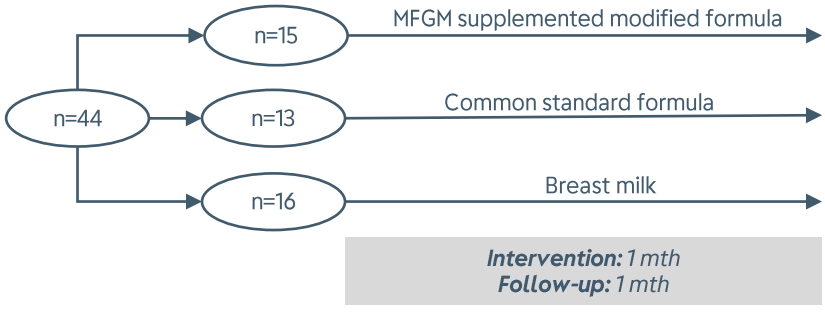
MFGM components promote gut Bifidobacterium growth in infant and in vitro

Zhao J, Yi W, Liu B, Dai Y, Jiang T, Chen S, Wang J, Feng B, Qiao W, Liu Y, Zhou H, He J, Hou J, Chen L. Eur J Nutr. 2022 Feb;61(1):277-288.

Objective: To investigate in vitro a modified formula that is supplemented with milk fat globule membrane (MFGM) that were missing in common formulas when compared with human milk and to assess the impact of feeding scheme on microbiota and metabolism

Inclusion Criteria

- Healthy term newborns
- Gestational age at birth of 37-41 weeks
- Birth weight of 2-4kg
- APGAR score >7



ENDPOINTS	FINDINGS
Gut microbiome	• MFGM supplementation were positively correlated with Bifidobacterium
Urinary metabolites	• MFGM supplementation altered the microbiome regarding hippureate in a manner similar to that in breastfed infants.

Conclusion: MFGM components could improve infants' health by modulating the gut microbiome, and possibly supporting the growth of Bifidobacterium.