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**Caption of Figures**

Figure 1. G’ (closed symbols) and G” (open symbols) of A) 1κ (●), B-1κ1CA1 (■), M-1κ1SAI (▲), S-1κ1CA1 (○), 2κ (♦) gels and B) 4κ (●), B-2κ2CA1 (■), M-2κ2SAI (▲), S-2κ2CA1 (♦), 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-1κ1CA1 (blue dotted line), M-1κ1SAI (green thick line), S-1κ1CA1 (red dashed line), 2κ gels (gray solid line) and B) 4κ (black solid line), B-2κ2CA1 (blue dotted line), M-2κ2SAI (green thick line), S-2κ2CA1 (red dashed line), 2κ gels (gray solid line), respectively.

Figure 4. Penetration test curves of A) 1κ (black solid line), B-1κ1CA1 (blue dotted line), M-1κ1SAI (green thick line), S-1κ1CA1 (red dashed line), 2κ gels (gray solid line) and B) 4κ (black solid line), B-2κ2CA1 (blue dotted line), M-2κ2SAI (green thick line), S-2κ2CA1 (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-1κ1SAI and D) M-2κ2SAI gels. 1 and 2 represents the micrographs at lower (10,000×, scale bar 10 μm) and higher (25,000×, scale bar 4 μm) magnifications respectively.
Figure 7. TEM images of (A) 2κ, (B) B-1κ1CAI and (C) S-1κ1CAI gels. Scale bar represents 500 nm.

Figure 8. Cryo-SEM images of (A) B-1κ1CAI and B) B-2κ2CAI beads included within the κ-carrageenan continuous phase. Scale bar represents 1 mm.

Figure 9. Average (n=2) descriptive sensory scores. A) 1κ (black solid line), B-1κ1CAI (blue dotted line), M-1κ1SAI (green thick line), S-1κ1CAI (red dashed line), 2κ gels (gray solid line) and B) 4κ (black solid line), B-2κ2CAI (blue dotted line), M-2κ2SAI (green thick line), S-2κ2Cal (red dashed line), 2κ 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.