

the expense, time involved, and risk for further exposure and anaphylactic reaction ([Dupont, 2014](#)). Careful observation of the child is required during a challenge test because of the possibility of anaphylactic reaction.

Therapeutic Management

Treatment of CMA is elimination of cow's milk-based formula and all other dairy products. For infants fed cow's milk formula, this primarily involves changing the formula to a casein hydrolysate milk formula (Pregestimil, Nutramigen, or Alimentum) in which the protein has been broken down into its amino acids through enzymatic hydrolysis. Although the [American Academy of Pediatrics \(2014\)](#) recommends the use of extensively hydrolyzed formulas for CMA, many practitioners may start a soy formula instead because of the expense of the hydrolyzed formulas.

Approximately 50% of infants who are sensitive to cow's milk protein also demonstrate sensitivity to soy, but soy is less expensive than protein hydrolysate formula. Other choices for children who are intolerant to cow's milk-based formula are the amino acid-based formulas Neocate or EleCare, but their cost is a major consideration. Goat's milk (raw) is not an acceptable substitute because it cross-reacts with cow's milk protein, is deficient in folic acid, has a high sodium and protein content, and is unsuitable as the only source of calories. Some suggest that goat's milk infant formula may be a suitable substitute for CMA; however, anaphylactic reaction to goat's milk has been noted in infants who are also allergic to cow's milk ([Ehlayel, Bener, Hazeima, et al, 2011](#)). Infants usually remain on the milk-free diet for 12 months, after which time small quantities of milk are reintroduced.

Children who have CMA may tolerate extensively heated cow's milk ([Dupont, 2014](#)). One study reports that children with CMA became tolerant to uncooked milk products over time after consuming baked milk products ([Kim, Nowak-Wegrzyn, Sicherer, et al, 2011](#)).

Nursing Care Management

The principal nursing objectives are identification of potential CMA and appropriate counseling of parents regarding substitute