules that make up Hamlet, partially unfolded human alpha-lactalbumin and oleic acid.

HAMLET kills cancer cells by entering the cells nucleus, breaking up its DNA and causing apoptosis, basically making them self-destruct. Apoptosis is the process of a programmed cell death. Researchers have found it to be effective against 40 different cell lines and primary tumors, colon cancer, and bladder cancer. Healthy cells are safe from HAMLET as it doesn't harm them. It can destroy respiratory pathogens and bacteria that can result in antibiotic resistance, for example penicillin-resistant *Streptococcus pneumoniae* and methicillin-resistant *Staphylococcus*.

It is not recommended for people with cancer to buy breastmilk online. The HAMLET study did not contain "drinking" human milk. The protein in breastmilk needs to be altered for it to fight tumors. Scientist have altered the protein by partly unfolding the protein and adding a fatty acid to it. You will only have the alpha-lactalbumin protein before this process not HAMLET. Also, with any food or drink there are risks for bacteria. Those that can cause food-borne illness can easily grow when it isn't collected, handled, or stored accurately. Always follow proper handling and storage guidelines when pumping and storing breastmilk. This can expose those who are unwell to viruses that can make it into the milk and have a great effect on those who are not well.

For more information about or assistance with breastfeeding, please contact the Meigs County Health Dept.'s WIC Program at 740-992-0392 Monday – Friday from 8AM-noon or 1-4PM.

Amber Thompson
WIC Breastfeeding Peer Helper



