

Neurodevelopmental outcomes of healthy Chinese term infants fed infant formula enriched in bovine milk fat globule membrane for 12 months - A randomized controlled trial

Xia Y, Jiang B, Zhou L, Ma J, Yang L, Wang F, Liu H, Zhang N, Li X, Petocz P, Wang B. Asia Pac J Clin Nutr. 2021 Sep;30(3):401-414.

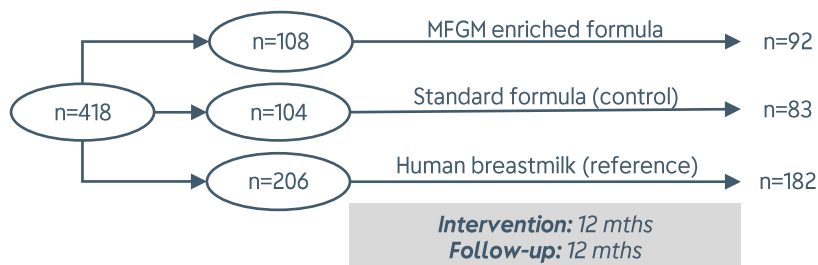
Objective: To evaluate the effect of MFGM-enriched formula on neurodevelopment and growth of healthy terms infants over 12 months

Inclusion Criteria

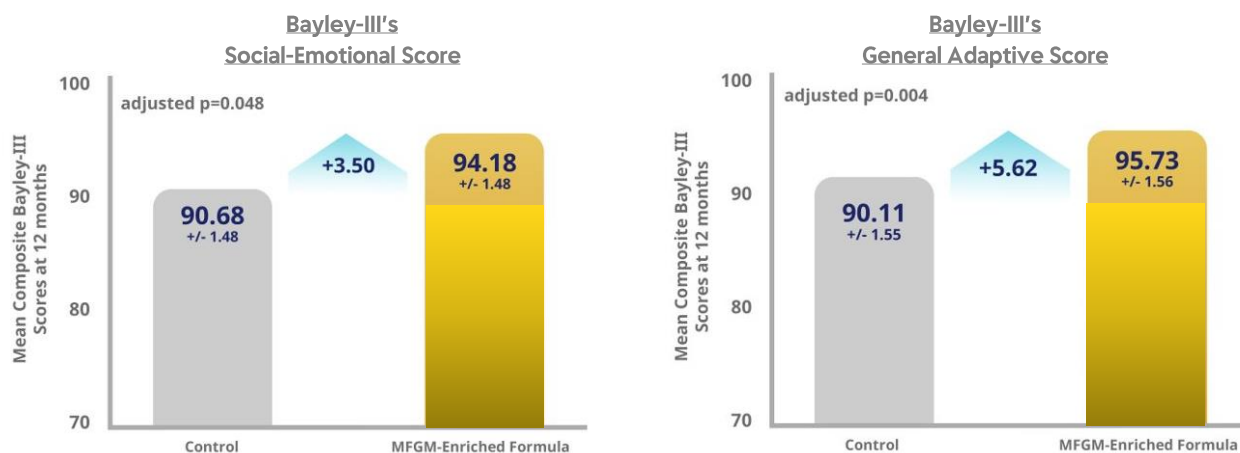
- Healthy newborns
- Gestational age: 37-41 wks
- Birthweight: 2.5-4 kg
- Intention to predominantly breastfeed (>90%) or formula feed (>60%)

Exclusion Criteria

- APGAR <7
- Obvious cerebral or major birth defects or genetic disease
- Mothers not expected to comply with exclusive breastfeeding or formula feeding



ENDPOINTS	FINDINGS (MFGM enriched formula vs standard formula)
Neurodevelopment	<ul style="list-style-type: none"> • Bayley-III <ul style="list-style-type: none"> - Higher social-emotional and general adaptive scores - No difference in cognitive, motor and language scores • improves short term memory
Growth	<ul style="list-style-type: none"> • No difference in weight, length or head circumference
Biochemical	<ul style="list-style-type: none"> • Higher serum ganglioside level • No difference in trace elements



Conclusions: MFGM supplementation in early life supports adequate growth, increased serum gangliosides concentration and improves some measures of cognitive development in Chinese infants.