



**PRESERVE FRESHNESS.  
PROTECT MEAT QUALITY.**

**PERFORM  
WITHOUT  
COMPROMISE.**



### **Shelf life support built for your needs in an evolving industry**

As today's market and consumer preferences evolve, having a shelf-life strategy that fits your goals matters more than ever. At Camlin Fine Sciences, we partner with meat processors to protect product quality, extend shelf life, and preserve color — with natural and traditional antioxidants that work.

Whether you're formulating for beef, pork, or poultry, our NaSure® and Xtendra® product lines give you flexible, effective tools to meet the moment — and whatever comes next.

WHAT’S THREATENING YOUR SHELF LIFE?

LET’S SOLVE IT TOGETHER

There’s no one-size-fits-all solution when it comes to oxidation control. Whether you’re preserving flavor, maintaining color, extending shelf life, or meeting clean-label demands, Camlin Fine Sciences offers tailored antioxidant solutions built around our proteins, formulation needs and performance goals.

We help you build shelf-life strategies based on:

**Formulation complexity:** complex meat matrices containing fats, spices, and proteins requiring synergistic antioxidant blends to manage oxidation challenges

**Flavor protection:** management of lipid oxidation and off-note development

**Color stability:** use of targeted acerola extract to stabilize myoglobin

**Clean-label requirements:** plant-based, naturally derived ingredients meeting evolving consumer expectations

**Dispersibility challenges:** matching water- or oil-soluble formats for even distribution in brines, marinades, or emulsions

**Sustainability goals:** concentrated formulations reducing packaging, warehouse space, and transportation costs

**Alternatives to BHA and BHT:** evaluation of natural options that maintain shelf life and support labeling goals

NaSure™ Plant-based protection for today’s clean-label demands.

NaSure® is our line of naturally derived ingredients that help preserve flavor, color, and shelf life without synthetic additives. It’s ideal for clean-label formulations or when transitioning away from traditional preservatives like BHA or BHT.

**ROSEMARY EXTRACT**  
Rich in phenolic compounds like carnosic acid; helps delay lipid oxidation

**GREEN TEA EXTRACT**  
High in polyphenols; protects flavor with low sensory impact

**ACEROLA EXTRACT**  
Natural source of ascorbic acid; protects red color in raw meat

Xtendra® Traditional antioxidants for high-performance protection.

Xtendra® includes well-established ingredients like BHA, BHT, and TBHQ — delivering oxidative stability in high-fat, high-stress, or extended storage environments.



# CUSTOM SOLUTIONS — BUILT AROUND YOU

## Tested. Tailored. Proven to Perform.

Choosing the right antioxidant is only the beginning. What really matters is how it performs in your product, under your conditions. That's where our Customer Application Lab comes in.

Camlin Fine Sciences partners with your team to test, validate, and optimize antioxidant strategies tailored to your proteins, formulation needs, and performance targets so you get results you can trust in the real world.

## How We Help You Build a Smarter Shelf-Life Strategy:



### 1. Diagnose Shelf-Life Risk

Understand how your product behaves over time — quickly.

- Real-time and accelerated oxidation studies
- Simulate weeks of storage in just days
- OSI and OXITEST for oils, fats, and dry blends
- Cold and frozen storage for long-term testing



### 2. Analyze Color and Flavor Stability

Measure key indicators of degradation that affect quality.

- Track myoglobin breakdown for color performance
- Test TBARS, peroxides, aldehydes, FFAs, and more
- Identify and reduce off-flavor compounds



### 3. Compare Ingredients Side-by-Side

Test natural vs. traditional options — in your product.

- NaSure®, Xtendra®, and alternatives put to the test
- Dose-response studies and active quantification
- Benchmarking for clean-label or conventional systems



### 4. Tailor Your Solution with Expert Support

Fine-tune for protein type, packaging, and shelf life needs.

- Custom blends for beef, poultry, and more
- Align with label and consumer requirements
- Support for reformulation, scale-up, or transition plans

## THE RESULT?

Less waste, stronger product quality, and shelf life that performs in real-world conditions — helping you deliver the products your customers choose again and again.

## Why Camlin Fine Sciences

We believe food deserves to stay fresher, longer — without compromise. For over 30 years, we've helped processors protect product quality, reduce waste, and extend shelf life through science-backed antioxidant solutions. Whether you're using traditional, natural, or a blend of both — we help you make it work.

LET'S SOLVE WHAT'S NEXT, TOGETHER.

[camlinfs.com/cfsna](https://camlinfs.com/cfsna)

[info.us@camlinfs.com](mailto:info.us@camlinfs.com) • 515-278-1559

