

Hypoallergenic Formulas for Infants and Children: When to Use Extensively Hydrolyzed Formula (eHF) vs. Amino Acid-Based Formula (AAF)

The prevalence of allergy is steadily rising, with around 30-40% of the world's population now affected by one or more allergic conditions.^{1,2} Cow's milk allergy (CMA) is one of the most common childhood allergies, affecting up to 3% of infants and children.³ The average time to diagnosis of CMA is 12 weeks, requiring more than 4 visits to a healthcare professional before a diagnosis is determined.² During this time, the impact on infants and caregivers extends beyond symptoms alone, impacting physical, psychological, and financial aspects of their lives.

Common Symptoms of CMA

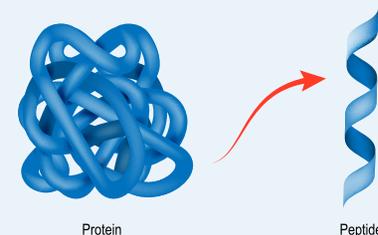
Allergic symptoms can happen immediately after feeding or be delayed by hours or days. Common CMA symptoms include, but are not limited to:

- **Digestive symptoms:** Vomiting, diarrhea, and gastroesophageal reflux
- **Respiratory symptoms:** Asthma-like symptoms, wheezing, and coughing
- **Skin problems:** Rashes, hives, or eczema, which may take 3-5 days to appear

Breastfeeding is the best nutrition for all infants. If a breast-fed baby develops CMA, intervention such as a cow's milk elimination diet by the mother should be tried. When breastfeeding is not possible or becomes too difficult, there are hypoallergenic formulas specifically designed for infants and children with allergies. There are two types of hypoallergenic formulas: extensively hydrolyzed formulas (eHF) and amino acid-based formulas (AAFs) and each of these has some specific indications and benefits.

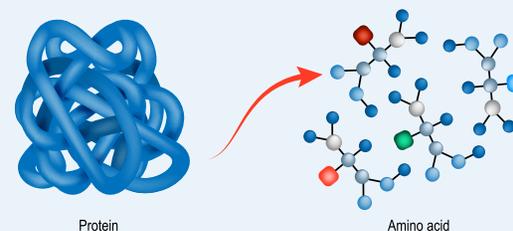
Extensively Hydrolyzed Formula (eHF)

These formulas contain short-chain peptides such as di- or tri-peptides, and some amino acids. They contain whey or casein protein from cow's milk that has been heat-treated for hydrolysis and/or enzymatically hydrolyzed.



Amino Acid-Based Formula (AAF)

These formulas are also called elemental formulas and contain 100% free amino acids. These products are 100% hypoallergenic and do not contain any cow's milk protein.⁷



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Indications

eHF

- Mild-to-moderate CMA
- Impaired GI function and malabsorption syndromes
- Trouble tolerating polymeric formula
- Lactose intolerance, in some cases⁷
- Presence of CMA and soy protein allergies⁸

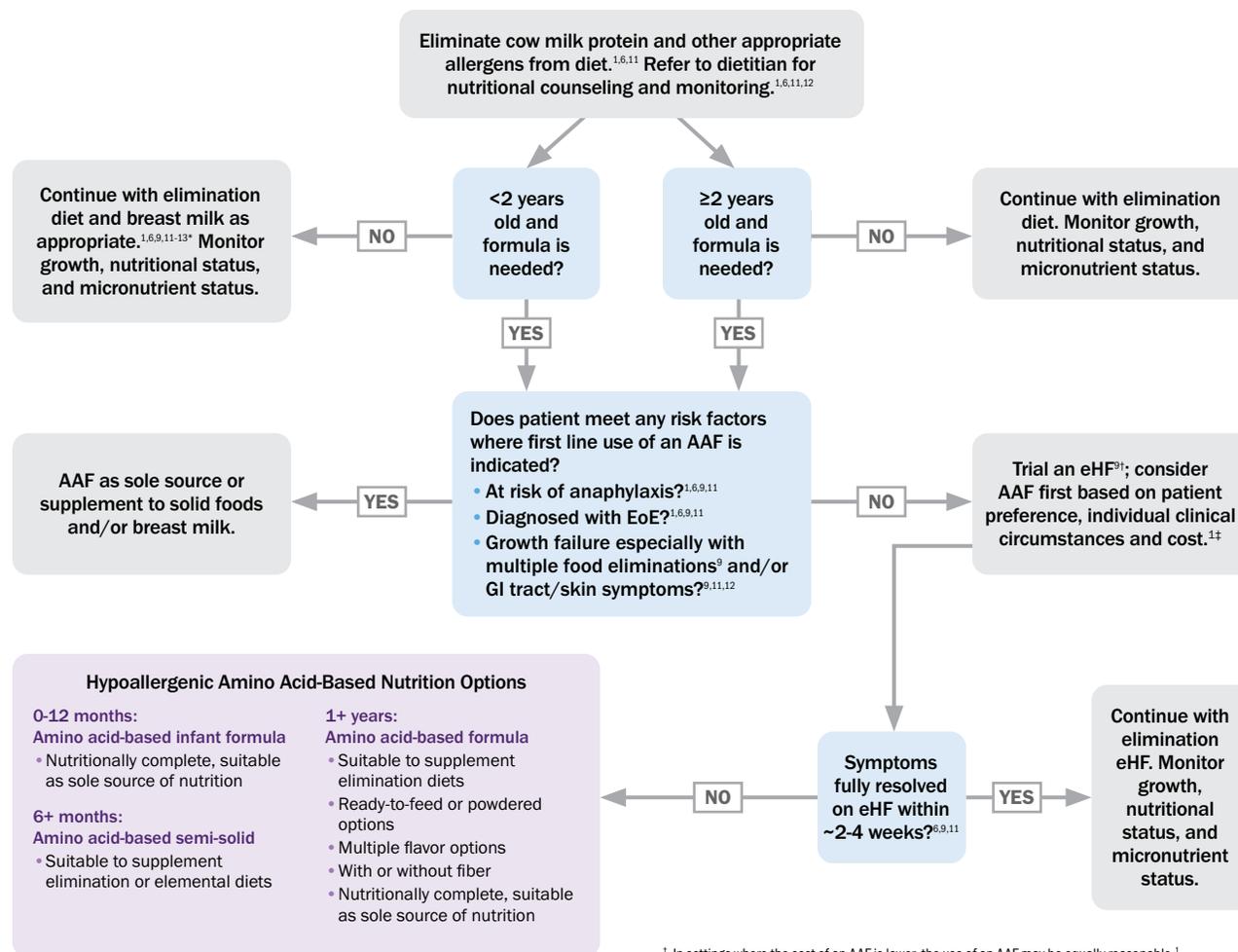
AAF

- Food allergies with faltering growth/failure to thrive⁹
- Severe allergies where an eHF formula has not resolved symptoms⁹
- Malabsorption disorders and GI impairment, short bowel syndrome or intestinal failure, food protein-induced enterocolitis syndrome (FPIES), eosinophilic esophagitis (EoE)^{7,10}
- Anaphylaxis, despite limited evidence, due to potential risk for a severe reaction⁹

Considerations for Reintroduction of Cow's Milk

- Children should be reevaluated every 6-12 months to assess if they have developed tolerance to cow's milk protein⁶
- This tolerance is generally achieved in greater than 75% of children by age 3 years and greater than 90% by age 6 years⁶

When to Use an eHF vs an AAF for the Dietary Management of CMA



Individual needs as directed by HCP. Monitor growth, nutritional status, and micronutrient status.

Breast milk is the preferred source of nutrition wherever possible.

* May include maternal elimination diet if breastfeeding and patient continues to react.^{6,11} Maternal elimination diet should always be conducted under medical supervision. Maternal vitamin and mineral supplementation should be considered^{1,6,11} and diet should be monitored for nutritional adequacy.⁶

¹ In settings where the cost of an AAF is lower, the use of an AAF may be equally reasonable.¹

[†] Soy formula can be recommended as a third choice for patients without soy allergy and > 6 months of age.¹

AAF = amino acid-based formula; eHF = extensively hydrolyzed formula; EoE = eosinophilic esophagitis; HCP = healthcare professional

This flow chart is intended to be used as a reference for healthcare professionals when managing patients with cow milk allergy/multiple food allergies as a primary diagnosis.

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