ABSTRACT

Lactobacillus is grouped into the GRAS (generally recognized as safe) class and has been widely used in the food industry for many years. It has the ability to inhibit the growth of food-borne microorganisms and other undesired food microorganisms. It also was continuously recognized with its every kind of nourishment health care function. Lactobacillus therefore has become one of the most popular research topices at the present time. In this study, several microorganisms belong to Lactobacillus were isolated from commercial beef products and inoculated into Chinese-type sausage, to investigate they ability in inhibiting the growth of food-borne microorganisms and other undesired food microorganisms and their ability in contributing special flavor in Chinese-type sausage. The sausage that inoculated Bacillus microorganisms were vacuum packed and stored at 4 ℃ for at least four weeks. During storage, lactic acid bacteria number, aerobic plate count number, lactic acid content, acetic acid content and pH value of the sausage were analyzed and the sensory evaluation was conducted. Research result showed that after sausage storage the lactic acid bacteria counts increased from originally 10⁶ CFU/g to finally 10⁷ CFU/g, along with ferment time increasing pH value of sausage quickly descending, and lactic acid content increasing up to fourth week. After the fourth week, amount of the aerobic count have no longer increase. Sensory evaluation result showed that those sausages inoculate with B2 or B5 Bacillus microorganisms have better preference. During storage, the rancidity for those fried sausages inoculated wit Lactobacillus microorganisms used in this study were found decreased. Keywords: lactic acid bacteria, Chinese-type sausage, flavors and aroma, probiotics
參考文獻

1. 仇志強、吳淳美(1983) 滷肉的揮發性成分,食品工業發展研究所,研究報告,No.285。
2. 何其黨(1991) 食品加工過程所生成的香味,香料資訊。
4. 林松筠 (1986) 菌種在發酵香腸扮演的角色。食品工業, 18(4): 37-41。
5. 林淑姿 (1996) 天然殺菌劑NISIN的特性及於肉品中的應用。食品資訊,128:59-65。
7. 張平平 (1979) 發酵香腸製造之微生物。食品工業,11(7): 18 - 24。
9. 陳幸臣(1991) 水產微生物學實驗法。華香園出版社,台灣。
11. 陳勁初(1991)以乳酸菌保存食品之機制。科學與技術,23(9): 17-21。
12. 彭秋妹、王家仁(1990)食品官能檢查手冊。食品工業發展研究所,新竹、台灣,P10-13。
13. 彭瑞森(1994) 乳酸菌應用於冷藏食品腐敗之抑制。食品工業, 26 (12) :46~52。
14. 程竹青(1987) 肉類香氣。食品香料化學與加工。115-131。
15. 黃加成 (1991) 乳酸菌之特性與利用。雜糧與畜產,221:21-28。
17. 黃加成 (1998) 乳酸菌於中式香腸應用性之探討。生命科學簡訊,12(11):5-8。
18. 黃加成(1993)應用乳酸菌於中式香腸之研究。台灣大學畜產學研究所,博士論文。
20. 黃翠萍、邱再預、沈孜徽、陳炳宗、李樹其(1992)市售肉製品中防腐劑及保色劑含量之調查。藥物食品檢驗局調查研究年報,10:55-60。
22. 郭秀蘭、陳明造、劉登城 (1999) 微球菌對香腸原料肉醃漬期間脂肪之影響。中華農學會報,188:60-69。
25. 刘怡菁 (2001) 不同保護劑的添加對乾燥Lactobacillus acidophilus CCRC 10695菌株在貯藏過程中之影響。中興大學食科所,碩士論文。
26. 刘瑞珍、陳若菁、黃祥吉、林德育、戴謙(1998) 利用逢機複製DNA片段多態型分析近親台灣土雞之遺傳相似性。中華農學會報,186: 89-98。


