

# Case Study: Infant with Severe Atopic Dermatitis, Multiple Food Allergies, Growth Failure and Loose Stools – Success with Neocate® Syneo® Infant

## Patient history:

A dermatologist diagnosed this infant with dermatitis at two months of age and prescribed topical creams. This patient 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.

The patient's mother self-referred to Allergy when her baby was five 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 milk based yogurt without hives or swelling. He was also consuming packaged infant food that may have contained or been contaminated with allergens.

## Nutrition/Medical Management:

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

The mother expressed interest in supplemental formula to allow others to participate in feeding without her having to express breast milk. The patient was prescribed a hypoallergenic infant formula, due to his multiple food allergies and loose stools. At a follow-up appointment approximately 3 weeks later, the family reported that the patient had refused the formula and so the mother had continued to breastfeed for two weeks on a cow milk restricted diet. She did not find this helpful and again reintroduced cow milk to her diet 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 percentile curves on his growth chart (see table 1 and figure 1).

The dietitian provided secondary education on allergen alternatives for the mother and her son as well as tips to support a gradual transition to Neocate Syneo Infant, up to 30 fluid ounces per day. This volume of formula would provide 600 calories per day of an estimated 710 kcal, and 11 grams of protein per day. Education on preparation, feeding strategies, feeding regimen and expected changes in stool due to formula containing prebiotic fiber and probiotics was provided. The mother discussed her plan to stop breastfeeding.

Upon follow up at the eight month appointment, two weeks later, while the infant's weight was static, he was now accepting on average 28 fluid ounces 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.



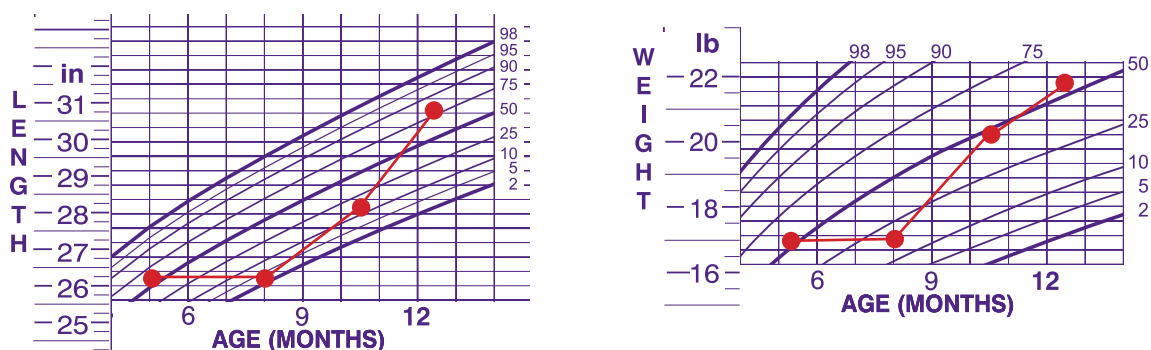
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The family's confidence was further boosted with the noted weight gain and catch-up growth between the 8 and 10 month appointments. The infant showed growth recovery through the 10 and 12 month appointments (see table 1 and figure 1). An appropriate hypoallergenic formula was able to help the infant and improved quality of life for the family.

**Table 1: Growth measurements**

	Age	Length & Percentile Range		Weight & Percentile Range	
5 month appointment	5 months, 1 week	26.25 inches	50-75	17 pounds	50-75
8 month appointment	Exactly 8 months	26.25 inches	2-5	17 pounds, 1 ounce	10-25
10 month appointment	10 months, 2 weeks	28 inches	10-25	20 pounds, 2 ounces	50
12 month appointment	12 months, 2 weeks	30.75 inches	75	21 pounds, 13 ounces	50-75

**Figure 1: Growth Charts**



**Conclusion:**

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

Product usage:	Patient profile:
<ul style="list-style-type: none"> <li>✓ Oral supplement to an elimination diet</li> </ul>	<ul style="list-style-type: none"> <li>✓ Eczema or Atopic dermatitis (AD)</li> <li>✓ Growth failure or Faltering growth</li> <li>✓ Multiple food allergies (MFA)</li> <li>✓ GI symptoms</li> <li>✓ Symptoms while breastfeeding or symptomatic on breast milk</li> </ul>

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\* The opinions expressed are those of the author of this case study and not necessarily reflective of the views of Nutricia North America.

Neocate Syneo Infant is indicated for the dietary management of cow milk allergy, multiple food allergies and related GI and allergic conditions, including food protein-induced enterocolitis syndrome, eosinophilic esophagitis and gastroesophageal reflux.