

United States Patent [19]

Kakade

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[54] **MILK REPLACER AND METHOD OF FEEDING**

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Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 516,454, Jul. 26, 1983, abandoned.

[51] **Int. Cl.⁴** A23K 1/08

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[58] **Field of Search** 426/2, 56, 72, 74, 656, 426/807, 580, 583

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[57] **ABSTRACT**

An improved flowable milk replacer concentrate having good shelf stability and ready reconstitutability is provided for the feeding of monogastric animals, which concentrate can be readily reconstituted to provide a milk replacer. The milk replacer concentrate has 50 to 75 percent total solids and comprises 10 to 45 percent sugars, including 10 to 35 percent lactose plus up to 35 percent monosaccharides or disaccharides or mixture thereof, 10 percent to 16 percent protein, including at least 60 percent non-heat denatured milk serum proteins; and 1 to 25 percent fat. The ingredients are mixed together and emulsified, as by homogenization, to provide a shelf-stable, flowable product. The milk replacer concentrate has a viscosity of between 100 and 5000 centipoises and a pH of between 4.0 and 7.0 with a water activity of between 7.0 and 0.87. The milk replacer concentrate readily mixes with water to provide a milk replacer having a solids content of about that of cows' milk.

13 Claims, No Drawings