蒟蒻、卡德藍膠和鹿角菜膠應用於貢丸加工上模式系統之評估

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摘 要

研究乃探討以食用膠(多醣類)添加於貢丸中之可行性。實驗分別探討對照組(基礎原料配方)和添加不同食用膠(配方膠群:鹿角菜膠、蒟蒻膠、卡德藍膠、鹿角菜膠加蒟蒻膠、蒟蒻膠加卡德藍膠、鹿角菜膠加卡德藍膠)(0% , 5% , 10%)對產品的硬度、凝膠性強度、彈力，以及官能品質之影響。實驗結果顯示：添加不同膠類時，卡德蘭膠,鹿角菜膠，蒟蒻膠，(鹿角菜膠加蒟蒻膠)，(蒟蒻膠加卡德藍膠)，(鹿角菜膠加卡德藍膠)的添加，均能增進產品的多汁性，這可能與膠類的保水能力有關。而含不同食用膠之貢丸失重率及色澤均與對照組無顯著差異。質地分析及剪切值測試結果顯示，含有第一配方群(添加5%單一膠體)與第二配方群(添加10%單一膠體)之貢丸其硬度、凝膠、咀嚼性、彈力值均明顯低於對照組，而含有第三配方群(5%鹿角菜膠加蒟蒻膠、5%蒟蒻膠加卡德藍膠及5%鹿角菜膠加卡德藍膠)及第四配方群(10%鹿角菜膠加蒟蒻膠、10%蒟蒻膠加卡德藍膠及10%鹿角菜膠加卡德藍膠) 之貢丸其硬度、凝膠性、咀嚼性、彈力值則高於對照組，此結果可能因兩種多醣類混合時會使膠體特性改變。 在烹煮性試驗方面，比較添加不同配方膠群製成之貢丸於70°C恆溫水中連續烹煮(1 hr , 2 hr , 3 hr , 4 hr)，除了凝膠性和味道略差以外，其口感及接受性尚能維持，故將貢丸置於70°C水中保溫是可行的換言之，在配方中添加不同組合的膠體可增加貢丸的耐煮性。 在冷凍儲存試驗，組織方面(15 , 30 , 45 , 60天)，僅有添加10%蒟蒻膠和對照組相較有顯著的降低的情況。 不論是卡德蘭膠，蒟蒻膠，鹿角菜膠，鹿角菜膠加蒟蒻膠，蒟蒻膠加卡德藍膠，鹿角菜膠加卡德藍膠之5%添加量，均較10%添加量獲得品評員的喜好。以總接受性來說，5%的卡德蘭膠組具有最好的接受性。

關鍵詞 : 鹿角菜膠、蒟蒻膠、卡德藍膠、鹿角菜膠蒟蒻、蒟蒻卡德藍膠、鹿角菜膠卡德藍膠

目錄

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