X[1] The amount of flour (SYF: 20% spent yeast and 80% soybean flours, MRF: 20% malt rootlets and 80% soybean flours) was adjusted depending on the desired percentage (3.5%, 5% and 7.5%) for the preparation of the hybrid cheese analogues (HCA).

[2] Commercial starter Lyofast MOT 082 CE was used in a concentration of 1 UC per 100 L of milk while the non-starter cultures in a concentration of 10^5 CFU/mL

[3] Samples were analyzed both with and without the addition of rennet

[4] Coagulation time depended on the time needed to obtain the maximum coagulum strength (G'max)

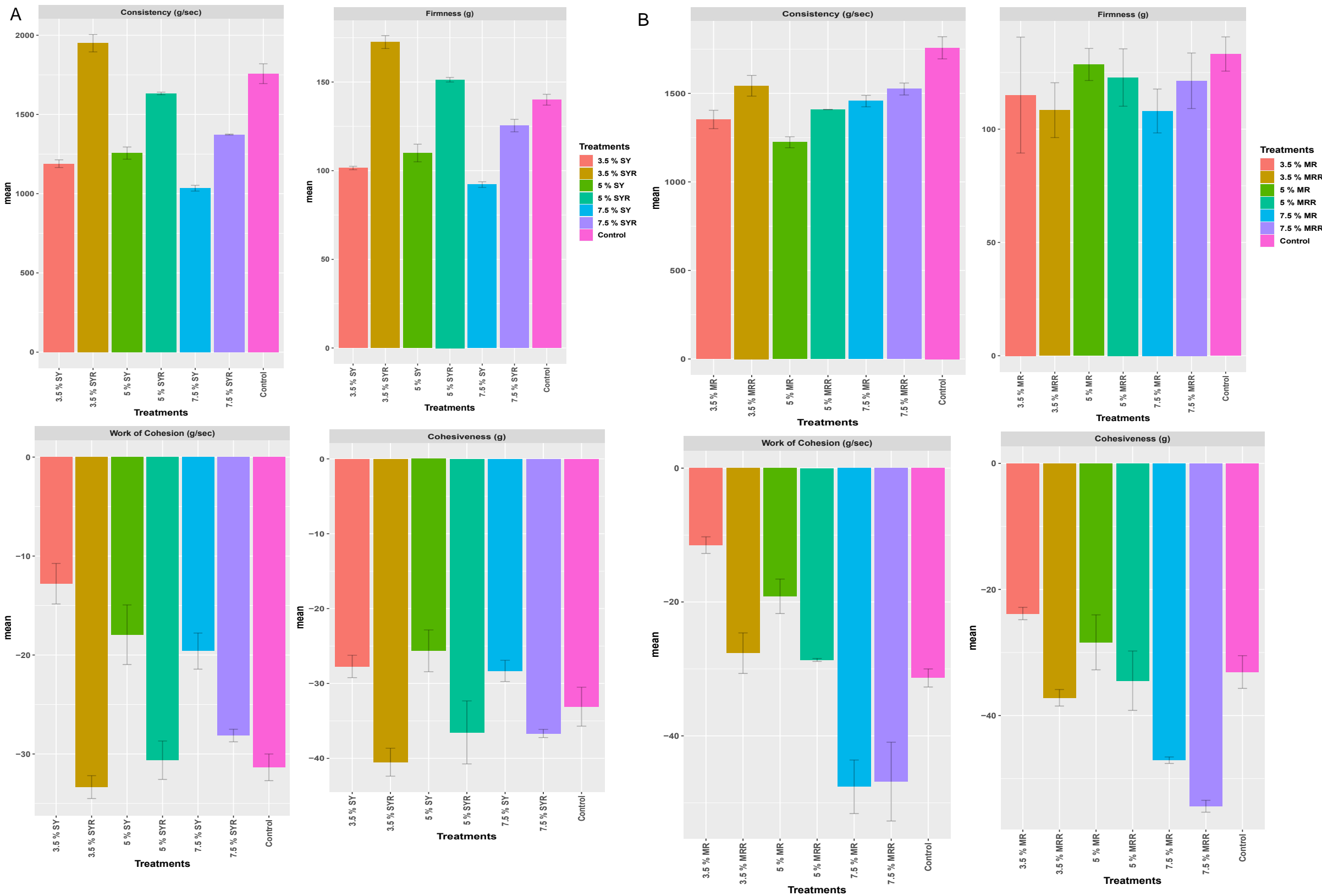**Figure S1. Production process workflow of hybrid cheese analogues (HCA).**

Figure S2. Texture analysis of the curd samples concerning consistency (g/sec), firmness (g), cohesiveness (g) and work of cohesion (g/sec) for blends made with spent yeast (A) and malt rootlets (B) substrates. Dairy based fresh cheese served as control and hybrid cheese analogues were made with added 3.5%, 5% and 7.5% SYF flour (20% spent yeast and 80% soybean flours), with rennet (SYR) and without (SY), and 3.5%, 5% and 7.5% MRF flour (20% malt rootlets and 80% soybean flours), with rennet (MRR) and without (MR). Data are means ± standard deviations for each type of curd sample, analyzed in triplicate.
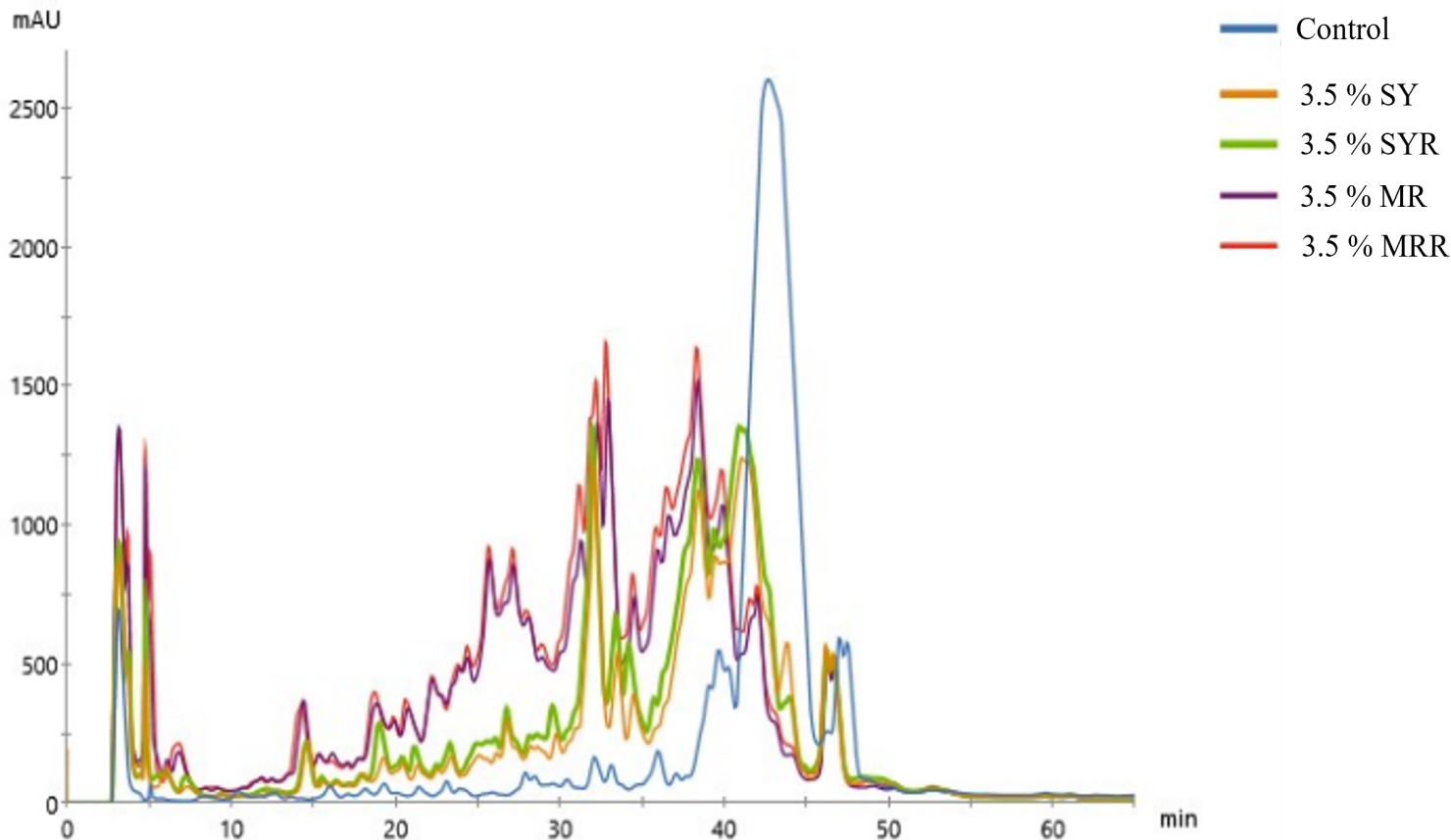
Figure S3. Peptide profiles, obtained by RP-FPLC (detector at 214 nm), of dairy-based fresh cheese (control), and hybrid cheese analogues made with added 3.5% SYF flour (20% spent yeast and 80% soybean flours), with rennet (SYR) and without (SY), and 3.5% MRF flour (20% malt rootlets and 80% soybean flours), with rennet (MRR) and without (MR). All the control and hybrid cheese analogue (HCA) samples were fermented with a combination (SC3) of a commercial starter Lyofast MOT 082 CE (1 UC/100 L) and *Lacticaseibacillus rhamnosus* (105 CFU/mL). Results were visualized using Unicorn software.