

Supplementary Information

Table S1. Exact formulation of rice oil-GA emulsions prepared at different oil:GA ratios, without surfactant and with Tween 80, SCG or Lecithin at 0.1, 0.5 and 1%.

Oil:GA	Type of Surfactant	Gum arabic solution (15%) (g)	Oil (g)	Surfactant (g)
1:3	Without Surfactant	20.010	1.080	-
	0.1% Tween 80	20.022	1.014	0.022
	0.5% Tween 80	20.016	1.009	0.111
	1% Tween 80	20.012	1.006	0.207
	0.1% SCG	20.051	1.009	0.023
	0.5% SCG	20.066	1.017	0.106
	1% SCG	20.173	1.028	0.211
	0.1% Lecithin	20.013	1.015	0.025
	0.5% Lecithin	20.006	1.027	0.105
	1% Lecithin	20.002	1.136	0.212
1:0.3	Without Surfactant	20.008	10.027	-
	0.1% Tween 80	20.007	10.017	0.040
	0.5% Tween 80	20.021	10.020	0.159
	1% Tween 80	20.034	10.103	0.303
	0.1% SCG	20.021	10.012	0.034
	0.5% SCG	20.127	10.027	0.153
	1% SCG	20.055	10.027	0.304
	0.1% Lecithin	20.098	10.019	0.033
	0.5% Lecithin	20.021	10.026	0.154
	1% Lecithin	20.115	10.007	0.304

Table S2. Exact formulation of oil-GA emulsions prepared with different oils at an oil:GA ratio of 1:3, without surfactant or with 0.1% SCG, Tween 80 or lecithin.

Oil	Type of Surfactant	Gum arabic solution (15%) (g)	Oil (g)	Surfactant (g)
Rice	Without Surfactant	20.010	1.080	-
	0.1% SCG	20.051	1.009	0.023
	0.1% Tween 80	20.022	1.014	0.022
	0.1% Lecithin	20.013	1.015	0.025
Safflower	Without Surfactant	20.011	1.014	-
	0.1% SCG	20.097	1.029	0.022
	0.1% Tween 80	20.046	1.033	0.026
	0.1% Lecithin	20.054	1.017	0.023
Sweet almond	Without Surfactant	20.022	1.023	-
	0.1% SCG	20.041	1.006	0.021
	0.1% Tween 80	20.030	1.006	0.027
	0.1% Lecithin	20.180	1.008	0.022
Aloe Vera	Without Surfactant	20.152	1.032	-
	0.1% SCG	20.900	1.003	0.023
	0.1% Tween 80	20.003	1.007	0.020
	0.1% Lecithin	20.062	1.018	0.021
Jojoba	Without Surfactant	20.597	1.036	-
	0.1% SCG	20.009	1.016	0.020
	0.1% Tween 80	20.252	1.001	0.027
	0.1% Lecithin	20.226	1.012	0.023
Sesame	Without Surfactant	20.180	1.003	-
	0.1% SCG	20.018	1.036	0.024
	0.1% Tween 80	20.039	1.007	0.020
	0.1% Lecithin	20.084	1.003	0.023

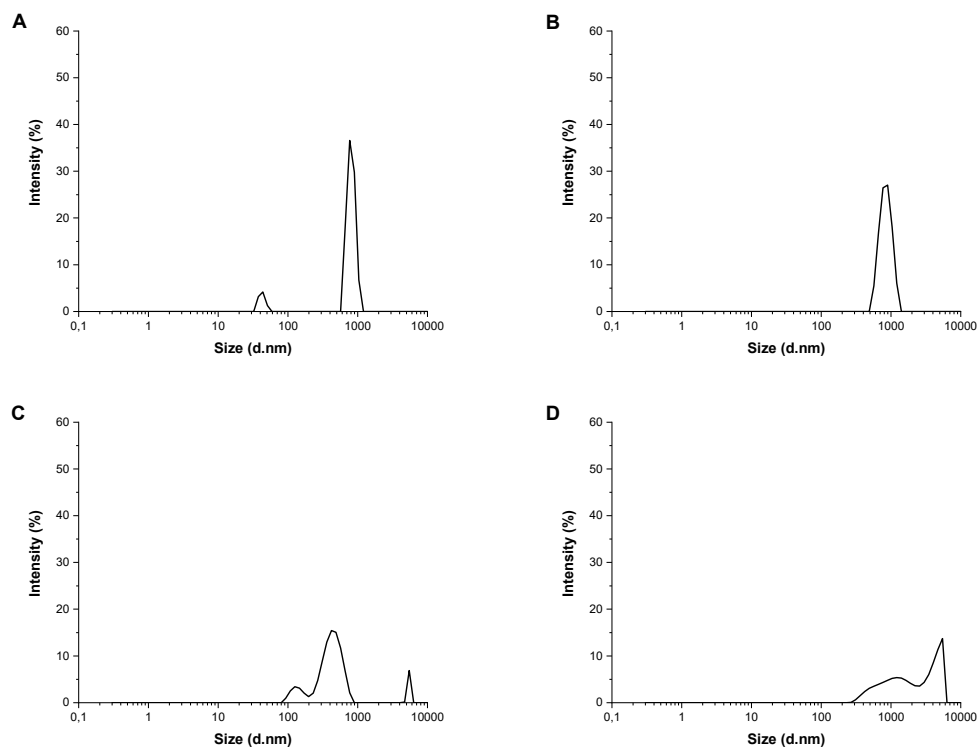


Figure S1. Particle size distributions of rice oil-GA emulsions (oil:GA = 1:3) prepared without surfactant (A), or with 0.1% SCG (B), Tween 80 (C), or Lecithin (D).

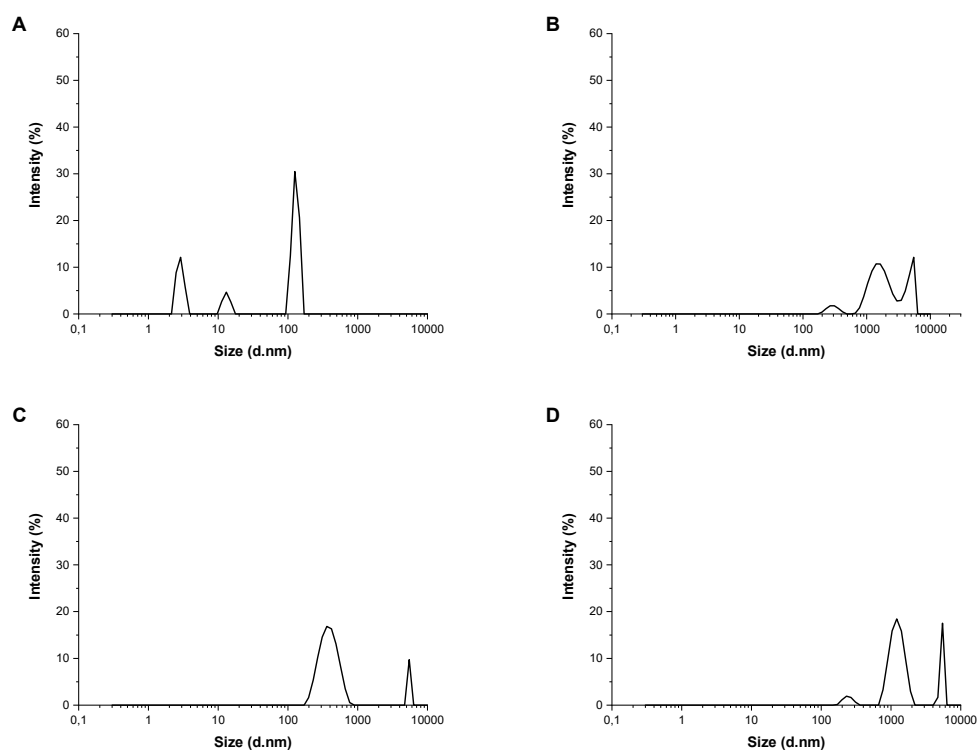


Figure S2. Particle size distributions of safflower oil-GA emulsions (oil:GA = 1:3) prepared without surfactant (A), or with 0.1% SCG (B), Tween 80 (C), or Lecithin (D).

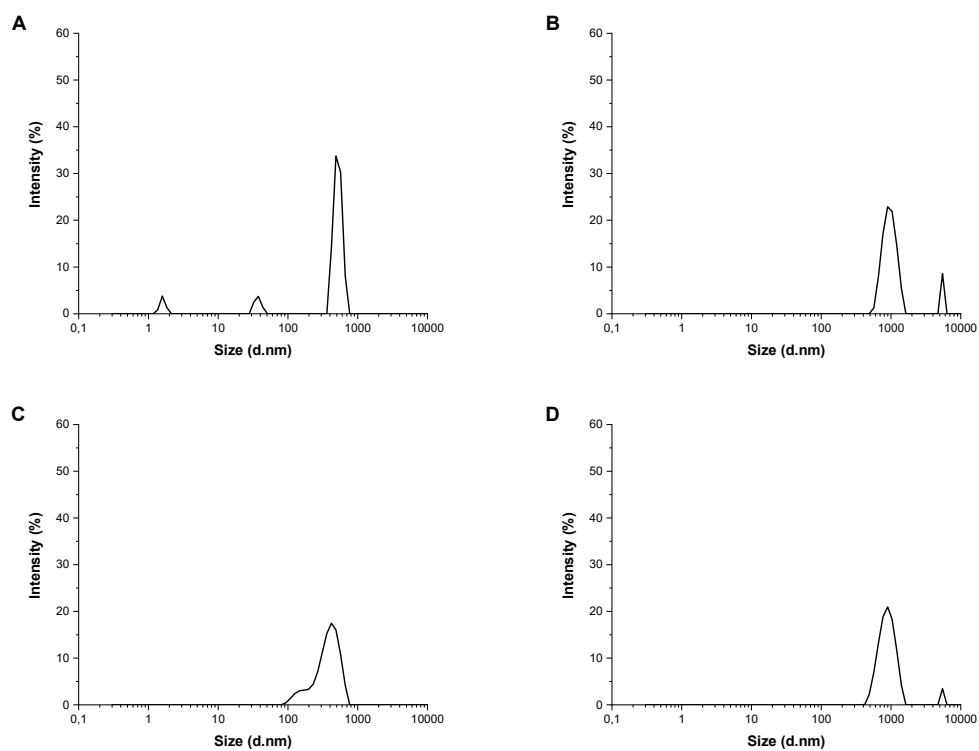


Figure S3. Particle size distributions of sweet almond-GA emulsions (oil:GA = 1:3) prepared without surfactant (A), or with 0.1% SCG (B), Tween 80 (C), or Lecithin (D).

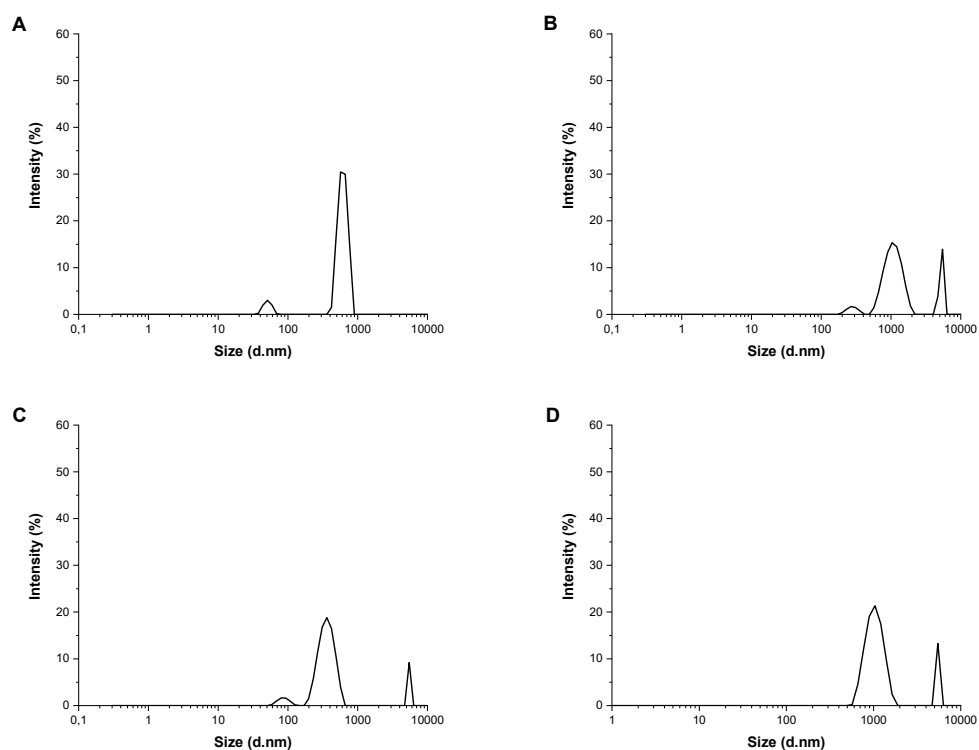


Figure S4. Particle size distributions of aloe vera-GA emulsions (oil:GA = 1:3) prepared without surfactant (A), or with 0.1% SCG (B), Tween 80 (C), or Lecithin (D).

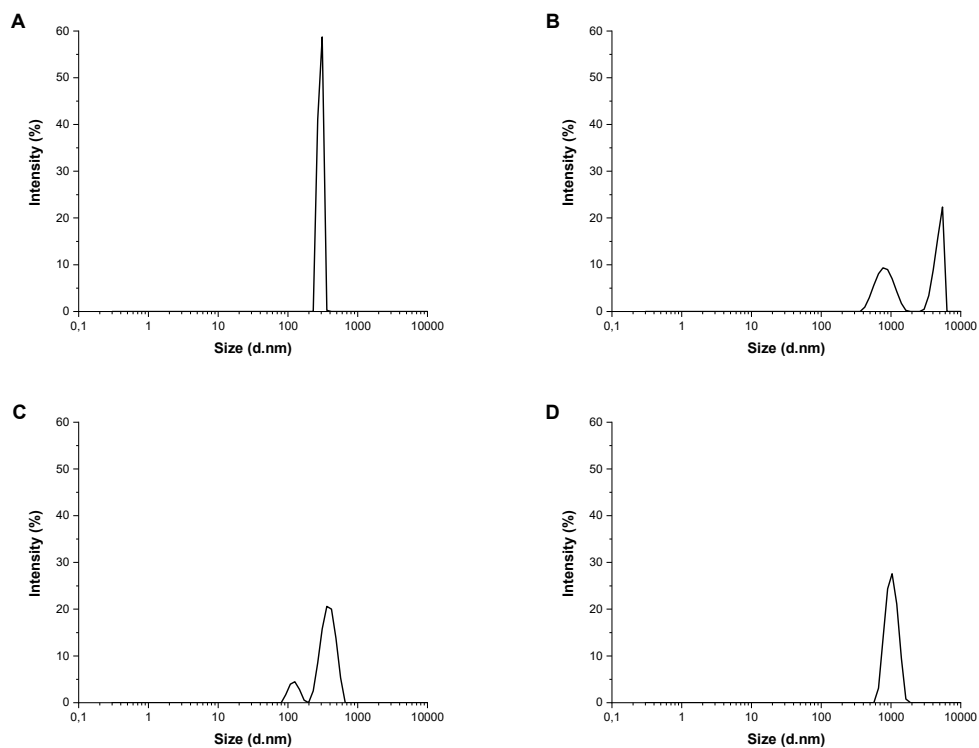


Figure S5. Particle size distributions of jojoba-GA emulsions (oil:GA = 1:3) prepared without surfactant (A), or with 0.1% SCG (B), Tween 80 (C), or Lecithin (D).

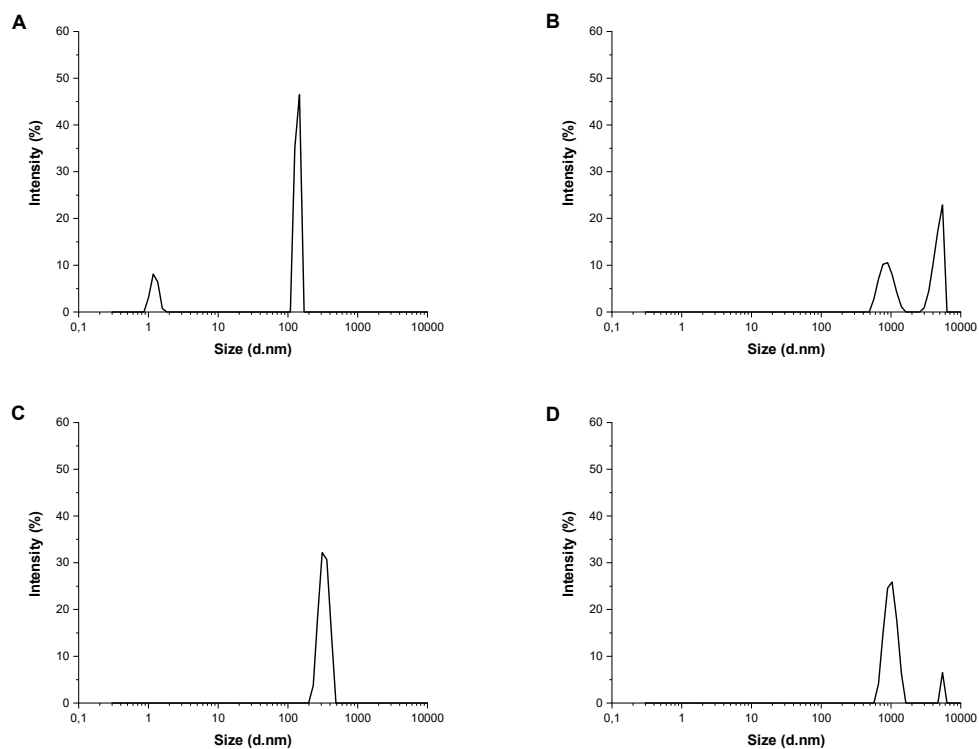


Figure S6. Particle size distributions of sesame emulsions (oil:GA = 1:3) prepared without surfactant (A), or with 0.1% SCG (B), Tween 80 (C), or Lecithin (D).