Kemin touches **3.5 billion people** every day by improving the quality, safety and efficacy of food, feed and health-related products.

- Founded in 1961 by R.W. and Mary Nelson
- Family owned and operated
- More than 200 patents and applications
- $710 million annual revenue
Kemin Food Technologies focuses on naturally sourced, technically sophisticated antioxidant, food safety, shelf stability and color protection solutions for a wide range of food products.
KEY PLATFORMS

Antioxidants
Antimicrobials
Mold Inhibitors
KEY APPLICATIONS

Proteins
Baking / Snack
Fats / Oils
Tortillas
OXIDATION SOLUTIONS

SYNTHETIC ANTIOXIDANTS
- effective
- economical
- easy to use

TOCOPHEROLS
- effective
- easy to use
- label-friendly

ROSEMARY EXTRACT
- well-known
- label-friendly
- oil & water soluble

GREEN TEA EXTRACT
- oil & water soluble
- label-friendly
- heat stable

ACEROLA EXTRACT
- cure accelerator
- label-friendly
- protects color

PLANT EXTRACT BLENDS
- enhanced protection
- complementary benefits
- retain flavor & color
**CONSUMER TRENDS**

**Grocery shoppers make the majority of their grocery purchases from national grocery stores (38%) or value stores/big box (36%).**

**Although more than half (57%) say price is most important when purchasing grocery items, one-quarter (25%) say it is the ingredient label.**

**Half (50%) do not avoid purchasing grocery items because of any words in the ingredient label, but a minority (26%) avoid the word “preservative” in the label.**

**Around one-third (31%) say they always read the ingredients label before purchasing groceries. Half of those who read the label (49%) say health claims are most important to them.**
CONSUMER TRENDS

THE TOP REASON FOR LABEL CHOICE
IS INGREDIENTS IN THE STATEMENT/INGREDIENT NAME—RATHER THAN THE LENGTH OF THE STATEMENT.
Oxidation in Emulsions

- High Surface area
- Use of Oils with PUFA
- Pro-oxidants

Oil-Water Interface
Hot Area for Oxidation
Synthetic Antioxidants
EDTA

Plant Derived Extracts
Mixed Tocopherols

Blends
Rosemary Extract + Green Tea Extract
NaturFORT™ RSGT 101 Dry: Blend of Green Tea, Spearmint & Rosemary Extracts
**PEROXIDE VALUE: MAYONNAISE**

![Graph showing peroxide values over weeks of ambient storage.](image)

- **X-axis:** Weeks under ambient storage (22 °C-24 °C)
- **Y-axis:** Peroxide values (meq/kg fat)

Lines represent:
- Untreated negative control
- EDTA 65 ppm
- RSGT 1000 ppm
- RSGT 2200 ppm

Graph illustrates the increase in peroxide values over time for different storage conditions.
Total Carbonyl Value: Mayonnaise

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Total Carbonyl Value (µmol/g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Untreated 65 ppm</td>
<td>6.8</td>
</tr>
<tr>
<td>EDTA 65 ppm</td>
<td>2.8</td>
</tr>
<tr>
<td>RSGT 101 Dry 1000 ppm</td>
<td>4.2</td>
</tr>
<tr>
<td>RSGT 101 Dry 2200 ppm</td>
<td>4.0</td>
</tr>
</tbody>
</table>

- **Total Carbonyl Value**
- **Month 5** represented in blue
- **Month 6** represented in orange
QUESTIONS?