The Misconception of High Lipase in Human Milk

Misinformation about healthcare is rampant, and one of the most widespread topics has to do with human milk, and in particular, the concerns about high lipase in mothers' stored milk. This fallacy was spread among new moms and has unintentionally scared some into not feeding their children their stored milk or scalding it when reheating the milk, which destroys many - if not all - of the wonderful properties of human milk.

The Academy of Breastfeeding Medicine (ABM) has recently put out "Clinical Protocol #8: Human Milk Storage Information for Home Use for Full-Term Infants." In this comprehensive document, ABM explains what happens to human milk when it is refrigerated or frozen and what makes it smell and taste different from fresh milk.

"...Lipase-mediated triglyceride breakdown, releasing fatty acids. The odor likely comes from oxidation of these fatty acids. This lipolysis process has antimicrobial effects preventing the growth of microorganisms in thawed refrigerated milk. Heating milk to above 40 degrees Celsius to deactivate lipase is not advised because this may destroy many of the immunologically active factors in human milk."

Over the years, Mothers' Milk Bank has had many questions from donors who want to donate their milk because their baby refuses to drink it after it has been stored in a refrigerator or freezer because of a taste or smell, it's perfectly normal for stored milk to be this way. A baby who has been used to only fresh milk may well reject frozen milk - but they can get used to it. Taste preferences are not formed in infants before about 3 months of age so offering a feeding of stored milk in the early weeks will not only get a baby used to a bottle but also the taste.

The 2019 edition of Best Practice for Expressing, Storing and Handling of Human Milk by the Human Milk Banking Association of North America addresses the smell and taste of stored milk. It is "due to the breakdown of fats during storage and is safe to feed babies." And "mothers should be informed of the destruction of properties of their milk if they decide to scald".

Mothers' Milk Bank is a recognized source for the most recent information and research about human milk and can be a resource for your families. If you have a concerned parent, please feel free to have them reach out to us with any questions.

Sources:
Lactation Journal Club is back this February!

Colorado’s Lactation Journal Club is back in 2019! Thanks to everyone who attended our November meeting. Stay tuned to our club’s Facebook page for our February date and topic!

Prescribe Donor Milk

Donor human milk is the first choice for all babies anytime mom's own milk is unavailable and is essential for any baby with a weakened immune system or special dietary needs.

To learn more about prescribing donor human milk from Mothers’ Milk Bank to infants in your care, please visit our website and watch a short video.

Potential Milk Donors

Human milk is a gift that lasts a lifetime.

Nationally, we are seeing a growing demand for human milk for babies. We rely on the generosity of our donors and are thankful for the healthcare providers who encourage patients with excess milk to become milk donors to meet this demand. If you have a patient with an established milk supply and more milk than her healthy baby needs, please have her contact us. Those interested in becoming donors should visit our website for more information.

About Mothers' Milk Bank

A nonprofit program of Rocky Mountain Children's Health Foundation, Mothers’ Milk Bank (MMB) collects, processes, tests, analyzes and provides donor human milk to babies across the country. Babies who receive the milk may be premature or have severe illnesses and need human milk to thrive.

MMB consistently provides more milk to NICUs than any other nonprofit milk bank in North America and adheres to the strict guidelines of the Human Milk Banking Association of North America.

Dedicated to babies. Dedicated to quality. Dedicated to safety.