

Effect of sodium chloride on preparation of emulsion containing food-functional saponin.

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Summary

The aim of this study is to investigate the effect of sodium chloride on preparation of W/O type and W/O/W type emulsions with A- and B-saponin extracted and fractionated from soybean and soybean oil. In the preparation of W/O type emulsion, emulsions having the good quality on the emulsifying activity and emulsion stability could be obtained by using the aqueous solutions of 0.5% A-saponin at pH 7 containing about 3% sodium chloride. For providing the W/O/W type emulsions, the obtained W/O type emulsions were homogenized with various egg white and ovomuchin solutions with or without sodium chloride. The W/O/W type emulsions could be prepared successfully with the thin white and/or water-soluble ovomuchin solutions separated from thin white in the presence of 4% sodium chloride and at pH 7 ~9.