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ANNUAL REVIEW



INNOVATIVE SOLUTIONS  
FOR A  
CHANGING WORLD



# LIVES TOUCHED

2,500,000,000  
2015 500+ 2,000  
7,300,000,000

2.5 billion lives touched, on average,  
each day in 2015

by our 500+ ingredients,  
as nearly 2,000 employees strive  
to improve the quality of life for an estimated  
7.3 billion people around the globe.

54 14 \$550 90

Celebrating 54 years in business,  
with our 14 business units producing  
more than \$550 million in sales and  
serving more than 90 countries.

# LETTER TO THE STAKEHOLDERS

## Providing Continual Innovation to Address Changing Consumer, Producer, and Global Needs

Change is inevitable. At Kemin, we embrace change. It is the inspiration behind our continual innovation and our vision to improve the quality of life by touching half the people of the world every day with our products and services.

For instance, the recent changes in shifting consumer awareness, motivation, and expectations regarding food quality, healthy lifestyles, and sustainability have brought new opportunities in the many industries we serve.

In the following pages, you can learn how we are providing new choices for those who may desire:

- Protein produced with antibiotic alternatives
- Human and petfood ingredients that meet “clean label” requirements
- Dietary ingredients that give all ages an opportunity for a healthy future

Meanwhile, we know our global community today will not look the same 10, 20, or even 30 years from now. New challenges will require the next generation to have a strong grounding in science, technology, engineering, and math (STEM) subjects. I personally have seen the result of STEM initiatives as students learn to make connections between school, community, work, and the global enterprise to compete in the new economy.

As our world continues to change and evolve, we will be there with you every step of the way, providing innovative solutions designed to fit the needs of you and your customers. It’s about what we can do, and are doing together, for a growing population that requires all of us who live and work in this expanding global economy to improve the health and nutrition of people and animals.

**Together, we are changing the world – for the better.**



Christopher E. Nelson, Ph.D.  
CEO and president



The rapid economic growth and demographics of emerging markets around the globe are expected to give rise to a large middle class – estimated to reach 5 billion by 2030\* – with an increased need for animal protein.

Whether motivated by personal health, animal welfare, or environmental concerns, many in this growing consumer population are seeking alternatives to conventional meat products, which are typically produced with the routine use of antibiotics.

While some companies may find consumer and industry demands at odds, Kemin can offer antibiotic alternatives that maintain animal productivity without sacrificing the health or performance of animals.



Together, let's feed the world.

“We’re in this together – sharing expertise in animal nutrition and health. We are your partner as well as your provider of solutions to help you succeed now and in the future.”

KP Philip, president, animal nutrition and health, Europe

## Consumer and Producer Choice

Agriculture production around the globe is challenging. The emergence of new and unforeseen diseases, as well as new legislation and regulatory changes, will remain serious challenges for producers. Meanwhile, changing consumer demand dictates that antibiotic alternatives – new choices – must be brought to market.

We share in our industry's responsibility to serve as caring stewards of livestock and poultry. Kemin continuously looks for innovative ways to provide animal care that will help increase global food production while satisfying a growing population desiring healthy and nutritious food.



1. "Meat Companies Go Antibiotics-Free as More Consumers Demand It," Wall Street Journal, November 3, 2014  
2. "Does Giving Antibiotics to Animals Hurt Humans," USA Today, April 20, 2012  
3. "Meat on Drugs," Consumer Reports, June 2012

## A Responsive Product Portfolio

Alternatives and strategies suggested include probiotics, butyric acid, organic acids, and essential oils. To that end, a few of our product offerings in these areas include:

### Probiotics

*CLOSTAT™* is an effective, active microbial with a clear and defined mechanism of action against pathogenic *Clostridium spp.* and reduces intestinal health issues. It is highly stable in feed or water applications, and proven to not create antibiotic resistance/residue concerns.

### Butyric Acid

*ButiPEARL™* is an encapsulated intestinally released butyric acid for livestock and poultry. The proprietary embedded core encapsulation produced by Kemin allows for a sustained release throughout the intestinal tract. This helps enterocyte proliferation which leads to better villi growth, maximizing animal performance.

### Organic Acids

*Acid LAC™ liquid* is a synergistic blend of organic acids carefully selected for their proven efficacy to reduce microbial load in drinking water, remove biofilm and mineral deposits that can slow water consumption.

*Acid LAC™ dry* contains a balanced proportion of acids and prevents the growth of harmful bacteria in animal feed by direct contact and lowering the pH.

*KEM SAN™* has been proven to inhibit a broad spectrum of pathogenic bacteria in livestock and poultry drinking water. KEM SAN is registered with the US EPA and is a unique combination of the most effective organic acids balanced by their individual pKa's and buffered over an optimal pH range.

### Essential Oils

*ORSENTIAL™ Dry*, a feed additive for livestock and aquaculture production, contains oregano essential oil extracted from oregano plant lines specially selected by our Specialty Crop Improvement team. It exhibits strong antimicrobial properties and anti-inflammatory activity, improving the intestinal health of livestock. It can be used as an alternative to some growth promoters to improve the growth performance of farm animals.



Food is a universal language. One that brings together families, neighbors, friends, strangers — and even the pets we care for and love.

Whether you are munching on a snack, dining on a large feast with extended family, or feeding a beloved pet, the quality of the food you eat is the most important factor. At Kemin, our extensive knowledge of oxidation processes and understanding of food products on a molecular level has made us a leading choice for much needed preservation and food safety.

Now that's food for thought.

"Today's food consumers have never been savvier or more concerned about where their food comes from and what is added to it. Kemin customers are continually looking for ways to have a more label friendly option and maintain shelf life characteristics.

Dr. Will Schroeder,  
Kemin food technologies research and development director

## Expanded Choices For Healthy Eating

As a food manufacturer, your goal is to deliver products that look good, taste fresh, and are consistent time and time again. As consumers increasingly request ingredients that are recognizable, having options to keep your labels “clean” is essential. As your partner we are constantly developing new products.

### Looking Good!

FORTRA™, introduced in 2015, is a plant-based extract derived from our proprietary variety of spearmint. This label-friendly ingredient has properties that promote color stabilization and delay lipid oxidation in alcoholic and non-alcoholic beverages, dairy, flavorings, emulsions, and other highly aqueous foods.



We introduced a new oil soluble green tea extract as a natural alternative to synthetic antioxidants. This label-friendly ingredient may be used in fats and oils, as well as dressings and sauces.



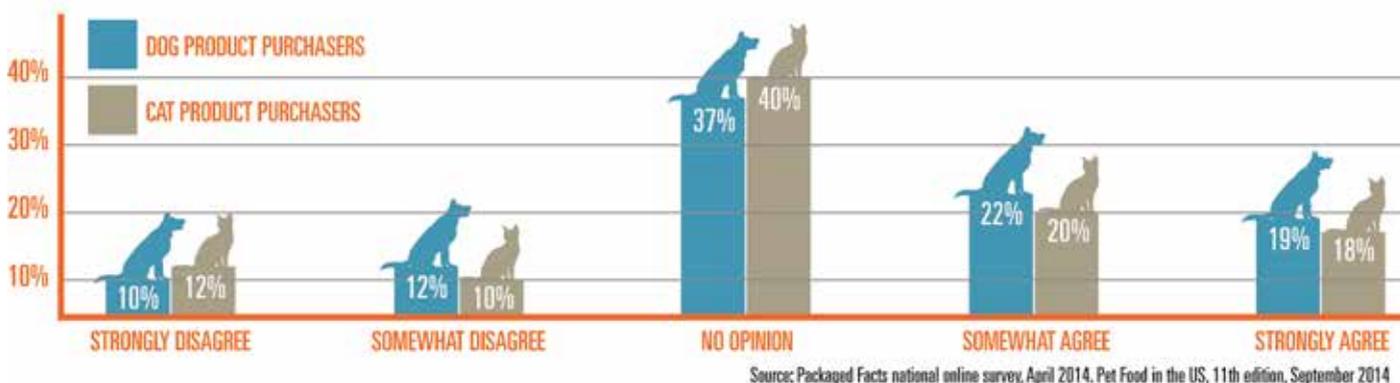
More fish processors are choosing the clean label product made from our buffered vinegar: BactoCEASE™ NV. This unique ingredient helps ensure compliance with food safety regulations while moving away from lactates that carry an E-number on the label.

“Performance, reliability, consistency, freshness, and trust are on everyone’s radar as food safety regulations tighten. Plus, consumers are demanding more transparency in the origin and overall quality of their pets’ diets. As a trusted supplier of superior palatability enhancers and antioxidants, we take our commitment to quality very seriously.”

David Raveyre, Kemin, petfood ingredient business unit president

Consumer demand for natural products continues to experience significant growth across many market segments – including petfood. With pet parents becoming more concerned about what they are feeding the four-legged members of their family, they are looking for more natural and organic products.

**Level of agreement with statement:**  
**If natural/organic pet products were more available where I shop, I would buy them more often.”**



### Pleasing The Pet Palate With Kemin Technology

As more and more consumers purchase special pet nutrition products, palatability technologies can provide practical benefits that extend beyond taste. Our company’s patent-pending pH-adjustor palatant technology incorporates organic acids into specially designed palatability enhancers, resulting in the ability to strike a balance between acidification and palatability.

**Our nutrition and health partners want access to products with safe, beneficial ingredients that will keep people healthy at every stage of life.**

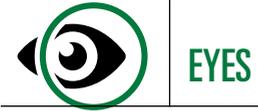
From new discoveries in cognitive health to helping maintain eyesight as we age – and so much more – we delight in sharing our research and knowledge with you. It's these new applications of a single molecule that lead to improved health and well-being of people worldwide.

**At Kemin, we truly believe all who have health, have hope.**

“With an aging population and more adults interested in cognitive health, the market for ingredients and products aimed at cognitive health is burgeoning.”

Anita Norian, president, human nutrition and health division of Kemin

**What a Smart Idea!**  
**Neumentix™ Phenolic Complex K110-42**

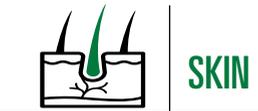


This year, Kemin and DSM sponsored a new study to show how FloraGLO Lutein and OPTISHARP\* Zeaxanthin supplementation **improve eye health** in 3 areas:

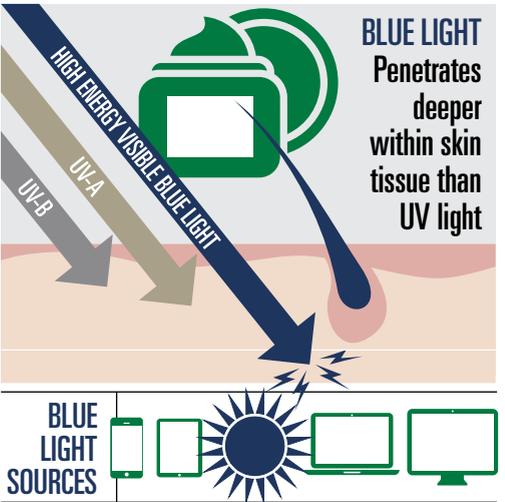
- the ability to see under glare conditions
- photostress recovery time
- chromatic contrast

Results indicate that the regular intake of lutein and zeaxanthin can be beneficial for improving vision in young, healthy people.

\*OPTISHARP is a registered trademark of DSM IP Assets B.V.



FloraGLO Lutein Topical is effective in **shielding skin** from high energy visible light, known as blue light, whether from the sun or emitted from electronic devices. It also maintains healthy looking skin, providing long-term elasticity and hydration.



Around the world people are living and working longer than ever before. And in this competitive age characterized by demanding work and personal schedules, the brain gets a serious work out on a daily basis.

A growing body of research suggests that lutein, in particular FloraGLO Lutein, is an essential nutrient for **brain function** throughout life.

**Kemin introduced Neumentix in 2015 and it was commercially launched into the marketplace in December. Based on clinical trials/research, Neumentix is shown to:**



- **help improve working memory and cognitive performance in older adults**
- **help people fall asleep faster and easier at night**

**By increasing cognitive performance and improving sleep, Neumentix helps revitalize the mind and body and enhances quality of life.**



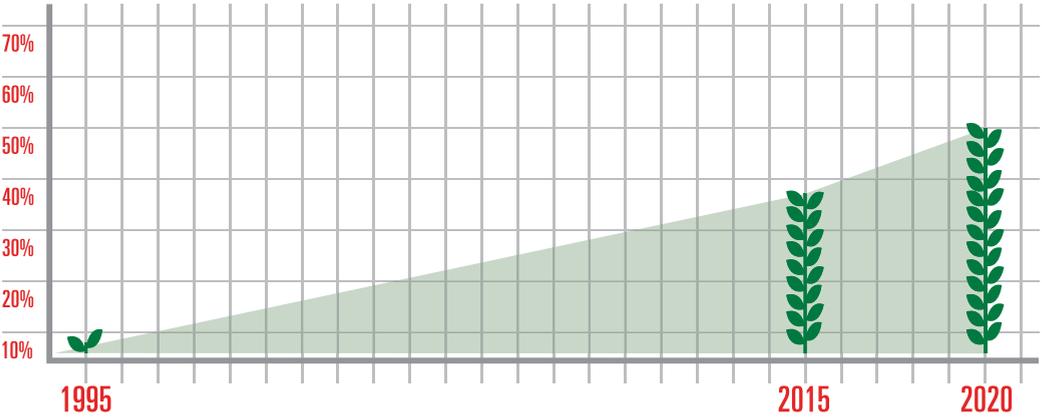
Neumentix is a proprietary ingredient sourced from patent-pending, non-GMO lines of Kemin Industries' own purpose-grown spearmint. Producing over 200 acres of proprietary plants, Kemin works in partnership with multi-generation family farmers who have grown mint for decades.



FloraGLO® lutein is sourced from the marigold flower. In any given year, to support the market demand of lutein's applications across several industries, we grow up to 20,000 acres of marigolds.

**20/20 Vision for Naturally Derived Products**

20 years ago 5% of our products were plant-derived. Today about 37% of our products are plant-derived, with the goal being 50% by 2020.



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## A GROWING COMPANY

We're delighted to share good news about our planned growth. We've entered one of the biggest periods of capital investment as a company.

It's not about bigger and better buildings. It's about the people they are designed for – our hardworking producers, valued manufacturers, respected clients, and caring employees who share in our vision of improving the lives of half the world's population by the end of the decade.

Let's keep building a better world together.

"As aggressive as we are in making these investments, the world's population growth is equally aggressive. We must keep investing, innovating, and growing to provide ingredients that improve the health and well-being of people and animals around the world."

Guiseppe Abrate, president, food and human group

## EXPANSION





Today, there is an ever-increasing global interconnectedness. We are part of a larger, global community. All will thrive when there is a desire to bring about positive change in the world.

At Kemin, we are dedicated to doing our part to improve the health of the communities where our customers, partners, employees, and their families live and work. It's acts of kindness – large or small – that inspire us to continually help make the world a better place for humans, pets, and animals.

**At Kemin, kindness isn't random. It's a way of life.**

"We strive to have a positive impact on the communities we call home – no matter where that is in the world. Our charitable programs focus on underprivileged children, science, general education, arts, and culture. It's these programs that will help make a difference in what people can do in the future."

Mary Nelson, Kemin world wide corporate vice president

## NEPAL EARTHQUAKE | Disaster of Earthshaking Proportions

Kemin Family Members Respond In A Time of Crisis

The massive 7.8 magnitude earthquake that struck Nepal on April 25, 2015, affected 8 million people, including 2 million children. Since millions were displaced from their homes, Kemin decided to partner with Habitat for Humanity (HFH) to rebuild homes.



\$85,000+ was raised by Kemin employees to help rebuild Nepal.

## WORLD FOOD PROGRAMME | Providing Food Security

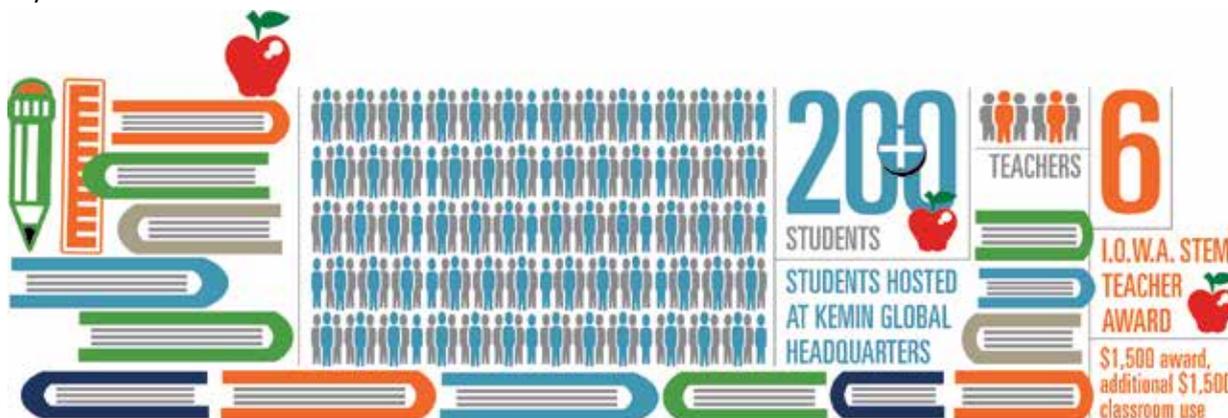
As the humanitarian situation in Syria continued, the World Food Programme (WFP) helped meet the urgent food needs of more than five million displaced people in Syria and in neighboring countries. WFP also helps hundreds of thousands of Syrian children through a school feeding program meant to boost micronutrient intake.

Kemin has been working with the World Food Programme for several years, sharing our understanding of how to prevent the degradation of food and extend the nutritional life of super cereals and high energy biscuits to those in need.



## STEM | Inspiring Our Youth

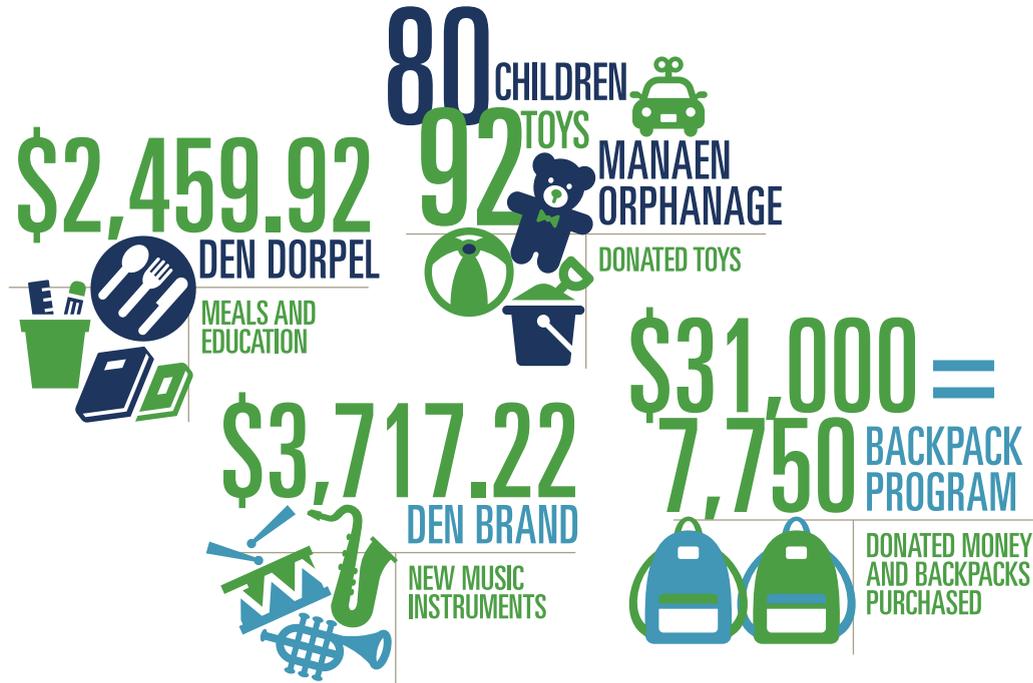
There is an increasing global need for preparing students to become skilled in the fields of science, technology, engineering, and mathematics (STEM). Kemin is proud to further support the advancement of STEM in Iowa schools. This year, Dr. Nelson was appointed to a two-year term as Co-Chair of the Iowa Governor's STEM Advisory council.



## LOCAL GIVING | Charity Begins At Home

In the true spirit of giving, Kemin employees around the globe raise funds or donate items for local charities. In Herentals, Belgium, two local charity organizations: Den Brand, a local day and night care center for disabled adults, and Den Dorpel, which offers people from Herentals living in poverty warm meals and education, received monetary donations.

In South America, our employees donated toys to children at the Manaen orphanage in Indaiatuba, Brazil. In North America, the animal nutrition and health business unit raised funds for the Food Bank of Iowa's Backpack Program™ to help send a backpack full of kid-friendly, nutritious, and easy-to-prepare meals home with low-income elementary school children on the weekends. This program is currently serving 5,000 Iowa children at 139 sites in 31 counties.



## LOCAL GIVING | YESS

For 16 years, we've been providing support to the Youth Emergency Services & Shelter (YESS) near our global headquarters in Des Moines. This year, our holiday auction helped us raise over \$80,950 in donations. We have now surpassed raising over \$500,000 in total donations for YESS and the programs and children/families they support. This amazing milestone has only been possible due to the long term commitment of our employees over the years.





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