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and, if desired, cooled prior to storage. Optionally, an in-line high shear mixer may be provided on the discharge line. Preferably, the filter has a mesh below about 2 mm. Most preferably the filter has a 1.5 mm mesh.

The following are non-limiting examples according to the invention.

## EXAMPLE 1

To obtain an output of 3700 kg of sweetened condensed skim milk with 73.00% dry matter content, 2380 kg of liquid sucrose (68.1° Brix) and 195 kg water are mixed together at 60±5° C. With high shear agitation, 1126 kg skim milk powder having 96% dry matter content is added to the process vessel. The sweetened condensed skim milk is mixed with high shear agitation for at least 15 minutes at 60±52° C. prior to discharge. The resulting sweetened condensed milk has a solids content of 73.0% by weight, and a fat content of 0.2% by weight.

## EXAMPLE 2

To obtain an output of 3700 kg of sweetened condensed skim milk with 73.48% dry matter content, 2103 kg of liquid sucrose (68.1° Brix), 599 kg dextrose monohydrate having 91.4% dry matter content, 155 kg lactose monohydrate having 99.5% dry matter content, and 234 kg water are mixed together at 60±5° C. With high shear agitation, 610 kg skim milk powder having 96% dry matter content is added to the process vessel. The sweetened condensed skim milk is mixed with high shear agitation for at least 15 minutes at 60±5° C. prior to discharge. The resulting sweetened condensed milk has a solids content of 73.48% by weight, and a fat content of 0.1% by weight.

## EXAMPLE 3

To obtain an output of 3700 kg of sweetened condensed whole milk with 72.92% dry matter content, 2275 kg of liquid sucrose (67.5° Brix), 168 kg lactose monohydrate having 99.5% dry matter content, and 234 kg water are mixed together at 60±5° C. With high shear agitation, 717 kg skim milk powder having 96% dry matter content and 306 kg anhydrous milk fat is added to the process vessel. The sweetened condensed whole milk is mixed with high shear agitation for at least 15 minutes at 60±5° C. prior to discharge. The resulting sweetened condensed milk has a solids content of 72.92% by weight, and a fat content of 8.4% by weight.

Obvious variations of the disclosed method within the scope of the appended claims will be apparent to those of ordinary skill of the art.

What is claimed is:

1. A method of forming a reconstituted high-solids composition containing carbohydrate and protein comprising the steps of:

- (a) providing a liquid carbohydrate composition having a solids content greater than about 55 percent;
- (b) adjusting the temperature of said liquid carbohydrate composition to between about 45° C. and about 75° C.; and
- (c) mixing a powdered proteinaceous composition and the liquid carbohydrate composition under high shear to obtain a reconstituted composition containing between about 65 and 80 weight percent solids.

2. A method according to claim 1, wherein said liquid carbohydrate composition consists essentially of sucrose, lactose, or dextrose, or a mixture thereof; and water.

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3. A method according to claim 1 wherein said reconstituted composition contains greater than about 70 weight percent non-fat solids.

4. A method according to claim 1, wherein said reconstituted composition contains greater than about 72 weight percent solids and less than about 6 weight percent fats.

5. A method according to claim 1, wherein said step of adjusting the temperature of said liquid carbohydrate comprises adjusting the temperature to between about 55° C. and about 65° C.

6. A method according to claim 5, wherein said step of adjusting the temperature is conducted with agitation and recirculation.

7. A method according to claim 1, wherein said reconstituted composition comprises between about 14 and about 31 weight percent of said proteinaceous composition.

8. A method according to claim 1, wherein said step of providing a liquid carbohydrate composition comprises diluting a liquid sucrose starting composition having a solids content greater than about 65 weight percent with water under agitation to obtain a dilute liquid sucrose composition having a solids content between about 55 and 65 weight percent, and adding additional carbohydrates, said additional carbohydrates comprising between about 4 weight percent and about 20 weight percent of said reconstituted composition to said dilute liquid sucrose composition.

9. A method according to claim 8, wherein said additional carbohydrates comprises a mixture of lactose and dextrose.

10. A method according to claim 1, further comprising adding a fat to said liquid carbohydrate composition during said steps (a), (b), or (c), or after said step (c).

11. A method according to claim 1 wherein said proteinaceous composition consists essentially of skim milk powder.

12. A method of forming a reconstituted high-solids composition containing carbohydrate and protein comprising the steps of:

- (a) providing a liquid sucrose composition having a solids content between about 65 and 70 percent;
- (b) diluting said liquid sucrose composition to obtain a diluted liquid sucrose composition;
- (c) adding additional carbohydrate selected from lactose, dextrose and combinations thereof to said diluted liquid sucrose composition, said additional carbohydrate comprising between about 4 weight percent and about 20 weight percent of said reconstituted composition, to obtain a liquid carbohydrate composition;
- (d) adjusting the temperature of said liquid carbohydrate composition with agitation, to between about 55° C. and about 65° C.; and
- (e) mixing skim milk powder and the liquid carbohydrate composition under high shear to obtain a reconstituted composition containing greater than about 70 weight percent solids and having less than about 2 weight percent fat.

13. A method of forming a reconstituted high-solids composition containing carbohydrate and protein, comprising the steps of hydrating skim milk powder at a hydration solids content of greater than about 50% to obtain the reconstituted composition having a solids content greater than about 72% and a fat content less than about 6%.