CLAIMS

What is claimed is the following:

1. A composition comprising:

an aqueous phase;

a neutral surfactant or a reaction product form thereof;

a reaction product of a saccharide polymer and a fatty ester, the saccharide polymer comprising a dextran, a dextrin compound, or any combination thereof, and the reaction product of the saccharide polymer and the fatty ester and the reaction product form of the neutral surfactant, if present, being formed in the aqueous phase in the presence of a hydroxide base;

wherein the reaction product form of the neutral surfactant, if present, comprises a fatty ester reaction product formed from a hydroxyl group upon the neutral surfactant; and

one or more alcohols originating from the fatty ester upon forming the reaction product of the saccharide polymer and the fatty ester;

wherein the reaction product of the saccharide polymer and the fatty ester is present in the aqueous phase at a concentration effective to lower a surface tension of the neutral surfactant.

2. The composition of claim 1, wherein the saccharide polymer comprises a dextrin compound, and the dextrin compound comprises a maltodextrin.

3. The composition of claim 1, wherein the fatty ester comprises a glycerol ester of at least one fatty acid, and the one or more alcohols comprise at least glycerol.

4. The composition of claim 3, wherein the at least one fatty acid comprises up to three types of fatty acids having 4 to 30 carbon atoms.

5. The composition of claim 3, wherein the at least one fatty acid consists of straight-chain fatty acids.

6. The composition of claim 3, wherein at least a portion of the at least one fatty acid comprises one or more unsaturated straight-chain fatty acids.
7. The composition of claim 3, wherein the glycerol ester comprises at least one plant oil, animal oil, vegetable fat, or animal fat selected from the group consisting of soybean oil, grapeseed oil, olive oil, palm oil, tea seed oil, rice bran oil, safflower oil, corn oil, coconut oil, sunflower seed oil, canola oil, rapeseed oil, peanut oil, cottonseed oil, hazelnut oil, linseed oil, sesame oil, acai oil, almond oil, beech nut oil, brazil nut oil, cashew oil, macadamia nut oil, pecan oil, pine nut oil, pistachio oil, walnut oil, pumpkin seed oil, apricot oil, avocado oil, grapefruit oil, lemon oil, orange oil, mango oil, flax seed oil, fish oil, cocoa butter, hemp oil, castor oil, tall oil, fish oil, cattle fat, buffalo fat, sheep fat, goat fat, duck fat, pig fat, poultry fat, and any combination thereof.
8. The composition of claim 1, wherein the fatty ester is formed from at least one fatty acid, and the at least one fatty acid comprises 90 wt. % or above of one or more straight-chain fatty acids.
9. The composition of claim 1, wherein the neutral surfactant comprises an alkanolamide or a reaction product thereof.
10. The composition of claim 1, wherein a molar ratio of fatty acid to saccharide polymer in the reaction product is 0.2 to 0.9 on a basis of $moles_{\text{fatty acid in fatty ester}}$:$moles_{\text{glucose monomers in saccharide polymer}}$.
11. A personal care product comprising the composition of claim 1.
12. A method comprising:

heating a saccharide polymer, a fatty ester, a neutral surfactant, and a hydroxide base in an aqueous phase, the saccharide polymer comprising a dextran, a dextrin compound, or any combination thereof; and

obtaining a reaction product of the saccharide polymer and the fatty ester in the aqueous phase, the aqueous phase also containing the neutral surfactant or a reaction product form thereof, and one or more alcohols originating from the fatty ester upon forming the reaction product of the saccharide polymer and the fatty ester;

wherein the reaction product form of the neutral surfactant, if present, comprises a fatty ester reaction product formed from a hydroxyl group upon the neutral surfactant.

13. The method of claim 12, wherein the saccharide polymer comprises a dextrin compound, and the dextrin compound comprises a maltodextrin.
14. The method of claim 12, wherein the fatty ester comprises a glycerol ester of at least one fatty acid, and the one or more alcohols comprise at least glycerol.
15. The method of claim 14, wherein the at least one fatty acid comprises up to three types of fatty acids having 4 to 30 carbon atoms.
16. The method of claim 14, wherein the at least one fatty acid consists of straight-chain fatty acids.
17. The method of claim 14, wherein at least a portion of the at least one fatty acid comprises one or more unsaturated straight-chain fatty acids.
18. The method of claim 14, wherein the glycerol ester comprises at least one plant oil, animal oil, vegetable fat, or animal fat selected from the group consisting of soybean oil, grapeseed oil, olive oil, palm oil, tea seed oil, rice bran oil, safflower oil, corn oil, coconut oil, sunflower seed oil, canola oil, rapeseed oil, peanut oil, cottonseed oil, hazelnut oil, linseed oil, sesame oil, acai oil, almond oil, beech nut oil, brazil nut oil, cashew oil, macadamia nut oil, pecan oil, pine nut oil, pistachio oil, walnut oil, pumpkin seed oil, apricot oil, avocado oil, grapefruit oil, lemon oil, orange oil, mango oil, flax seed oil, fish oil, cocoa butter, hemp oil, castor oil, tall oil, fish oil, cattle fat, buffalo fat, sheep fat, goat fat, duck fat, pig fat, poultry fat, and any combination thereof.
19. The method of claim 12, wherein the fatty ester is formed from at least one fatty acid, and the at least one fatty acid comprises 90 wt. % or above of one or more straight-chain fatty acids.
20. The method of claim 12, wherein the neutral surfactant comprises an alkanolamide or a reaction product thereof.

21. The method of claim 12, wherein a molar ratio of fatty acid to saccharide polymer in the reaction product is 0.2 to 0.9 on a basis of $moles_{\text{fatty acid in fatty ester}}$:$moles_{\text{glucose monomers in saccharide polymer}}$.