

Figure S1. Characterisation interfacial tension of HPMC-L and HPMC-H.

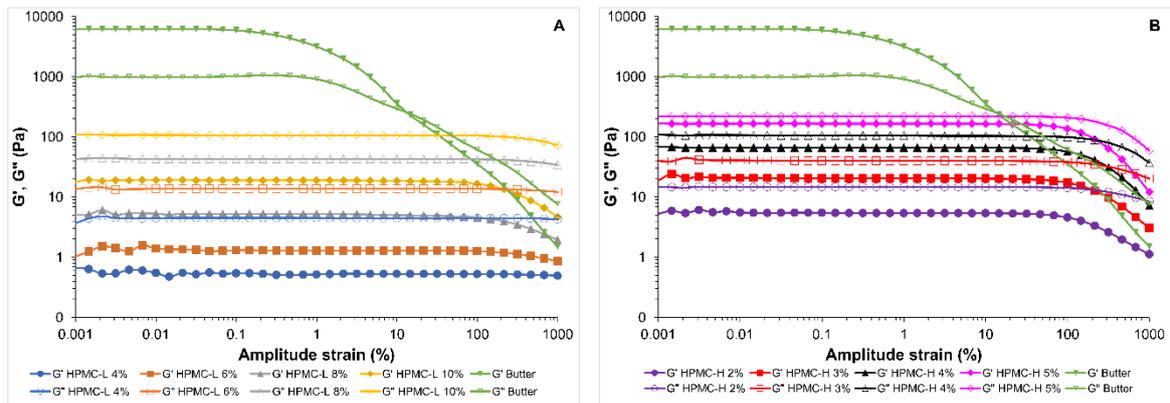
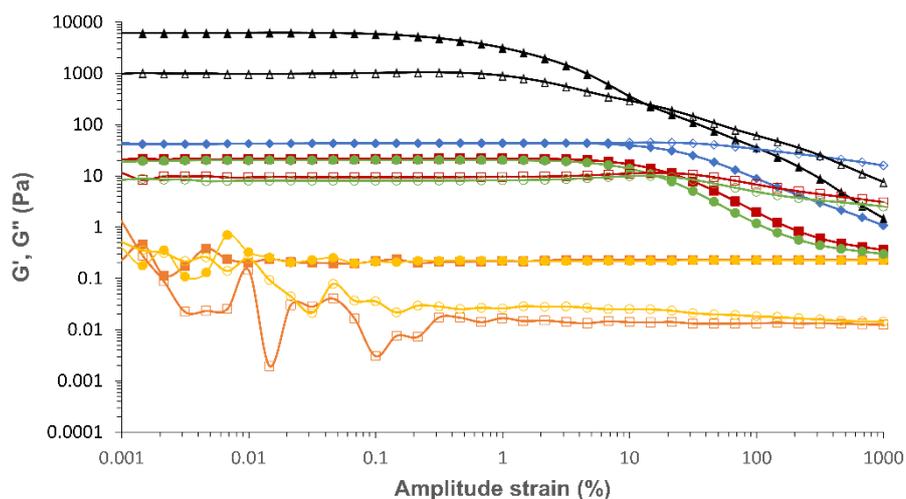


Figure S2.  $G'$  and  $G''$  moduli of HPMC solutions and butter as a function of amplitude. A) HPMC-L solutions at different concentrations (4% blue circles; 6% orange squares; 8% grey triangles; 10% yellow diamond) and butter (green down-pointing triangle). B) HPMC-H solutions at different concentrations (2% purple circles; 3% red squares; 4% pink triangles; 5% black diamond) and butter (green down-pointing triangle). Filled symbols correspond to storage modulus ( $G'$ ) and open symbols to loss modulus ( $G''$ ).



**Figure S3.** Dynamic moduli as a function of amplitude of emulsions and butter  $\blacktriangle$ . Conventional emulsion (CE-0  $\blacksquare$ ; CE-2  $\blacksquare$ ; CE-4  $\blacklozenge$ ). Nanoemulsion (NE-0  $\bullet$ ; NE-2  $\bullet$ ). Filled symbols correspond to elastic modulus ( $G'$ ) and open symbols to viscous modulus ( $G''$ ).

**Table S1.** MDD and PDI of conventional (CE) and nanoemulsion (NE) stabilised with lecithin and HMPC (0%, 2% and 4%).

Emulsions	MDD (nm)	PDI
CE-0	220.13 <sup>c</sup> (2.22)	0.313 <sup>a</sup> (0.030)
CE-2	257.51 <sup>b</sup> (5.26)	0.356 <sup>a</sup> (0.063)
CE-4	275.01 <sup>a</sup> (6.78)	0.346 <sup>a</sup> (0.035)
NE-0	185.83 <sup>e</sup> (4.52)	0.230 <sup>b</sup> (0.018)
NE-2	192.08 <sup>d</sup> (3.93)	0.255 <sup>b</sup> (0.013)

Indicated values are reported as means (standard deviation). Values with the different superscript letters are significantly different ( $p < 0.05$ ) between samples in the same column.