

Fig. 1. Test in chicken fat

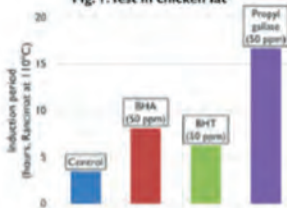
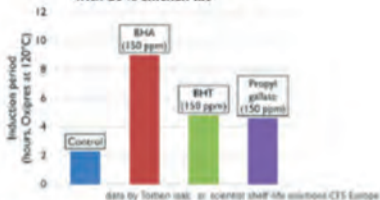


Fig. 2. Test in low-moisture system with 20 % chicken fat



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## How to protect lipids in rendered products from oxidation

First, we need a fundamental understanding of the matrix: is it an emulsion, a melted fat or a low-moisture protein meal? Antioxidants will perform differently in these three situations. For example, BHA was invented because propyl gallate had low performance in the cooker (migration into the aqueous phase)

The antioxidant functionality depends on reactivity, hydrophobicity and interaction. The testing protocol is equally important. If we test in chicken fat (fig. 1), but the primary application is a low-moisture system (fig. 2), we might reach the wrong conclusion.

Finally, the delivery system is important. Lately, PEG-free systems are in demand. CFS is happy to discuss which antioxidants are best for your system.

PEG\_FREE: XTENDRA 597: Feel free to contact us!

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