## CLAIMS

1. A hybrid micelle composition, comprising at least two casein proteins, wherein the two casein proteins are from different mammalian species; wherein at least one of the casein proteins is a recombinant protein; and wherein the casein proteins are associated in micellar form.

2. The hybrid micelle composition of claim 1, wherein the at least two casein proteins comprise a first alpha casein protein and a first kappa casein protein, wherein the first alpha casein protein and the first kappa casein protein are from different mammalian species, and wherein both of the first alpha casein protein and the first kappa casein protein are recombinant proteins.

3. The hybrid micelle composition of claim 1 or claim 2, wherein at least one of the casein proteins is an alpha-S1-casein protein.

4. The hybrid micelle composition of claim 1 or claim 2, wherein at least one of the casein proteins is an alpha-S2-casein protein.

5. The hybrid micelle composition of any one of claims 1-4, wherein at least one of the casein proteins is a bovine alpha casein protein.

6. The hybrid micelle composition of any one of claims 1-4, wherein at least one of the casein proteins is an ovine or a caprine alpha casein protein.

7. The hybrid micelle composition of any one of claims 1-6, wherein at least one of the casein proteins is an ovine kappa casein protein, a caprine kappa casein protein, a bovine kappa casein protein, an equine kappa casein protein, or a camel kappa casein protein.

8. The hybrid micelle composition of any one of claims 1-7, wherein the micellar form does not include a beta casein protein or a derivative thereof.

9. The hybrid micelle composition of any one of claims 1-7, wherein the hybrid micelle comprises a full-length beta casein protein, a gamma casein protein, or an alternate truncation of beta casein protein.

10. The hybrid micelle composition of any one of claims 2-9, wherein:

(a) the first alpha casein protein is not phosphorylated or is substantially reduced in phosphorylation as compared to a native alpha casein protein,

(b) the first kappa casein protein is not glycosylated or is substantially reduced in glycosylation as compared to a native kappa casein protein,

(c) the first kappa casein protein comprises a glycosylation pattern that differs from native kappa casein protein,

or any combination of (a), (b) and (c).

11. The hybrid micelle composition of any one of claims 2-10, wherein the ratio of total alpha casein protein to total kappa casein protein in the composition is about 1: 1 to about 10:1 or about 3:1 to about 5:1.

12. The hybrid micelle composition of claim 1 or claim 2, wherein at least one of the casein proteins is a recombinant truncated kappa casein protein.

13. A dairy-like product derived from the hybrid micelle composition of any one of claims 1-12.

14. The dairy-like product of claim 13, wherein the hybrid micelle composition provides one or more dairy-like features selected from the group consisting of texture, melt, stretch, turbidity, and appearance.

15. The dairy-like product of claim 13 or claim 14, wherein the dairy-like product is cheese, cheese analogue, milk, cream, ice cream or yogurt.

16. A method for producing a hybrid micelle composition, comprising:

providing the first alpha casein protein and the first kappa casein protein of any one of claims 2-12 and combining the first alpha casein protein and the first kappa casein protein and at least one salt under conditions wherein the first alpha casein protein and the first kappa casein protein form a micellar form in a liquid colloid.

17. A dairy product comprising:

an alpha casein and a kappa casein, wherein at least one of the alpha casein and the kappa casein is a recombinant protein, and wherein the alpha casein and the kappa casein are associated in micellar form or micellar and aggregate forms;

a fat in a concentration of between about 0% to about 50 %; and

one or more salts from group of: calcium, phosphate and citrate;

wherein the dairy product is:

(a) a cheese product selected from the group consisting of a pasta-filata cheese product, a hard-matured cheese product, a very hard dry cheese product, and wherein the total casein in the cheese product comprises between 70-85% (w/w) of an alpha casein; between 15-30% (w/w) of an ovine kappa casein;

(b) a goat-like soft and spreadable cheese wherein the total casein in the cheese product comprises between 70-85% (w/w) of an alpha casein; between 15-30% (w/w) of a caprine kappa casein;

(c) a soft cheese product wherein the total casein in the cheese product comprises between 70-75% (w/w) of a truncated alpha casein and between 25-30 % (w/w) of a kappa casein;

(d) a crumbly cheese product wherein the total casein in the cheese product comprises between 70-75% (w/w) of an alpha casein and between a- 25-30% (w/w) of a truncated bovine kappa casein; or

(e) a yogurt-like product wherein the total casein in the cheese product comprises between 70-75% (w/w) of a truncated alpha casein and between 25-30% (w/w) of a kappa casein.

18. A method for regulating the yield of curd comprising:

providing an alpha casein protein and a kappa casein protein;

combining the alpha casein protein and the kappa casein protein and at least one salt under conditions wherein the alpha casein protein and the kappa casein protein form a micellar form in a liquid colloid; and

coagulating the liquid colloid to form a curd, wherein the ratio of the alpha casein protein to the kappa casein protein regulates the yield of curd.