Electronic Supplementary Material (ESI) for Soft Matter.

Supplementary information

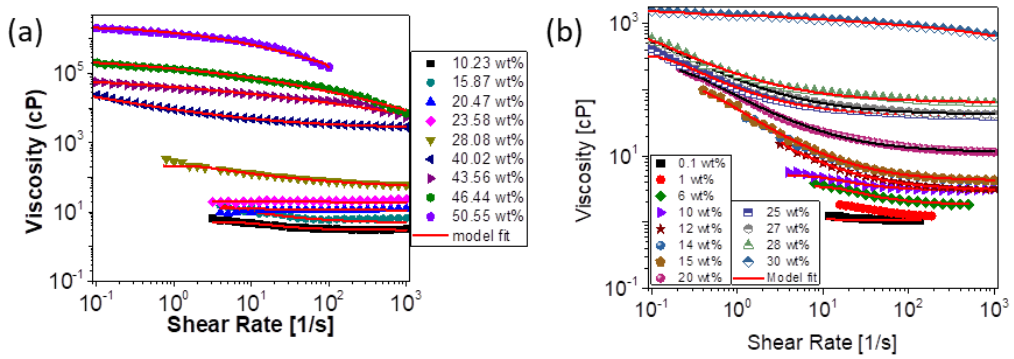

Figure S1. Shear rate-dependent viscosity of casein dispersions (a) during drying at 60 °C (Method A) and (b) for Method B. Red lines show the model fits to Equation (2).

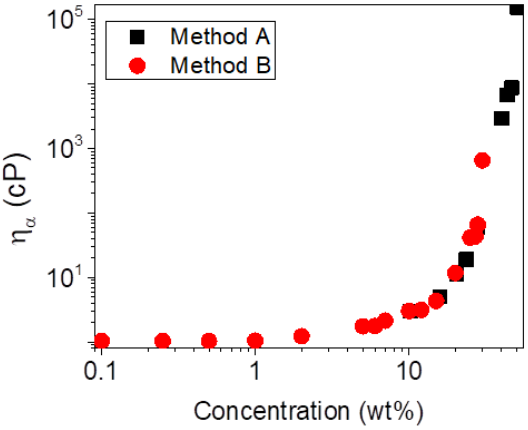

Figure S2. Variation of infinite shear viscosity, η_∞ (determined from Equation (2)) with concentration of casein dispersions.

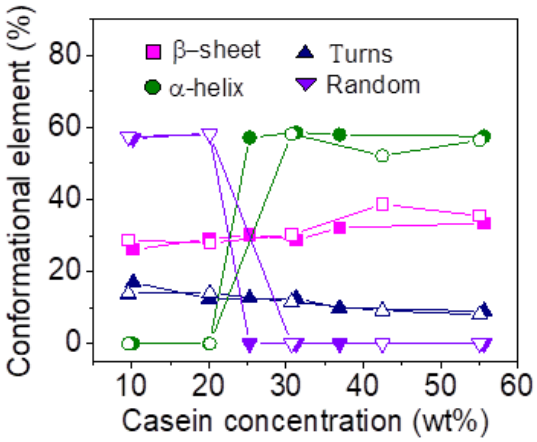

Figure S3. Conformational elements present in the dispersions while drying at different temperatures. Closed symbols and open symbols represent the data for 40 °C and 80 °C, respectively.

Table S1. Fitting parameters for Berli-Quemada model at different casein concentrations of Method A (60 °C) and Method B (1 N) dispersions

Method A				Method B			
Conc. (wt%)	$\phi_{eff}/\phi_{m,0}$	$\phi_{eff}/\phi_{m,\infty}$	τ_c **(Pa)**	**Conc. (wt%)**	$\phi_{eff}/\phi_{m,0}$	$\phi_{eff}/\phi_{m,\infty}$	τ_c **(Pa)**
				0.1	0.521	0.026	0.003
				0.5	0.38	0.023	0.006
				1	0.465	0.05	0.034
				5	0.794	0.257	0.024
10	0.752	0.424	0.027	10	0.752	0.424	0.027
12.3	0.679	0.511	0.027	15	1.051	0.473	0.086
15.87	0.612	0.601	0.336	20	1.036	0.705	0.096
17.99	0.667	0.648	0.434	25	1.004	0.882	0.127
20.3	0.814	0.677	0.648	28	1.005	0.880	0.093
29.8	1.005	0.857	0.086	30	0.967	0.952	69.25
41.3	0.994	0.986	18.83				
50.55	0.999	0.998	1833.52				

Table S2. Fitting parameters for Berli-Quemada model of casein dispersions prepared in NaOH solutions of different normalities

2 N				5 N			
Conc. (wt%)	$\phi_{eff}/\phi_{m,0}$	$\phi_{eff}/\phi_{m,\infty}$	τ_c **(Pa)**	**Conc. (wt%)**	$\phi_{eff}/\phi_{m,0}$	$\phi_{eff}/\phi_{m,\infty}$	τ_c **(Pa)**
10	1.0292	0.5563	0.02677	10	1.1017	0.3345	0.03757
20	1.0583	0.6923	0.09517	20	1.1199	0.5682	0.12001
30	1.0096	0.8461	0.17183	30	1.0757	0.714	0.1622