Quality of regular and parboiled rice in long-term storage

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Quality of regular and parboiled rice in long-term storage

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ABSTRACT

There is interest in storing food for long periods of time, particularly rice and cereals. Long-term storage can help reduce food loss and waste. However, there is little information on the quality of rice stored for long periods of time. The objective of this research was to investigate the effects of different storage conditions on the quality of regular and parboiled rice stored for 15 years. The rice was monitored for changes in color, aroma, texture, flavor, overall acceptability, and the percentage of sensory attributes that were significantly different from fresh rice. The results indicate that the rice stored for 15 years retained a high percentage of consumer acceptance over long periods of time and should be included in long-term food storage efforts.

METHODS

There is a market for food products that will store for long periods of time, particularly for humanitarian purposes. This study was designed to determine the effects of long-term storage on rice. The rice was packaged in 15 (11 regular, 4 parboiled) mixed-grain rough rice (15 L trays) in three storage conditions: room temperature, refrigerated storage, and freez storage. The rice was monitored for changes in color, aroma, texture, flavor, overall acceptability, and the percentage of sensory attributes that were significantly different from fresh rice. The results indicate that the rice stored for 15 years retained a high percentage of consumer acceptance over long periods of time and should be included in long-term food storage efforts.

INTRODUCTION

There is a market for food products that will store for long periods of time, particularly for humanitarian purposes. This study was designed to determine the effects of long-term storage on rice. The rice was packaged in 15 (11 regular, 4 parboiled) mixed-grain rough rice (15 L trays) in three storage conditions: room temperature, refrigerated storage, and freez storage. The rice was monitored for changes in color, aroma, texture, flavor, overall acceptability, and the percentage of sensory attributes that were significantly different from fresh rice. The results indicate that the rice stored for 15 years retained a high percentage of consumer acceptance over long periods of time and should be included in long-term food storage efforts.

RESULTS AND DISCUSSIONS

The results indicate that the rice stored for 15 years retained a high percentage of consumer acceptance over long periods of time and should be included in long-term food storage efforts.

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