

Non-exclusive colostrum feeding increases the risk of Peanut allergy sensitization.

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INTRODUCTION

Colostrum: first milk drops produced by mother's breast (upto 3rd day of life)

WHO recommends to feed only colostrum (exclusively) to every baby.

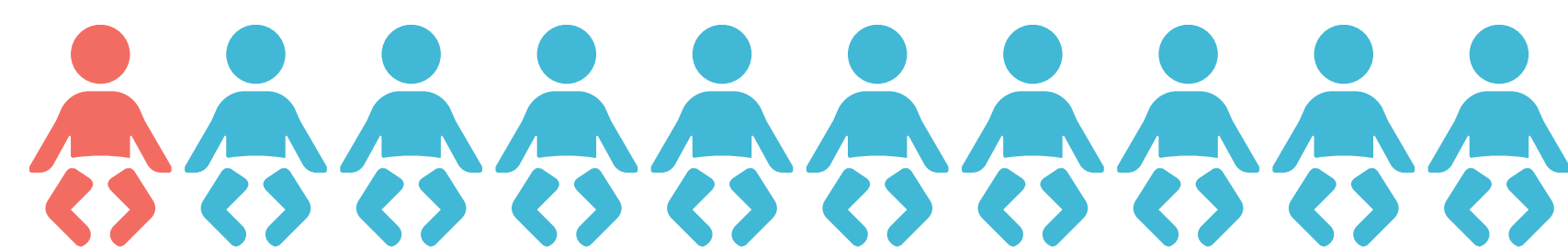


ONE in every 3 baby is NON-EXCLUSIVE COLOSTRUM FED

UNICEF Data



10% Australian infants have proven food Allergy
One of the highest incidences internationally



\$ 29.9 billion estimated allergy cost annually

HYPOTHESIS

Non-exclusive colostrum feeding (NECF) might increase allergic sensitization in infants at 1 year of age

Non-exclusive colostrum feeding

Less Bioactives

Altered Development of Barriers



Increased allergic sensitization

PRELIMINARY RESULTS

Prevalence of NECF



54 %
N=365
Exclusive colostrum feeding (ECF)

46 %
N=309
Non-exclusive colostrum feeding (NECF)

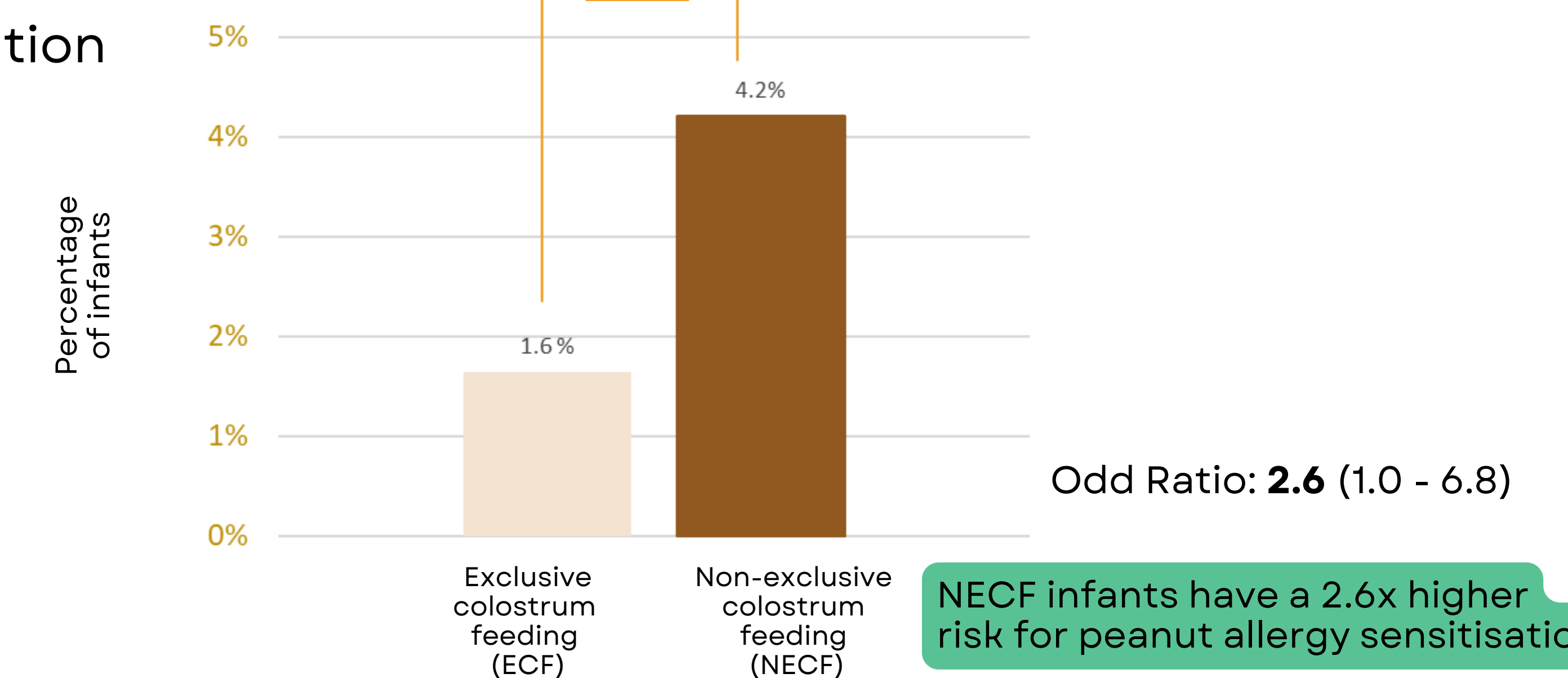


p-value

Maternal Age [Mean (SD)]	32 (4)	32 (5)	
Private Insurance [n/N (%)]	99/365 (27 %)	67/309 (22 %)	0.2
Female infants [n/N (%)]	172/365 (47 %)	161/309 (52 %)	0.4
Gestational Age (in Weeks) [Mean (SD)]	39 (0.9)	39 (1)	
Infant's Birth Weight [gm; Mean (SD)]	3461 (418)	3381 (435)	
Caesarean Section [n/N (%)]	153/365 (42 %)	150/309 (49 %)	0.3
Hospital Stay duration [Median (IQR)]	4 (2-5)	4 (2-5)	
APGAR 5 min [Median (IQR)]	9 (9-9)	9 (9-9)	
Median Age of Peanut sensitization [Median (IQR)]	7 (6-8)	7 (6,8)	

Population characteristics remains the same in both the groups (ECF and NECF)

Peanut Allergic Sensitization

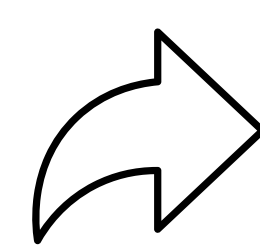


METHODOLOGY

DAY 1 -----> 674 FULL TERM INFANTS -----> 1 YEAR OLD

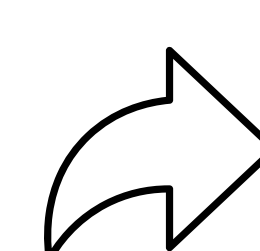


Feeding information for first 3 days from Hospital records.

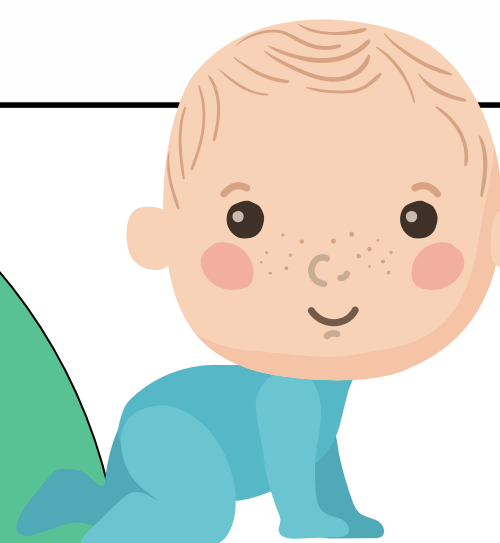


Separated into two Groups

- Exclusive Colostrum feeding
- Non Exclusive Colostrum feeding



Allergic sensitization at 1 year of age by Skin Prick test



CONCLUSION

- Up to half of the infants in an Australian birth cohort were Non-exclusively Colostrum Fed.
- These infants are at a **higher risk of sensitization to peanut allergens.**

In Australia, current allergy prevention guidelines are lacking (Soriano,2022), these observations opens up a **PARADIGM** shift in peanut allergy prevention by improving early breastfeeding practices.



References:

- UNICEF Exclusively breastfed for the first 2 days after birth data (<https://data.unicef.org/topic/nutrition/breastfeeding/>)
- Soriano VX, Peters RL, Moreno-Betancur M, et al. Association Between Earlier Introduction of Peanut and Prevalence of Peanut Allergy in Infants in Australia. JAMA. 2022;328(1):48-56. doi:10.1001/jama.2022.9224

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