

## Kemin Offers Consumer Friendly Solution to Replace TBHQ in Par-fried Meat and Poultry Applications

**DES MOINES, Iowa** (January 29, 2018) – Kemin Industries, a leading provider of shelf-life extension and food safety solutions that help manufacturers keep food and beverage products safe, high-quality and appealing, has announced results of a recent study that showcased how oil-soluble green tea extract could be used in par-fried meat and poultry applications including deli meats to replace tertiary butylhydroquinone (TBHQ).

Par-frying, a process where meat and poultry products are placed in high temperature oil for less than a full lethality cooking process, is used to set batter and/or breading, set exterior proteins to hold a shape, or to impart a color and/or flavor on the surface of the product. The new research study suggests that oil-soluble green tea extract, NaturFORT™ LGR 105 from Kemin is an effective alternative to TBHQ providing flavor stabilization to the frying oil used for par-fried foods.

"This study showcases a consumer-friendly alternative to traditionally used synthetic antioxidants such as TBHQ," said Amanda King, Ph.D., Technical Manager, Proteins, for Kemin Food Technologies. "It is very positive that the removal of TBHQ from frying oil does not mean you have to risk the flavor or shelf life of par-fried meat and poultry items. Kemin offers NaturFORT LGR 105, an oil-soluble green tea extract, as an alternative solution that may be an efficacious tool for replacement of TBHQ in oil used for such applications."

The study results indicate that oil-soluble green tea extract provides equal performance to traditionally used TBHQ, while sensory evaluation of the oil-soluble green tea extract showed no negative sensory impact to flavor, color or quality attributes of the meat. While consumers continue to demand the removal of synthetic ingredients such as TBHQ, its removal without replacing it with an alternate ingredient can lead to development of oxidative rancidity during shelf life, which in turn can lead to customer complaints and ultimately, decreased repeat purchases affecting the bottom line.

"Kemin offers a new solution with a consumer-friendly alternative that helps protect brands and meet consumer expectations, as well as their eating experience," states Dr. King.

### **Study highlights of par-frying with oil-soluble green tea extract vs TBHQ:**

- TBHQ stabilizes the oil during transit as well as the frying process which ensures oil absorbed by the food is not rancid. However, the majority of TBHQ actually flashes off during frying, suggesting that little of it may transfer to the par-fried food for a direct benefit to finished product shelf life.
- Alternatively, the oil-soluble green tea and rosemary extracts in LGR 105 are heat stable, meaning that the hot oil will retain more of the active molecules than TBHQ.
- Meat and poultry are high in moisture, much of which is displaced with oil when placed in a fryer. The oil retained in the product may be more protected from oxidation and development of off-flavors during the par-fried item's shelf life, due to protection from LGR 105.

In today's highly competitive marketplace, Kemin provides food processors, manufacturers and formulators the ability to reduce costs, control inventory and meet demand, all while providing the visual appeal and flavor protection consumers demand.

Please visit <https://www.kemin.com/en/north-america/markets/food-technologies/market-segments/meat-poultry> for more information.

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### **About Kemin Industries**

Kemin ([www.kemin.com](http://www.kemin.com)) has been dedicated to using applied science to improve the quality of life for over half a century. As a global company touching 3.8 billion people every day with its products, Kemin is committed to improving the quality, safety and efficacy of food, feed and health-related products to feed a growing population and be a resource for others in need.

Committed to feed and food safety, Kemin maintains top-of-the-line manufacturing facilities where over 500 specialty ingredients are made for humans and animals in the global feed and food industries, as well as the health, nutrition and beauty markets. The company provides product solutions and options to customers in more than 120 countries.

A privately held, family owned and operated company, Kemin has more than 2,500 global employees and operates in 90 countries including manufacturing facilities in Belgium, Brazil, China, India, Italy, Russia, Singapore, South Africa and the United States.

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