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Caption of Figures

Figure 1. G' (closed symbols) and G'' (open symbols) of A) 1κ (●), B- 1κ 1CAI (■), M- 1κ 1SAI (▲), S- 1κ 1CAI (◆), 2κ (●) gels and B) 4κ (●), B- 2κ 2CAI (■), M- 2κ 2SAI (▲), S- 2κ 2CAI (◆), 2κ (●) gels, as a function of strain at frequency of 1 Hz, respectively.

Figure 2. G' (closed symbols) and G'' (open symbols) of different biopolymer gels at 1Hz and 0.05% strain.

Figure 3. Texture profile analysis curves of A) 1κ (black solid line), B- 1κ 1CAI (blue dotted line), M- 1κ 1SAI (green thick line), S- 1κ 1CAI (red dashed line), 2κ gels (gray solid line) and B) 4κ (black solid line), B- 2κ 2CAI (blue dotted line), M- 2κ 2SAI (green thick line), S- 2κ 2CAI (red dashed line), 2κ gels (gray solid line), respectively.

Figure 4. Penetration test curves of A) 1κ (black solid line), B- 1κ 1CAI (blue dotted line), M- 1κ 1SAI (green thick line), S- 1κ 1CAI (red dashed line), 2κ gels (gray solid line) and B) 4κ (black solid line), B- 2κ 2CAI (blue dotted line), M- 2κ 2SAI (green thick line), S- 2κ 2CAI (red dashed line), 2κ gels (gray solid line), respectively.

Figure 5. Maximum break force of gels (N) as a function of matrix inhomogeneity.

Figure 6. Cryo-SEM images of A) 2κ , B) 4κ , C) M- 1κ 1SAI and D) M- 2κ 2SAI gels. 1 and 2 represents the micrographs at lower (10,000 \times , scale bar 10 μ m) and higher (25,000 \times , scale bar 4 μ m) magnifications respectively.

Figure 7. TEM images of (A) 2 κ , (B) B-1 κ 1CAI and (C) S-1 κ 1CAI gels. Scale bar represents 500 nm.

Figure 8. Cryo-SEM images of (A) B-1 κ 1CAI and B) B-2 κ 2CAI beads included within the κ -carrageenan continuous phase. Scale bar represents 1 μ m.

Figure 9. Average (n=2) descriptive sensory scores. A) 1 κ (black solid line), B-1 κ 1CAI (blue dotted line), M-1 κ 1SAI (green thick line), S-1 κ 1CAI (red dashed line), 2 κ gels (gray solid line) and B) 4 κ (black solid line), B-2 κ 2CAI (blue dotted line), M-2 κ 2SAI (green thick line), S-2 κ 2CAI (red dashed line), 2 κ gels (gray solid line), respectively.

In both graphs the parenthesis letters signify: (M) mouth, (AF) after feeling, (V) visually, (H) hand.

Figure 10. Number of chews (participant's average) in relation with A) the time at swallow of the different gels created and difficulty perceived, and B) the time at swallow and the level of inhomogeneity.

Figure 11. Principal component analyses with the attributes results. TP: trained panel; black: texture analyser; black italic: participants eating time and difficulty perceived; bold black: rheology and grey box: samples names.