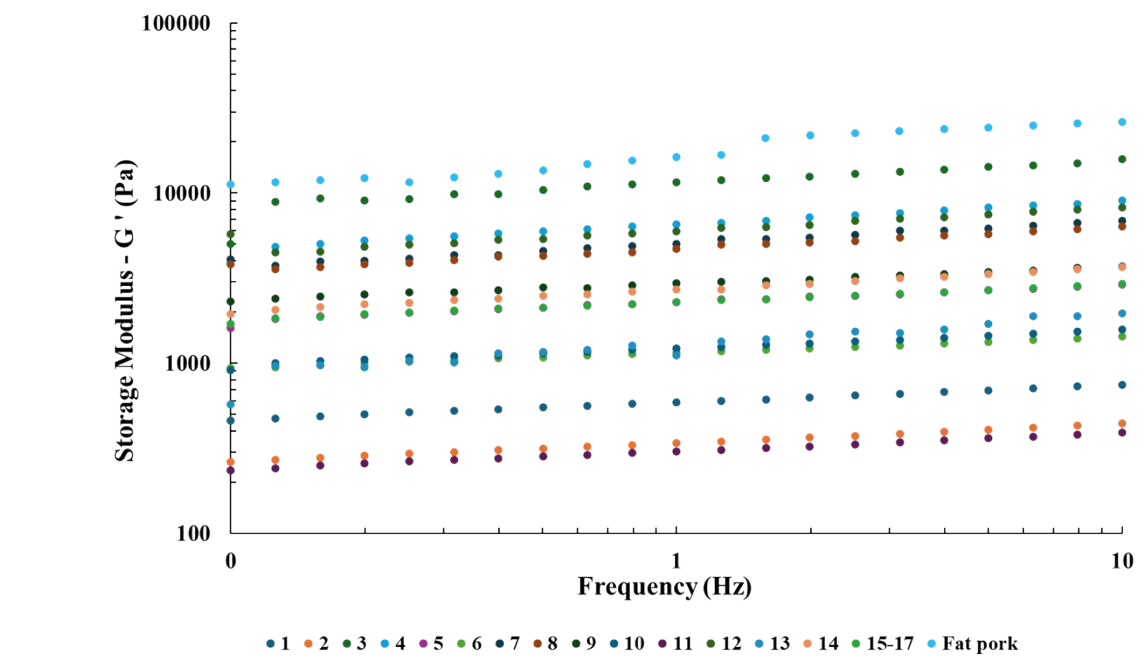
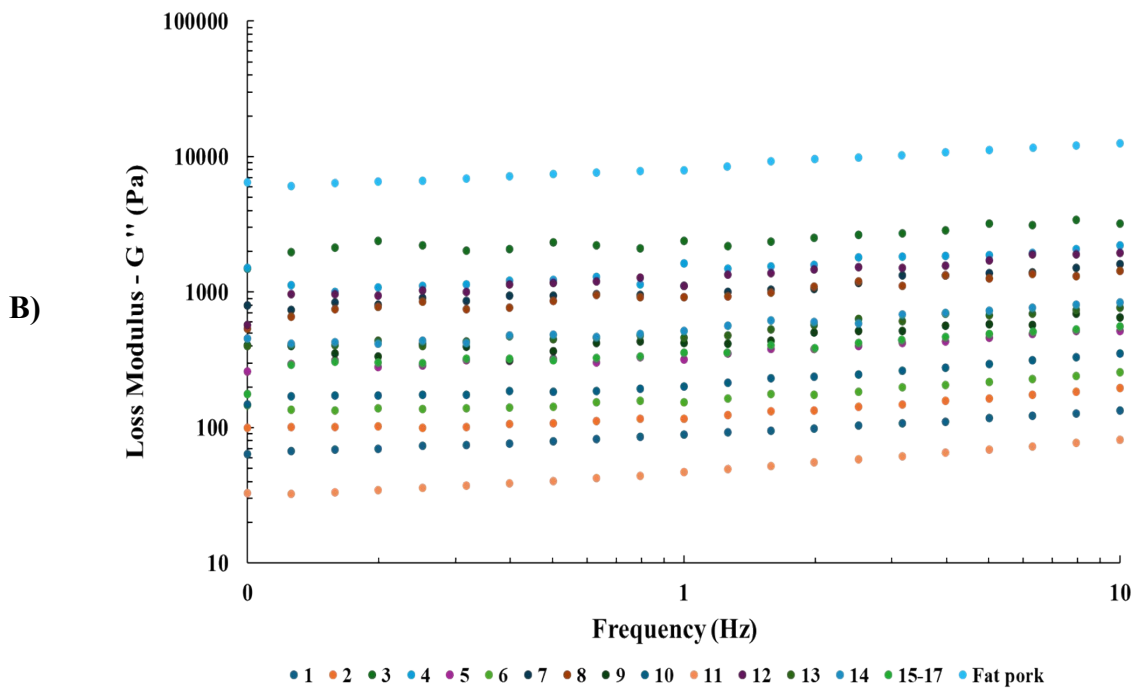


Supplementary Material

Fig. S1 - Frequency sweep test for G' (A) and G'' (B) at 4°C according to the formulations proposed in the experimental design.



A)



B)

Model equations

$$\text{pH} = 4.60 + 0.22x_1 - 0.55x_3 + 0.26x_3^2 + 0.14x_1x_3 \quad (\text{S1})$$

$$G' = 2896.61 - 859.25 x_1 + 3251.48 x_2 + 1181.53 x_2^2 - 573.96 x_3 + 442.39 x_3^2 - 578.8 x_2 x_3 - 1415.10 x_2 x_3 \quad (\text{S2})$$

$$G'' = 666.10 - 123.30 x_1 + 770.35 x_2 + 294.36 x_2^2 - 129.78 x_3 - 328.04 x_2 x_3 \quad (\text{S3})$$

Where x_1 is the encoded value for the SPI variable, x_2 is the encoded value for the CAR variable, and x_3 is the encoded value for the XOS variable