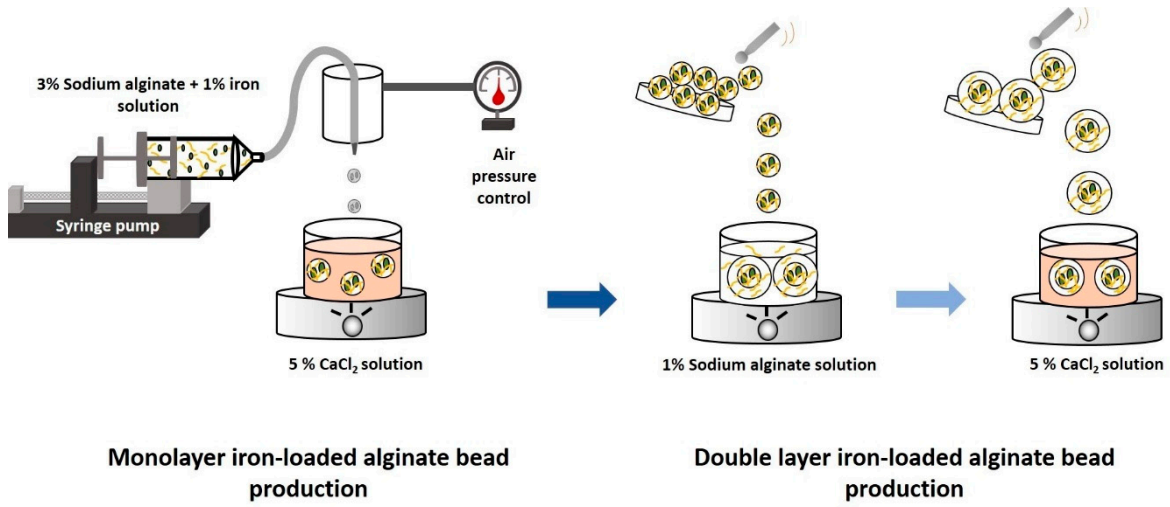
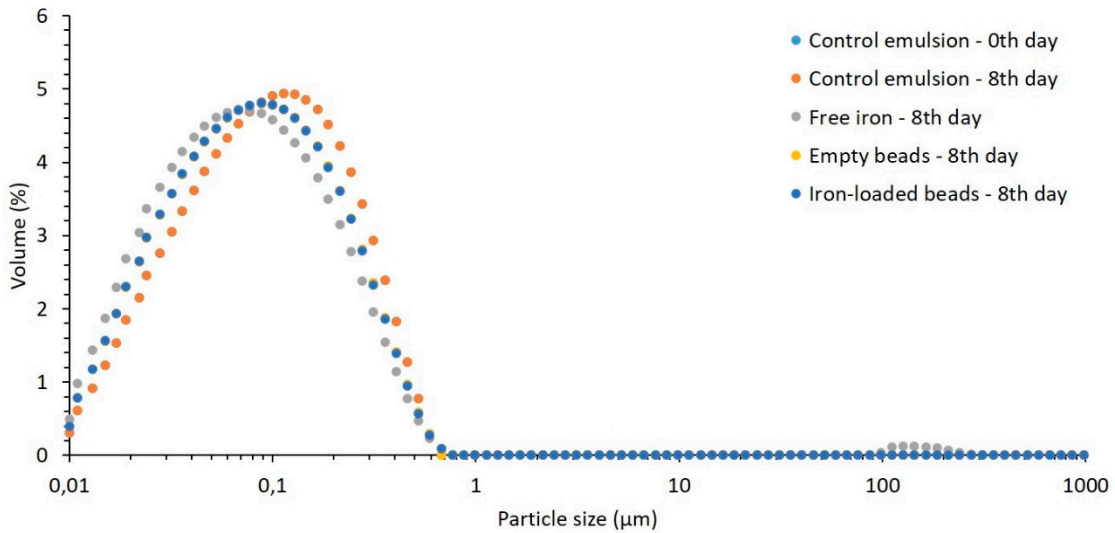


Supplementary Materials:



**Figure S1** : Schematic representation of the production of regular and double-layer iron-loaded alginate beads. More details about the process settings can be found in the materials and methods section; the size of the beads is given in Table 1. The image is not to scale; the thickness of the second alginate layer is exaggerated.



**Figure S2** : Particle size distributions of emulsions, freshly prepared and after 8 days of incubation. Please note that the size distributions of the control emulsions at day 0 and 8, as well as those of the emulsions with empty beads or iron-loaded beads at day 8, overlap.