

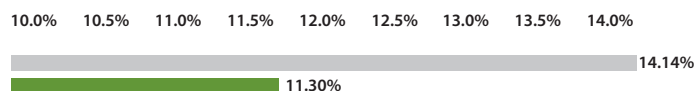
MoisturLok® Powder

CASE STUDY: PITA BREAD

CASE STUDY OBJECTIVES

- To improve a commercial pita formulation with **MoisturLok® Powder**
- Extend shelf life, improve sensory characteristics over the extended shelf life, decrease bake loss -- Increase yields, and remain cost neutral

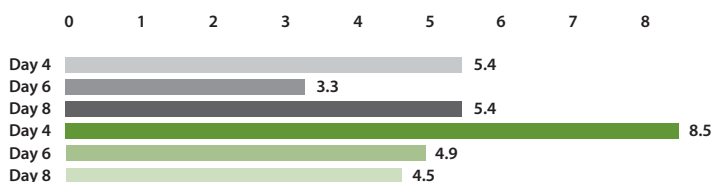
Average Bake Loss



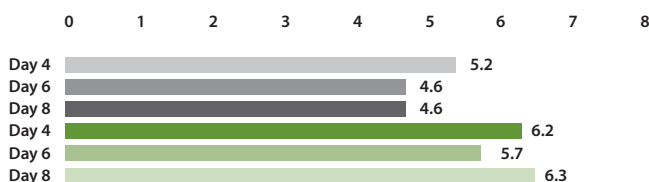
Moisture Loss Over 8 Days



Sensory Analysis: Appearance



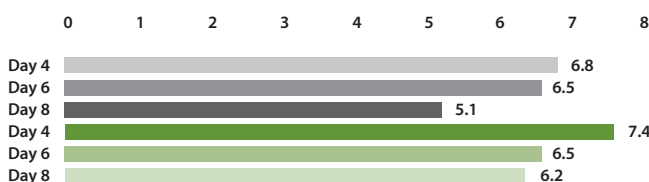
Sensory Analysis: Flavor Quality



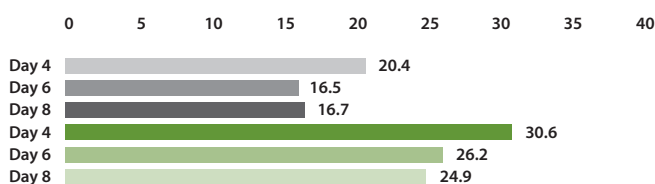
Sensory Analysis: Moistness



Sensory Analysis: Off Flavors



Sensory Analysis: Overall Score (Out of 40)



 **Control**  **MoisturLok® Powder**

CONCLUSION

- **MoisturLok® Powder** and the custom enzyme package work together to make a superior pita bread
 - While baking, more moisture is retained in the pita, increasing yields, which translates to additional savings
 - Less moisture leaves the pita while in storage, which helps to improve mouthfeel and overall quality of the pita
 - Sensory characteristics are improved across the board
- Increased shelf life from 4 days to 8 days and maintained pita bread characteristics throughout the 8 day shelf life

FORMULATION

- **Lower Amount of Fiber**
 - By anywhere from 25% - 35%
- **Add MoisturLok Powder**
 - As addition to the batch (0.85% - 1.0%)
- **Optimize Dough Conditioner**
 - Custom enzyme package synergistic with the humectant
- **Improves eating quality and shelf life of the pita**

SENSORY ANALYSIS

- Tested Pitats after day 4, 6, and 8
- 15 person panel; blind study
- Looked at freshness, flavor, moistness, appearance, and overall quality
- 0-10 scale; 0 being the least desirable



Testing conducted in conjunction with the
Department of Food Sciences at the University
of Minnesota

