

Natural Systems for Food Applications from Kemin

Natural antioxidants and extracts from Kemin can conserve the flavor, color, and nutritional value in your food products by helping to delay the onset of rancidity, color change or pigment loss, flavor or odor profile change, and degradation of fat-soluble vitamins.

Fortium®_{brand} R10 Liquid Natural Rosemary Extract

The formulation of Fortium R10 liquid natural rosemary extract allows for easy dispersion in meat products. Fortium R10 liquid natural rosemary extract has no restrictions on usage levels in meat products other than GMP. It is manufactured with only GRAS ingredients under ISO 9001 quality standards.

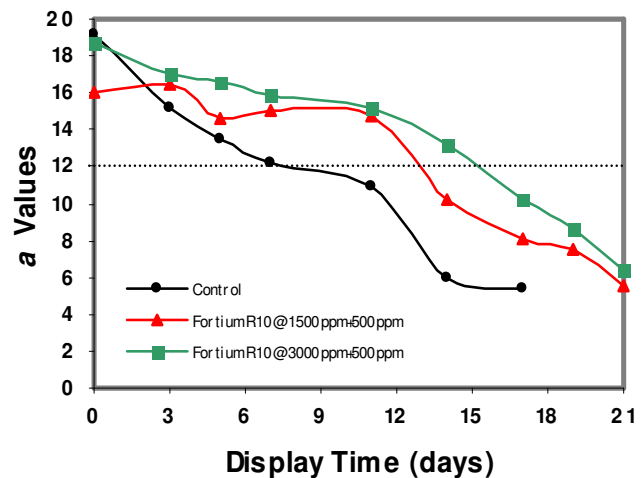
Application: Color Retention in Meats

The color of fresh meat is one of the most important attributes influencing consumers' purchasing decisions. Figure 1 displays Hunter *a* (redness) values of irradiated ground beef samples that were stored under simulated retail display conditions. Hunter *a* values are an indication of redness and are measured by a Hunter Colorimeter.



The higher the *a* value, the more red the meat. The ground beef samples included Fortium R10 liquid at two different levels: 1500 ppm internally + 500 ppm topically, and 3000 ppm internally + 500 ppm topically (based on total weight). They were irradiated with electron beam radiation and packaged utilizing modified (high oxygen) atmosphere packing. With the inclusion of Fortium R10 liquid, the onset of color loss (*a* values < 12) varied from 7 days (control) to 14 days (1500 ppm) to 17 days (3000 ppm).

Figure 1. Color Retention Profile of Irradiated Ground Beef including Fortium R10 Liquid Natural Rosemary Extract



The graph above is just one example of how meat products including Fortium R10 liquid maintain their natural color. Additional research has shown that other meat products, such as sausage and pepperoni, maintain their natural color with the inclusion of Fortium R10 liquid.

When it comes to keeping your meat products fresh looking longer, no other company gives you the comprehensive technical expertise and customer laboratory support you get from Kemin.

Let us show you the Kemin Difference.

Kemin Food Ingredients, Inc., 2100 Maury Street,
Des Moines, IA 50317-1100 USA • 866.253.9579
www.kemin.com

