

Yogurt enrichment with pumpkin powder: color, sensory and rheological properties

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Yogurt is the most popular fermented milk product and it has a considerable economic importance throughout the world, due to its high nutritional content and beneficial health effects related to the presence of probiotics. Numerous studies have shown that health claims imparted by probiotic bacteria are very strain specific; therefore, there is no universal strain that would provide all proposed benefits, not even strains of the same species (Vasiljevic and Shah 2008).

The pumpkin (*Cucurbita maxima*) belongs to a healthy and functional food group, rich in phenolic compounds (flavonoids and phenolic acids), carotenoids and vitamins.

In this study, the effect of pumpkin powder on yogurt color, sensory and rheological characteristics of low fat yogurt samples was investigated.

Materials and Methods

Raw bovine milk and sweet pasteurized cream were obtained from a local dairy companies in Suceava (Romania).

Yogurt was prepared with standardized cow's milk and various concentrations of pumpkin powder at 0%; 3%; 6%; 9%; 12% and inoculated with type cultures.

Oscillatory rheology was used to characterize rheological properties of yogurt during the gel formation process (fermentation) without damaging the gel network.

Conclusion

The viscosity of the yogurt samples on the first day of production is high in samples with the addition of 12% pumpkin powder.

The use of 12 % pumpkin powder (P4) resulted in yogurts with higher viscosity, and smoothness sensory attributes.

References

Vasiljevic, T., & Shah, N. P. (2008). Probiotics—from Metchnikoff to bioactives. *International Dairy Journal*, 18(7), 714-728.