

- lactic acid and trisodium phosphate on physical, chemical and sensory properties of ground beef[J]. Meat Science, 2003, 65 (3): 1 055~1 062
- 17 Pohlman F W, Stivarius M R, McElyea K S et al. Reduction of microorganisms in ground beef using multiple intervention technology[J]. Meat Science, 2002, 61 (3): 315~322
 - 18 王 丹,覃 雯. 二氧化氯对原料奶保鲜作用的研究[J]. 中国乳品工业, 2002, 30(5): 47~48
 - 19 王 丹,林劲松. 二氧化氯消毒剂在乳品加工中的应用[J]. 中国乳业, 2002, 5: 23~25
 - 20 Boddie R L, Nickerson S C, Adkinson R W. Efficacies of chlorine dioxide and Iodophor teat dips during experimental challenge with *Staphylococcus aureus* and *Streptococcus agalactiae*[J]. Journal of Dairy Science, 2000, 83 (12): 2 975~2 979
 - 21 Kim J M, Huang T S, Marshall M R et al. Chlorine dioxide treatment of seafoods to reduce bacterial loads [J]. Journal of Food Science, 1999, 64 (6): 1 089~1 093
 - 22 艾晓辉,杨先乐,毛爱民等. 二氧化氯对水产动物致病菌的杀菌效果及安全性评价[J]. 华中农业大学学报, 2002, 21(4): 367~370
 - 23 Kim J, Marshall M R, Du W X et al. Determination of chlorate and chlorite and mutagenicity of seafood treated with aqueous chlorine dioxide[J]. Journal of Agricultural & Food Chemistry, 1999, 47 (9): 3 586~3 591
 - 24 Andrews L S, Key A M, Martin R L et al. Chlorine dioxide wash of shrimp and crawfish an alternative to aqueous chlorine[J]. Food Microbiology, 2002, 19 (4): 261~267
 - 24 水华章,吴锦超,袁 涛. 稳定性二氧化氯在制麦和啤酒生产中的应用[J]. 酿酒, 1999, 2: 80~81
 - 26 彭晋航. 稳定性二氧化氯在软饮料生产中的应用[J]. 山西食品工业, 1996, 2: 26~27
 - 27 Pao S, Davis C L. Citrus research and education center, lake alfred, FL. enhancing microbiological safety of fresh orange juice by fruit immersion in hot water and chemical sanitizers[J]. Journal of Food Protection, 1999, 62 (7): 756~760
 - 28 Winniczuk P P, Parish M E. Minimum inhibitory concentrations of antimicrobials against micro-organisms related to citrus juice[J]. Food Microbiology, 1997, 14 (4): 373~381

The Application of Chlorine Dioxide in Food Fresh-keeping

Fu Maorun Du Jinhua

(Department of Food Science, Shandong Agricultural University, Taian, 271018)

ABSTRACT This paper summarized the application of chlorine dioxide in food fresh-keeping in China and abroad in recent years, which included the newest development of its application in fruit and vegetables, livestock products, milk products, aquatic products and beverage. Chlorine dioxide is a highly efficient, safe antiseptic and food fresh-keeper. It can kill microorganisms efficiently and with no odor remnant. It features preventing the formation of ethylene from methionine and destroying the formed ethylene, thereby providing advantage in the food fresh-keeping. This paper also discussed its future application prospect.

Key words chlorine dioxide, food fresh-keeping, application prospect

甘薯抑制胆固醇功效最佳

信息窗

日本东京大学等 3 个科研单位的科学家日前对 130 种蔬菜、水果和花卉等植物进行分析研究发现,甘薯、毛豆、姜芽、芹菜、菊花和当归等 6 种植物都有抑制胆固醇生成的作用,其中甘薯的功效最为显著。

研究实验证实,甘薯抑制胆固醇生成的功效是其他植物的 10 倍。科学家们还发现,抑制胆固醇生成的是甘薯中一种脂质和糖类相结合的物质,它具有抑制胆固醇生成后期的一种合成酶的作用。这一科研成果的价值在于发现了甘薯具有药效,今后可望用甘薯开发出降胆固醇药物。