



# Case Study: Baby B

Breastfed 8-month old boy with persistent allergic symptoms of atopic dermatitis, faltering growth and loose stools

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## Clinical Presentation

Baby B is an 8-month old infant with multiple food allergies (MFA) as well as a history of early onset severe atopic dermatitis (AD) and faltering growth. He had persistent symptoms of eczema, loose stools and faltering growth on breast milk, despite a maternal cow's milk free diet. Baby B's mother discussed stopping breastfeeding, despite her emotional reluctance, and he was subsequently successfully transitioned to Neocate Syneo Infant<sup>®</sup>, with the aim of optimising his elimination diet to address unresolved allergic symptoms.

## Background

A dermatologist diagnosed Baby B with AD at 2-months of age and prescribed topical creams. He was exclusively breastfed and his mother followed a milk and soy elimination diet for two weeks. The eczema did not improve so the mother resumed consumption of milk and soy.

Baby B's mother self-referred to the allergy service when her baby was 5-months of age. He had eczema on his face, arms, legs and trunk, but most severely on his cheeks, thighs and ankles. At the time of the initial consult the patient had not been exposed to peanut and was consuming cow's milk based yogurt without hives or swelling. He was also consuming packaged infant food that may have contained or been contaminated with allergens.

## Management

*Initial assessment (at 5-months of age)*

The allergist conducted skin prick testing which demonstrated a strong sensitivity to peanut and a mild sensitivity to cow's milk. Epinephrine was prescribed and an AD action plan was created to provide management of the skin.

The dietitian provided education on avoidance of milk, peanut and empirically tree nuts. A supplement of 400 IU Vitamin D was recommended as per the National Eczema Association.

Baby B's mother expressed interest in supplemental formula to allow others to participate in feeding

without her having to express breast milk. Consequently, he was prescribed an amino acid-based infant formula, due to his MFA and loose stools.

*3 week review (at 6-months of age)*

At follow-up the family reported that Baby B had refused the formula and so his mother had continued to breastfeed for two weeks on a cow's milk restricted diet. She did not find this helpful and again reintroduced cow's milk to her and her son's diet. The eczema remained severe, the loose stools persisted and the infant's weight was static, resulting in a fall of two centiles on his growth chart (see table 1 and figure 1).

Baby B's mother discussed her plan to stop breastfeeding. The dietitian provided tips to support a gradual transition to Neocate Syneo Infant, up to 30 fl oz (890ml) per day. This volume of formula would provide 600 kcal (2520kJ) and 17g protein per day of an estimated requirement of 710 kcal, and 11g of protein per day. The remaining energy needs would be met by a variety of solid foods. Education on preparation, feeding strategies, feeding regimen and expected changes in stool due to formula containing prebiotic fibers and a probiotic was provided.

*Two months later (at 8-months of age)*

Upon follow up, Baby B's weight was static however, he was now accepting on average 28 fl oz (800ml) per day of room temperature Neocate Syneo Infant. His stools had improved with formed bowel movements for three days. The eczema persisted, however only on his cheeks, which was likely related to breastfeeding for comfort and the mother's preference not to be on a restricted diet. The infant's acceptance of good volumes of formula and improvement in stools provided the mother with an increased confidence to wean him completely from breast milk.

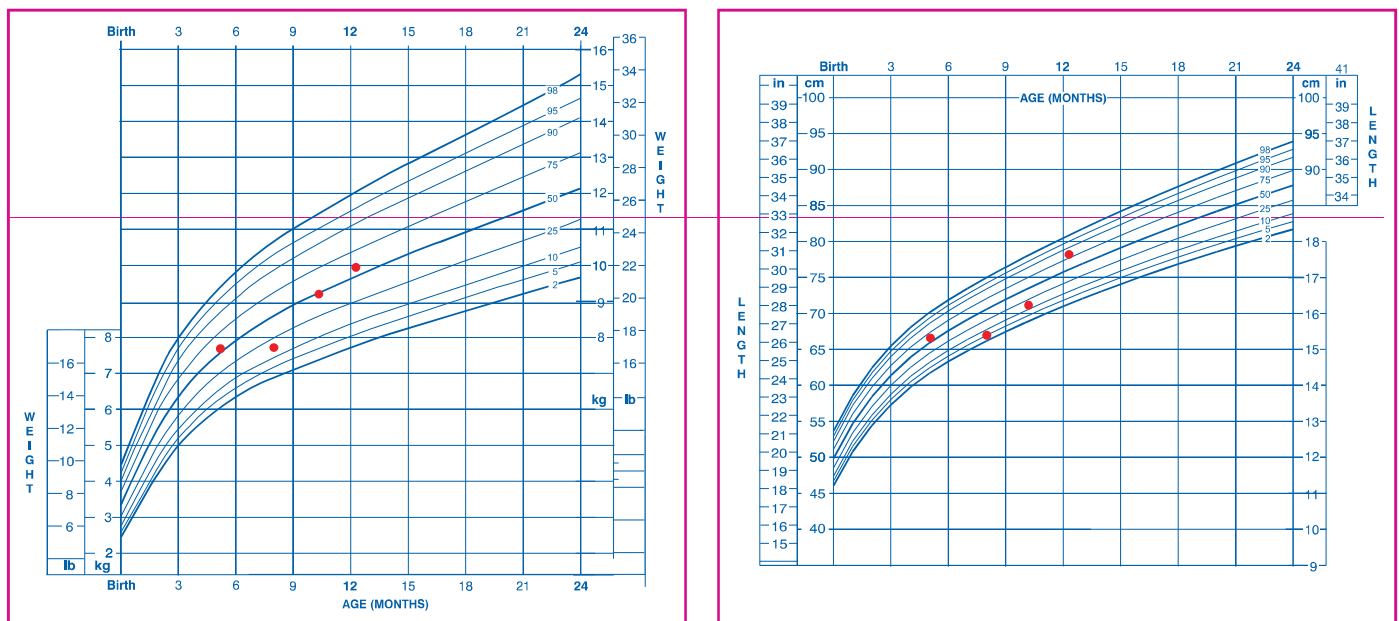
*Two months later (at 10-months of age)*

The family's confidence was further boosted with the noted weight gain and catch up growth between the 8 and 10-month appointments (see table 1 and figure 1). An appropriate hypoallergenic formula was able to manage the infant's symptoms and improve quality of life for the infant and his family.

Table 1. Growth Table for Baby B

Age	Length	Centile	Weight	Centile
5 months, 1 week	26.25 inches	50 <sup>th</sup> - 75 <sup>th</sup>	17 lb (7.7kg)	50 <sup>th</sup> - 75 <sup>th</sup>
8 months	26.25 inches	2 <sup>nd</sup> - 5 <sup>th</sup>	17lb 1oz (7.7kg)	10 <sup>th</sup> - 25 <sup>th</sup>
10 months, 2 weeks	28 inches	10 <sup>th</sup> - 25 <sup>th</sup>	20lb 2oz (9.1kg)	50 <sup>th</sup>
12 months, 2 weeks	30.75 inches	75 <sup>th</sup>	21lb 13oz (9.89kg)	50 <sup>th</sup> - 75 <sup>th</sup>

Figure1. Growth Chart for Baby B



## Conclusion:

- In this case study, a breastfed infant with persistent gastrointestinal (GI) and skin symptoms as well as faltering growth related to food allergies, was successfully transitioned to Neocate Syneo Infant. This approach was effective in managing symptoms of MFA, namely atopic dermatitis, loose stools and growth faltering.

### Product Usage

- ORAL NUTRITIONAL SUPPLEMENT
- TUBE FEED
- SOLE SOURCE OF NUTRITION
- SUPPLEMENT TO AN ELIMINATION DIET

CALORIE DENSITY: 0.68 KCAL/ML  
(STANDARD CONCENTRATION)

### Patient Profile

- ANAPHYLAXIS
- ATOPIC DERMATITIS (AD)
- FALTERING GROWTH
- MULTIPLE FOOD ALLERGIES (MFA)
- GI SYMPTOMS
- SYMPTOMATIC ON BREAST MILK
- SYMPTOMATIC ON AN EHF