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Figure 1

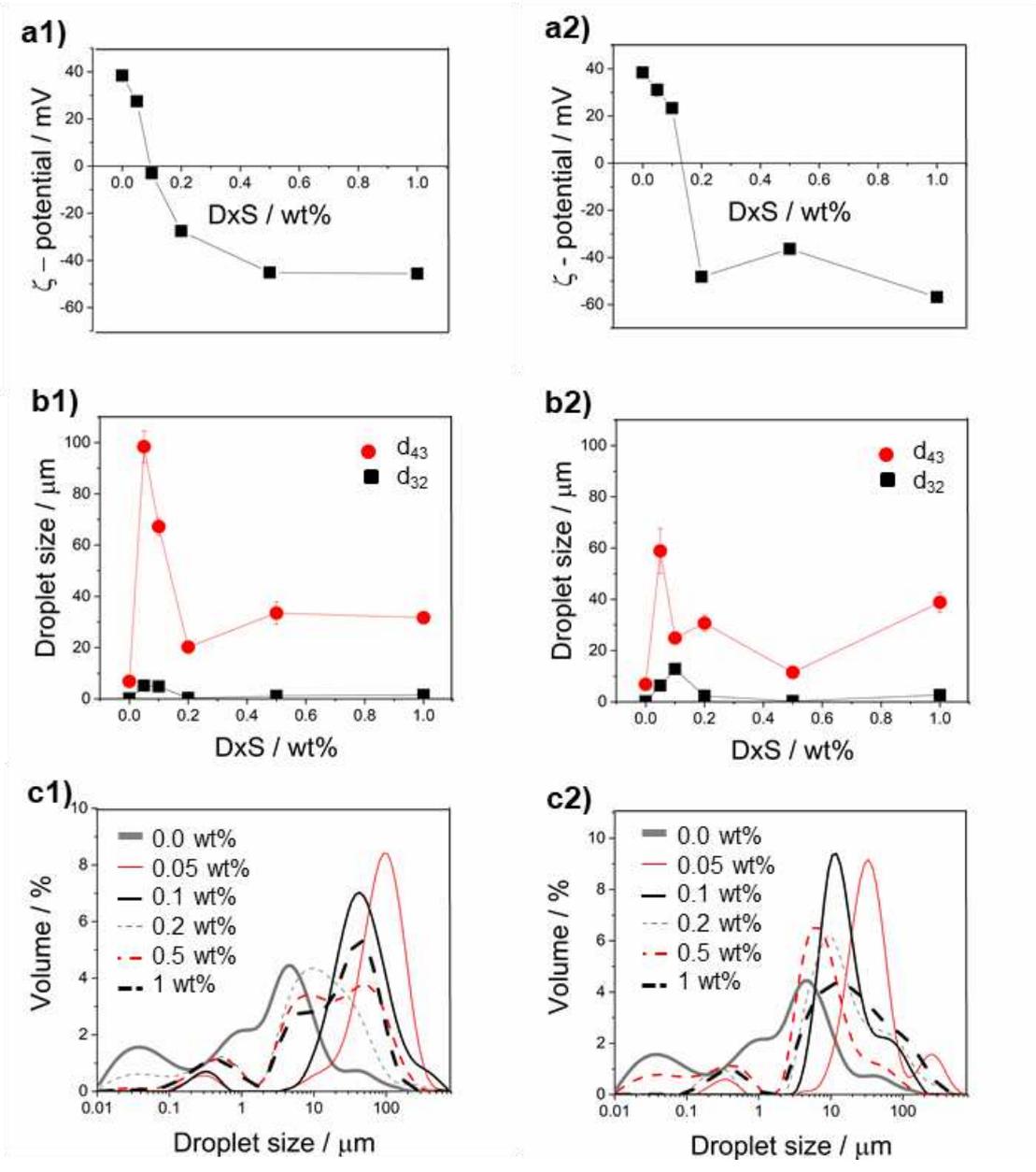
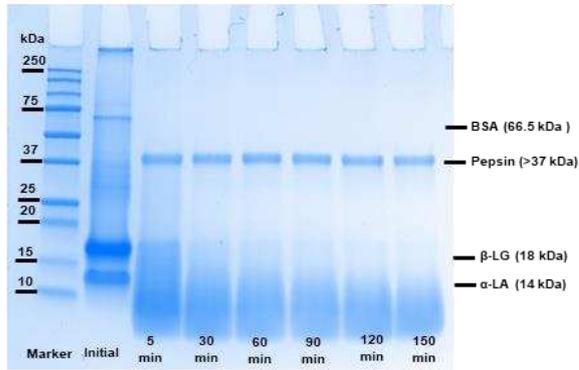
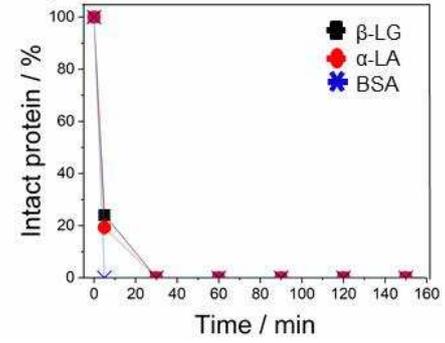


Figure 2

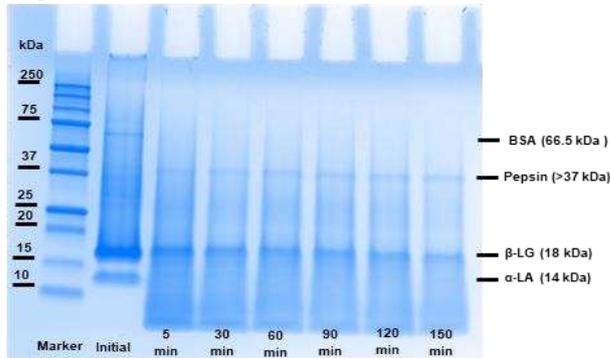
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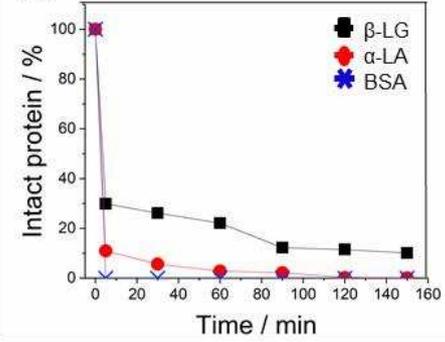
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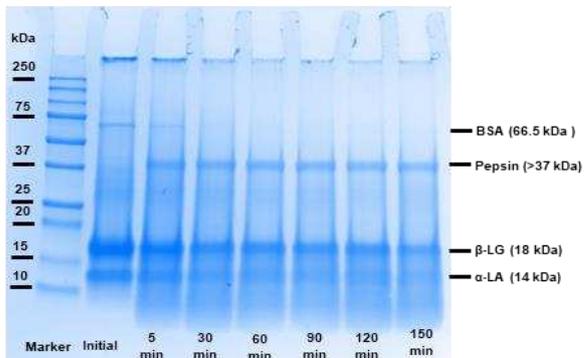
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b2)



a3)



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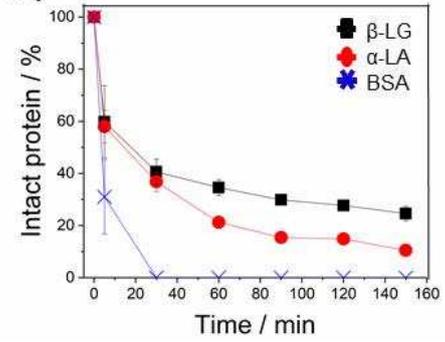


Figure 3

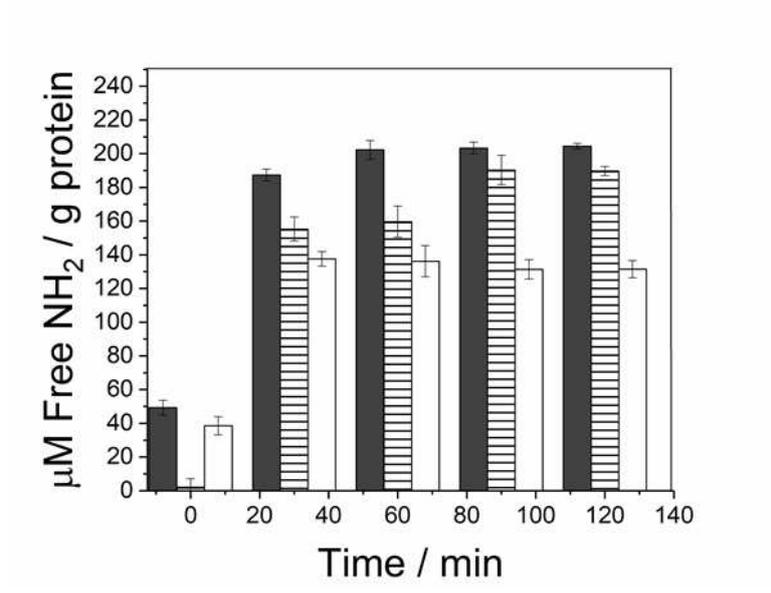


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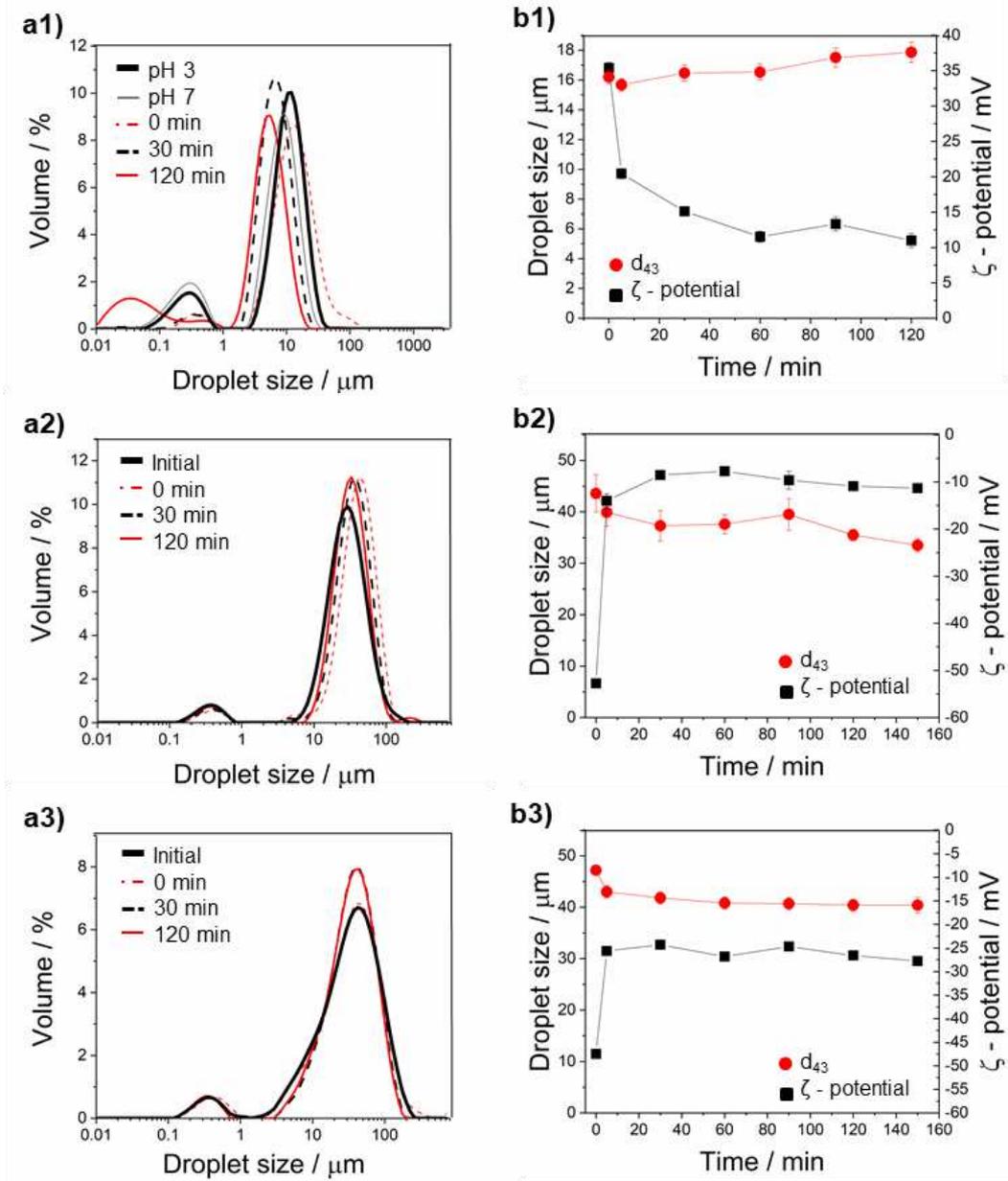


Figure 5

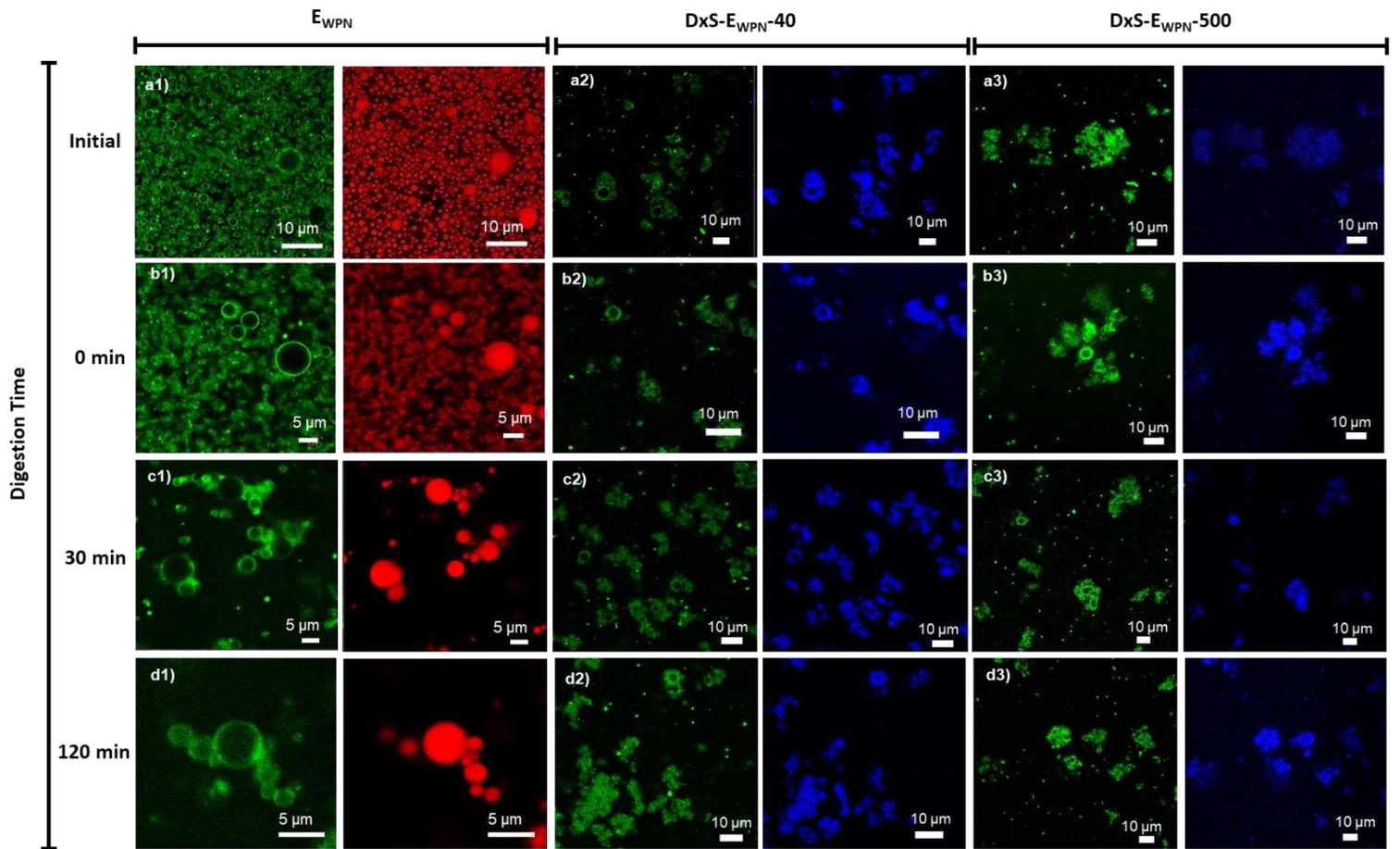
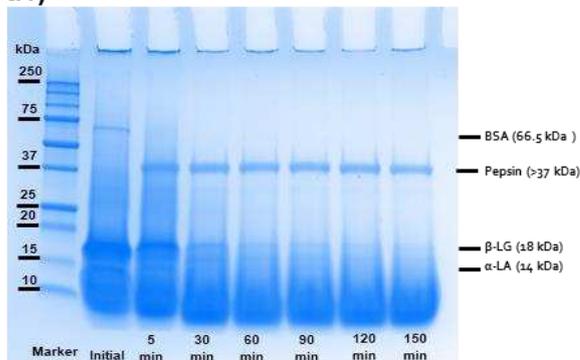
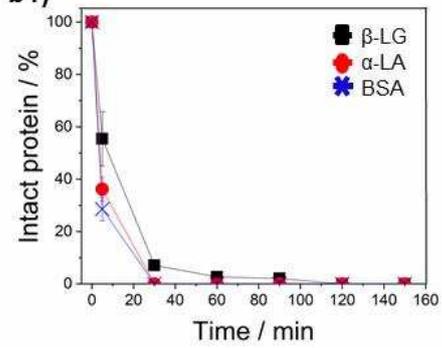


Figure 6

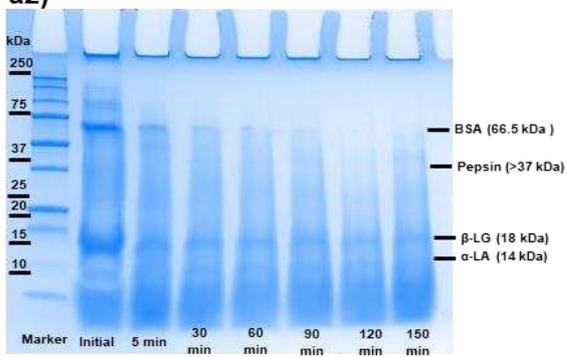
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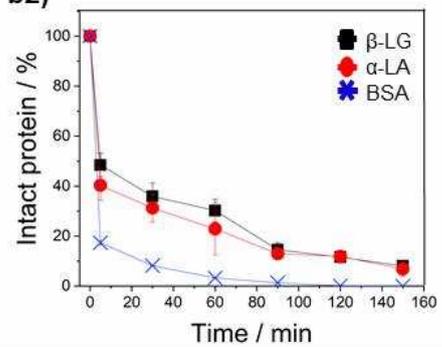
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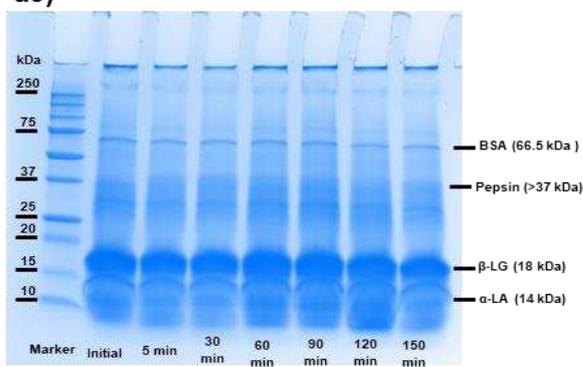
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b2)



a3)



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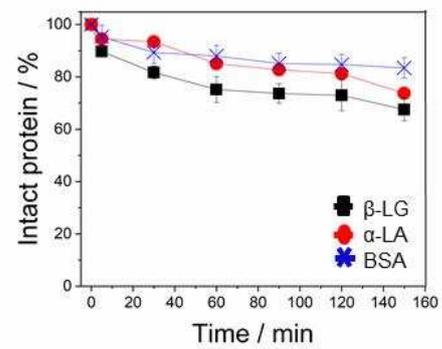
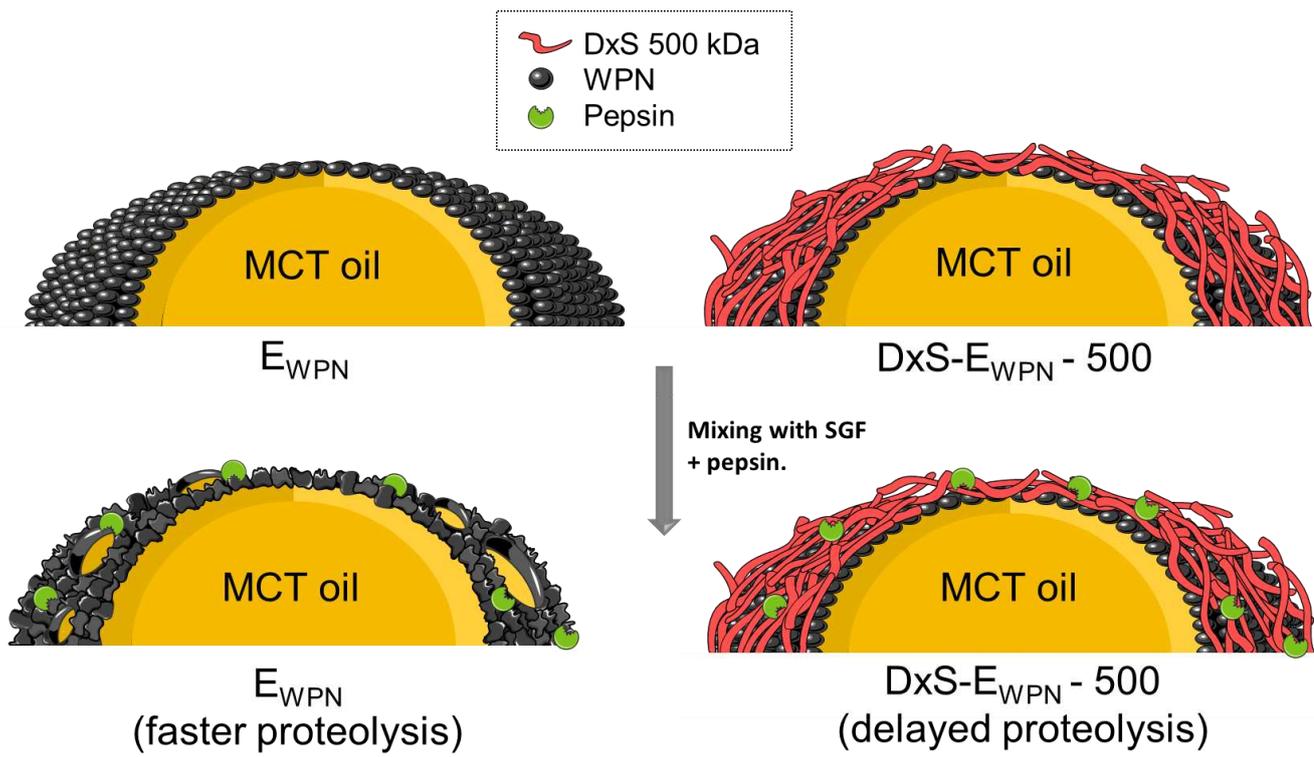


Figure 7



Captions of Figures

Figure 1. Change in a) mean ζ -potential values, b) mean droplet size (d_{43} and d_{32}) and c) mean droplet size distribution of 20 wt% MCT oil-in-water emulsions (DxS-E_{WPN}) at pH 3.0 containing 1 wt% WPN on addition of dextran sulphate (DxS) of (1) 40 kDa and (2) 500 kDa molecular weights, respectively. Error bars in figures a and b represent standard deviations, respectively.

Figure 2. a) SDS-PAGE image and b) percentage of intact protein bands of (1) 1 wt% WPN and 1 wt% WPN with addition of 0.2 wt% DxS of (2) 40 kDa or (3) 500 kDa molecular weights, respectively, as a function of in vitro gastric digestion time. Error bars in figure b represent standard deviations.

Figure 3. Free amino acid content of 1 wt% WPN (dark) and 1 wt% WPN with addition of 0.2 wt% DxS of 40 kDa (lined pattern) or 500 kDa (dotted pattern) molecular weights, respectively, as measured by OPA spectrophotometric and as a function of in vitro gastric digestion time. Error bars in figure represent standard deviations.

Figure 4. a) Droplet size distribution and b) mean droplet size (d_{43}) and ζ -potential values of (1) E_{WPN}, (2) DxS-E_{WPN}-40 and (3) DxS-E_{WPN}-500 after in vitro gastric digestion, respectively. Error bars in figure b represent standard deviations.

Figure 5. Confocal micrographs of (1) E_{WPN}, (2) DxS-E_{WPN}-40 and (3) DxS-E_{WPN}-500 3) at 0 min (a), after 30 min (b), and 120 min (c) of in vitro gastric digestion in presence of SGF containing pepsin, respectively. Note, 0 min represents the behavior in presence of SGF buffer

without added pepsin. Green colour represents WPN stained by Fast Green; red colour represents the oil droplets stained by Nile Red, and the blue colour represents the FITC-labelled dextran sulfate.

Figure 6. a) SDS-PAGE image and b) percentage of intact protein bands of the adsorbed phase of (1) E_{WPN}, (2) DxS-E_{WPN}-40, and (3) DxS-E_{WPN}-500 as a function of in vitro gastric digestion time. Error bars in figure b represent standard deviations.

Figure 7. Schematic diagram of interaction of E_{WPN} and DxS-E_{WPN}-500 on digestion with SGF. The grey shaded circles represent the WPN particles, the long coil red structures represent the DxS-500 kDa electrostatically attached at the interfacial layer and the smaller green structures represent the pepsin.