

S4 File. Effect of frozen storage (-20°C and -80°C) on DHM components, before and after pasteurization.

		No loss	Decreased	Increased	
Before pasteurization	-20°C, 1 months	Lactoferrin ²¹	Lysozyme, sIgA, Lactoperoxidase ²¹		
	-20°C, 3 months	Lactoferrin, lysozyme, IgG, IgA, C3 ²² Vitamin E, vitamin C, fatty acids ¹⁴ Bactericidal activity against <i>P.aeruginosa</i> ¹⁵ Lysozyme, Protease, lipase, B vitamins, lipids ¹²	Lactoferrin (↓ 37%) ¹⁸ , (↓ 55%) ¹³ Bactericidal activity against <i>E.coli</i> ¹⁵ Lactoperoxidase activity ¹² Fat content ¹⁶	Dornic Acidity ²³	
	-20°C, 5 months	Vitamin E, vitamin C, fatty acids ¹⁴			
	-20°C, 6 months	IgA, EGF, IL-8, TGF-β2, TGF-β1, TNF-RI, TNF-α, IL-6, IL-10 ¹⁷	Lactoferrin (↓ 46%) ¹⁸ , (↓ 65%) ¹⁸ Bioactivity of lactoferrin ¹³		
	-20°C, 8 months	Vitamin E, fatty acids ¹⁴	Vitamin C ¹⁴		
	-20°C, 9 months	Total protein, fat, lactoferrin, sIgA, osmolality ¹⁹		Nonesterified fatty acids ¹⁴	
	-20°C, 12 months	Vitamin E, fatty acids ¹⁴			
	-80°C, 3 months	Vitamin E ¹⁴ Bactericidal activity against <i>P.aeruginosa</i> , <i>E. coli</i> ¹⁵			
	-80°C, 5 months	Vitamin E, vitamin C, fatty acids ¹⁴			
	-80°C, 6 months	IgA, EGF, IL-8, TGF-β2, TGF-β1, TNF-RI, TNF-α, IL-6, IL-10 ¹⁷			
	-80°C, 8 months	Vitamin E, vitamin C, fatty acids ¹⁴			
	-80°C, 12 months	Vitamin E, fatty acids ¹⁴	Vitamin C ¹⁴ IgA, IL-8, TGF-β1 ¹⁷		
	After pasteurization	-20°C, 3 months	Dornic Acidity ²³		
		-20°C, 8 months	Macronutrient and energy content ²⁰		