

# SYNBIOTICS-SUPPLEMENTED AMINO ACID-BASED FORMULA SUPPORTS ADEQUATE GROWTH IN COW'S MILK ALLERGIC INFANTS

Burks A *et al.* *Pediatr Allergy Immunol.* 2015;26(4):316-22.

## BACKGROUND

Children with cows' milk allergy (CMA) are at risk for inadequate nutritional intake and growth. Dietary management of CMA, therefore, requires diets that are not only hypoallergenic but also support adequate growth in this population. This study assessed growth of CMA infants when using a new amino acid-based formula (AAF) with prebiotics and probiotics (synbiotics) and evaluated its safety in the intended population.

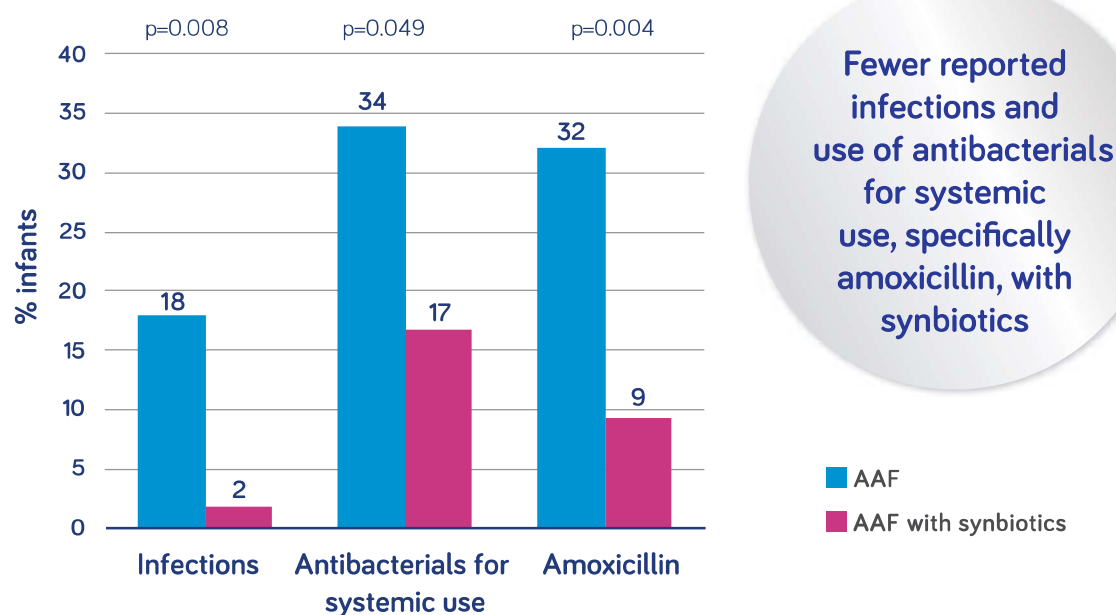
## METHODS

In a prospective, randomized, double-blind controlled study, full-term infants with diagnosed CMA received either an AAF (control; n=56) or AAF with synbiotics (oligofructose, long-chain inulin, acidic oligosaccharides, *Bifidobacterium breve* M-16V) (test; n=54) for 16 wk. Primary outcome was growth, measured as weight, length and head circumference. Secondary outcomes included allergic symptoms and stool characteristics.

## RESULTS

Average age +/- (SD) of infants at inclusion was 4.5 +/- 2.4 months. Both formulas equally supported growth according to WHO 2006 growth charts and resulted in similar increases of weight, length and head circumference. At week 16, differences (90% CI) in z-scores (test-control) were as follows: weight 0.147 (-0.10; 0.39, p=0.32), length -0.299 (-0.69; 0.09, p=0.21) and head circumference 0.152 (-0.15; 0.45, p=0.40). Weight-for-age and length-for-age z-scores were not significantly different between the test and control groups. Both formulas were well tolerated and reduced allergic symptoms; the number of adverse events was not different between the groups.

## ADVERSE EVENTS AND MEDICATION USAGE<sup>†</sup>



<sup>†</sup>Exploratory findings do not intend to offer final and conclusive results. Further research is needed to confirm the findings.

## CONCLUSIONS

This is the first study that shows that an AAF with a specific synbiotic blend, suitable for CMA infants, supports normal growth and growth similar to the AAF without synbiotics. Also observed were significantly fewer infections and lower use of antibacterials for systemic use (antibiotics) reported as adverse events and medication usage.