

甘藷粉取代部分麵粉對蒸餃皮品質之影響

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摘 要

本研究利用三種甘藷粉（台農 57 號、66 號及 73 號）分別以 5%、10%、20% 及 30% 取代率取代中筋麵粉製作蒸餃皮。製備成的蒸餃皮，分別測定烹煮增重率、色澤、組織質地及感官品評分析並進行冷凍儲藏實驗(-18°C)，以探討甘藷粉對蒸餃皮品質之影響。結果顯示，在烹煮試驗方面，添加甘藷粉的蒸餃皮烹煮增重率會下降，但不會隨著冷凍儲存時間的增加而有明顯變化。就顏色而言，整體來說，不論生或熟的蒸餃皮，隨著甘藷粉添加量增加，L 值皆有下降的現象，a 值則有慢慢上升的趨勢，添加台農 57 號及 66 號甘藷粉的蒸餃皮，b 值會增加，但添加台農 73 號的蒸餃皮 b 值會逐漸減少，冷凍貯存過的蒸餃皮在顏色的變化上亦有類似的現象。在質地剖面分析方面，隨著甘藷粉取代率增加，蒸餃皮的硬度上升，但內聚力、咀嚼性及彈性三種組織質地特性則無明顯差異。而感官品評結果顯示，添加甘藷粉的蒸餃皮產品，在顏色及外觀上的評分，雖未高於傳統的蒸餃，但在咀嚼感及整體接受度方面，評分普遍較佳，尤其以添加 5% 台農 57 號的蒸餃接受度最高。

關鍵詞：甘藷粉、蒸餃皮、組織質地、感官品評

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Effects of the Substitution Ratio of Sweet Potato Powders on qualities of Steam Dumpling Crusts

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ABSTRACT

In this study, three kinds of sweet potato powders (Tainung No. 57, No. 66 and No. 73) were substituted for wheat flour, with 5%, 10%, 20%, and 30% substitution ratio respectively, to making steamed dumpling dough. The prepared steam dumpling dough was used to analyze the cooking weight gains, color, texture profile, and sensory evaluation and conduct the frozen storage experiments at -18°C to investigate the impact of sweet potato powders on the quality of steamed dumpling dough. The results show that the steamed dumpling dough made of sweet potato powders gains weight after cooking. However, the weight remained the same regardless of how long it was frozen. In terms of color, the L value decreased and the a value slowly increased as the additional amount of the sweet potato powders increased for both steamed and uncooked dumpling dough. The steamed dumpling dough consisting of Tainung No. 57 and 66 showed an increase in b value. However, the steamed dumpling dough consisting of Tainung No. 73 showed a gradual decrease in b values. The frozen dumpling dough also indicated similar color changes. Regarding to the texture profile analysis, the hardness of the dumping dough increased when the substitution ratio of sweet potato powder increased but the cohesiveness, chewiness and springiness did not show any significant changes. The sensory evaluation results show that the additional sweet potato powders in steamed dumpling dough did not create a better quality in terms of appearance and color, compared to the traditional products. However, it did receive a better rating in chewiness and overall acceptability. Particularly, the dumpling consisting of 5% of No.57 received the highest overall acceptability.

Keywords: sweet potato powder, steamed dumpling dough, texture profile, sensory evaluation.

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