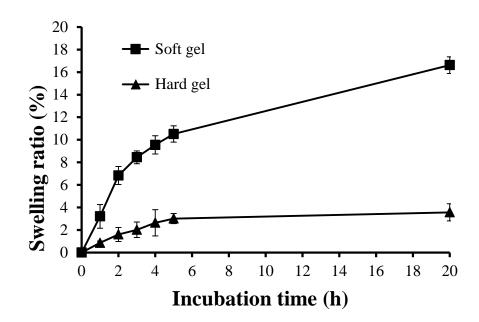
1

2 Supplementary Information

3 1 Swelling experiment

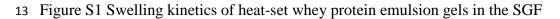
Gel sample (3 g and 5 mm thickness) was placed in 40 ml simulated gastric fluid (SGF) without added pepsin. Experiments were carried out at 37 °C. The gels were taken out of the solution after 1, 2, 3, 4, 5 and 20 h incubation respectively and excess water was removed by gently blotting with a tissue paper and the mass of the gel was recorded. Swelling ratio (SR) was calculated using the following expression: $R = (W_t - W_0) / W_0$, where W_t denotes the weight of the gel at time t and W_0 is the initial weight of the gel.¹ Experiments were replicated 6 times.

10



11

12



14

15 2 Reference

16 1. B. Vardhanabhuti, W. Khayankan and E. A. Foegeding, J. Food Sci., 2010, 75, E305-E313.

17