

final desired effect. The range will be from 0.1% to 10% emulsifier on a dry basis.

In all examples the preferred procedure was to mix the ingredients at about room temperature, e.g., 72° F. and then pasteurize by heating just prior to homogenizing as stated.

While we have referred to disodium acid phosphate as the peptizing agent, others can be used in the foregoing examples, notably sodium acid pyrophosphate, tetrasodium pyrophosphate, dipotassium phosphate, potassium polymeta phosphate, potassium polyphosphate, and diammonium phosphate. In fact, all compatible salts of the phosphate group may be used.

While we have also mentioned gum acacia or starch as the coating or enrobing agent, others equally compatible with the present acid conditions can be used in the examples, e.g., gums such as gum acacia, gum tragacanth, starches such as corn, wheat or potato, phosphated starches, acid modified starches, enzyme modified starches of the previous group, dextrins, pectins, whey solids, cellulose derivatives, modified celluloses, i.e., carboxymethyl cellulose methyl cellulose.

A suitable added non-milk or milk protein may be included in the mix prior to pasteurization and homogenization, notably skim milk solids, casein, and gelatin.

The protein also acts to encapsulate the fat like the native occurring proteins, i.e., is an additional coating agent, and any protein which is compatible and stable at pH 4.5 to 5.0 in the mix is used. Gelatin of the "A" type Isoelectric Point (7.0-8.3) is preferred.

The peptizing agent and the coating agent aid in the reconstruction with water to improve dispersibility and produce a smooth, creamy body. Without the peptizing agent or the coating agent on reconstitution with water, a curdy mass is produced from which the solids separate or precipitate out. The coating agent improves the product appreciably in helping to secure adequate encapsulation and on reconstitution with water, improves the dispersibility and precludes forming a curdy mass characterized by solids separation and precipitation even when no peptizing agent is included.

The peptizing agents, the coating agents and the added proteins, as explained, preferably are compatible with the acidity characteristic of the sour cream, e.g., pH 4.4 to 5.0.

In this application the amount of sour cream solids in some examples was as high as 97% or slightly more and even 99%.

We claim:

1. The process of making a sour cream powder comprising adding to sour cream 0.5% to 5% by weight of a sodium, potassium or ammonium phosphate as a protein peptizing agent, homogenizing the mixture and spray drying the mixture to produce a powder which is readily redispersible in water.

2. A process according to claim 1 wherein there is also included 0.1 to 10% of an emulsifying agent selected from the group consisting of glycerol monostearate, glycerol monooleate, glycerol lactopalmitate, glycerol lactostearate, propylene glycol monostearate, polysorbitan monostearate, sorbitan monostearate, glycerol acetomonostearate and lecithin prior to homogenizing.

3. The process according to claim 2 in which 5 to 30% of a coating assisting agent selected from the group consisting of gum acacia, gum tragacanth, corn, wheat and potato starches, acid modified starches, phosphated starches, enzyme modified starch of the previous group, dextrins, pectins, whey solids, gelatin, carboxymethyl cellulose, milk solids and casein is added to the mixture before homogenizing.

4. Readily water redispersible sour cream powder comprising sour cream and 0.5 to 5% by weight of a sodium, potassium or ammonium phosphate as a protein peptizing agent.

5. A powder according to claim 4 wherein the peptizing

agent is selected from the group consisting of disodium acid phosphate, sodium acid pyrophosphate, tetrasodium pyrophosphate, dipotassium phosphate, potassium polyphosphate and diammonium phosphate.

6. A spray dried free-flowing sour cream powder according to claim 5 containing about 97% sour cream solids and about 3% disodium phosphate.

7. A spray dried free-flowing powder according to claim 5 wherein there is also included 5 to 30% of a coating agent selected from the group consisting of gum acacia, gum tragacanth, corn, wheat and potato starches, phosphated starches, acid modified starches, enzyme modified starches of the previous group, dextrins, pectins, whey solids, carboxymethyl cellulose, gelatin, milk solids and casein.

8. A spray dried free-flowing sour cream powder according to claim 7 and containing in addition 0.1 to 10% of an emulsifying agent selected from the group consisting of glycerol monostearate, glycerol monooleate, glycerol lactopalmitate, glycerol lactostearate, propylene glycol monostearate, polysorbitan monostearate, sorbitan monostearate, glycerol acetomonostearate and lecithin.

9. A spray dried free-flowing sour cream powder according to claim 5 containing 85 to 95% sour cream solids, 0.5 to 5% of the peptizing agent and 0.1 to 10% of an emulsifying agent selected from the group consisting of glycerol monostearate, glycerol monooleate, glycerol lactopalmitate, glycerol lactostearate, propylene glycol monostearate, polysorbitan monostearate, sorbitan monostearate, glycerol acetomonostearate and lecithin.

10. Sour cream powder according to claim 4 including 0.1 to 10% of an emulsifying agent selected from the group consisting of glycerol monostearate, glycerol monooleate, glycerol lactopalmitate, glycerol lactostearate, propylene glycol monostearate, polysorbitan monostearate, sorbitan monostearate, glycerol acetomonostearate and lecithin.

11. A spray dried free-flowing sour cream powder readily redispersible in water to produce a stable suspension comprising 95 to 70% sour cream solids and 5 to 30% of a coating agent selected from the group consisting of gum acacia, gum tragacanth, corn, wheat and potato starches, acid modified starches, phosphated starches, enzyme modified starches of the previous group, dextrins, pectins, carboxymethyl cellulose, nonfat milk solids, gelatin and casein.

12. A spray dried readily redispersible powder according to claim 11 consisting essentially of sour cream solids and 5 to 30% of gum acacia.

13. A spray dried readily redispersible powder according to claim 12 consisting essentially of 82% sour cream solids and 18% gum acacia, said powder upon being redispersed in water forming a suspension which is stable for at least two hours.

14. A spray dried free-flowing sour cream powder readily dispersible powder according to claim 11 consisting essentially of sour cream solids and 5 to 30% of nonfat milk solids.

15. A product according to claim 14 wherein the nonfat milk solids are skim milk solids.

16. A product according to claim 15 consisting essentially of 80% sour cream solids and 20% skim milk solids, said product being characterized by being readily redispersible in water to give a suspension which is stable for at least two hours.

17. A spray dried product according to claim 11 consisting essentially of sour cream solids and 5 to 30% of gelatin.

18. A process of preparing the product of claim 11 consisting essentially of adding to sour cream 5 to 30% of the coating agent, homogenizing the mixture and then spray drying the mixture.

19. A process according to claim 18 wherein the coating agent is gum acacia and the composition consists essentially of the sour cream and gum acacia.