

## Changes in quality of egg gravy during storage

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Eggs are good source of protein and a real substitute for pulse protein for most of the non-vegetarians. Significant rise in the number of single working men and women professionals in the recent past has opened a wide market for the ready to eat foods. Eggs of 5 to 20 days old, heated in boiling water for 10 minutes peeled easily with minimum edible loss. Gravy prepared using onion, tomato and other spices was cooled and packaged in retort, PP and LDPE pouches along with eggs at 3:2 (v/v basis) after mixing with 0.8 per cent citric acid. The pouches were thermally processed at  $95\pm 2^\circ\text{C}$  for 30 minutes in hot water bath and cooled. Eggs packaged along with gravy in retort pouch recorded the lowest pH value of 4.70, the highest TSS value of 12.7°Brix, minimum hardness and springiness values of 12.06N and 0.808 at  $15^\circ\text{C}$  after 45 days of storage, respectively. Retort pouch containing eggs in gravy and stored at  $15^\circ\text{C}$  and gravy in LDPE pouches and stored at  $15^\circ\text{C}$  recorded minimum total colour change value of 7.03 and 11.8 for gravy and egg yolk after 45 days storage, respectively. Bacterial and yeast loads were well within ( $10^4$  cfu /g) spoilage range in all refrigerated pouches. Under ambient condition, products were found to be fit for consumption till 32, 16 and 24 days of storage in retort, PP and LDPE packaging material, respectively. Products packaged in retort pouches scored maximum score values of 8.0 and above to Hedonic scale during sensory evaluation. The production cost of one pouch eggs in gravy packaged in retort, LDPE and PP was estimated as Rs.13.80, Rs. 10.60 and Rs.10.55, respectively.

**Key Words :** Boiled eggs, Flexible packaging, Ready to eat products, Retort pouch

**How to cite this article :** Rajesh, K. and Vasantha Kumar, G.D. (2015). Changes in quality of egg gravy during storage. *Food Sci. Res. J.*, 6(2): 226-231.

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