

2020
SUSTAINABILITY
REPORT



ADVANCING
PERFORMANCE
TOGETHER

Greater nutrition
and smarter practices
for a better, more
sustainable world



Together we
work to achieve
better health
and wellbeing for
animals and people

Finding Opportunities Amidst Challenges



While rising to the global challenges of 2020, we also discovered opportunities. We found new ways to support customers, employees and communities. And we did it all while staying on course with our five sustainability pillars: **safety, environmental, social, economic and technical.**

Zinpro has been committed to pursuing sustainable business and customer solutions for 50 years. We refuse to let a pandemic stand in the way of progress. We're proud that our plants were recognized for their COVID-19 response in 2020, and even prouder that our increased health and safety measures secured an essential supply chain while protecting so many people.

Last year we hit safety records and optimized plants and manufacturing processes to be more sustainable and environmentally friendly. At the same time, we continued advancing performance together. The proof is in our research collaborations to improve health, feed efficiency and protein quality across species. We also introduced our first supplements that support human immunity and gut health – Mend + Defend®.

We're entering our 50th year excited about the future and to reveal a bold rebrand and new website. **Zinpro is more than minerals, so let's do more together.** Because when we help animals and people experience better health and wellbeing, we create a healthier and more sustainable world for all.

Rob Sheffer

President and CEO, Zinpro Corporation

50 Years of Achieving Better Health and Wellbeing

Our People

11 REGIONAL OFFICES



CORE VALUES:

- Build Trust
- Win Together
- Serve Generously
- Always Improve
- Dream Big

Our Products & Programs

PRODUCT LINES:

ProPath® | Availa®
Original | TruCare® | Eco
Mend + Defend® | HlgGh GOLD®
Zinpro Specialty Products

Products sold in **70+** Countries

PRODUCTION OPTIMIZATION PROGRAMS:

FirstStep®
FeetFirst®
Step Up®
Experts Talks
Perfect Carcass®
Blue Box
H₂O Water Analysis Program
Digital Dermatitis Check App
Equine Nutrition App

PERFORMANCE SOLUTIONS:

We Know Trace Minerals
Lameness Prevention
Managing Inflammation
Lifetime Performance®
Team of Experts

Our Science

Award Winning Blog with **150+** Articles

275+ Peer Reviewed
Research Papers Published

Over **500** Patents Globally



Our Sustainability Priorities:

- Technical
- Economic
- Safety
- Environmental
- Social

Technical

Grounded in research, Zinpro boldly advanced trace mineral science in 2020. We continued to tirelessly collaborate to achieve better nutrition for a more sustainable world.

Availa[®] Zn Improves Protein Production



BROILERS

A 2020 study* showed AvailaZn improved chicks' growth during the first week of life, decreased intestinal inflammation and improved gut development and gut microbiota profile in broilers subjected to nutritional stress, while tight junctions were maintained in heat stressed birds, sustaining gut integrity. Therefore, more energy went to support growth compared to an inorganic zinc source — resulting in improved performance and more breast meat with higher meat quality.



Healthier gut and improved nutrient absorption

- Longer small-intestinal villi
- Higher gut integrity
- Lower zinc excretion rates

*Dietary Zinc Source Impacts Intestinal Morphology and Oxidative Stress in Young Broilers



PACIFIC WHITE SHRIMP

Published in 2020, a two-year project* has paved the way for an increased, sustainable role for Zinpro in the fast-growing aquaculture industry. AvailaZn demonstrated higher bioavailability — providing better growth at lower levels (with less excretion), strengthening antioxidant and non-specific immunity and improving shrimp quality.



Better shrimp quality through water-holding capacity

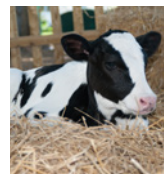
- Less whole drip loss
- Less whole thawing loss
- Less muscle drip loss

50% less zinc
» Lowers farming costs, decreases environmental impact, and improves water quality

*Alteration of Growth Performance, Meat Quality, Antioxidant and Immune Capacity of Juvenile Litopenaeus vannamei in Response to Different Dietary Dosage Forms of Zinc: Comparative Advantages of Zinc Amino Acid Complex

Premolac[®] Lowers Disease in Pre-weaned Calves

An innovative study* explored the power of Premolac colostrum replacer to curb bovine respiratory disease in pre-weaned calves — helping to maintain health for an animal that is highly vulnerable to illness and death.



Rewards of targeted intervention

- 64%** lower odds of Bovine Respiratory Disease diagnosis
» Reduced antibiotic use
- 50%** less likely to show lung lesions on ultrasound
» Greater lifetime milk potential

14% lower likelihood of diarrhea
» Stronger immune system

*Effect of Colostrum Replacer to Ameliorate a Disease Bout in Pre-Weaned Calves on an Automated Feeder

Throughout 2020, Zinpro conducted studies showing the power of nutrition to improve economic returns for those who proudly feed the world.



Boosting Beef Returns



Economic benefits of performance minerals extend beyond the financial rewards of greater animal productivity and beef output. Less disease and death loss means workers can focus their limited time and energy on other tasks, thereby reducing labor costs. The combined impact is stronger profitability and economic sustainability.

Availa®Zn through to market:

Mortality loss down 22%* + Beef production up 10 lb./head** = **5:1** net return

*Reduce Feedlot Mortality with Zinc from Zinpro Performance Minerals®

**Zinc from Zinpro Performance Minerals® Improves Growth in Feedlot Cattle: Results from a Nine-Study Pooled Analysis



Cost-efficient Aquaculture



Balancing European sea bass diets with Zinpro Performance Minerals® cut the amount of fish meal required in half (from 20% to 10%) without harming growth and feed conversion. The project unlocks one key to cost-efficient, sustainable aquaculture diets — and less dependence on marine ingredients enables aquafarmers to earn coveted eco-certifications sought by seafood consumers, retailers and importers.

50% reduction in fish meal needs

8.5% gain in economic advantage



Saving Money on Broilers



A strategy of lowering copper levels in broiler diets yielded financial and environmental gains. The most economical program fed just 21 ppm of Cu from Availa®Cu, and only for the first 27 days of a 42-day cycle. Performance was similar to feeding six times as much Cu from an inorganic source, with three times less Cu excretion at day 18 and two times less at day 35.

Maintained performance

Reduced copper excretion

Decreased cost

We continuously monitor and enhance employee safety. In 2020, we stepped up to protect employees, their families and communities during the pandemic.

Robust COVID-19 Safety Measures and Resource Hub

In the face of a massive challenge, our manufacturing and lab facilities continued to supply essential minerals to the world's agriculture supply chain without pause.

Robust safety precautions were rapidly implemented. Safety teams found ways to segment work groups, limit access in and out of facilities, adjust driver protocols and much more.

In addition, Zinpro Human Resources created and constantly updated a COVID-19 Resource Hub, giving employees a one-stop source for credible information and educational materials.

Determined priorities & procedures

Formed safety teams with daily calls

Implemented best practice sharing

Took detailed safety precautions

Our Wuxi, China manufacturing facility was honored for following strict safety standards to help protect employees from COVID-19 and other risks.

Employees Drive Safer Culture

This year, our focus was on creating a culture shift that puts employees at the helm when it comes to proactive safety efforts. Changes include more emphasis on near-miss reporting and identifying potential risks before they result in accidents.

One-Year Milestone
Shell Rock, IA

600 days without any OSHA-recordable safety incidents

Location Record
North Branch, MN

341 days without any OSHA-recordable safety incidents

Environmental

Our steadfast quest to boost manufacturing efficiency, conserve resources and improve environmental stewardship continued strong in 2020.

Converting Colostrum Waste into Green Value

Rather than going into the waste stream, byproducts from our colostrum production now head to other partners who utilize them, avoiding the need for disposal. This year we worked with a forward-thinking company to test our colostrum permeate solution as a feedstuff for microorganisms that create a green, renewable energy source.

State-of-the-Art Air Emission Monitoring

In order to maintain our “minor source” status for air emissions while increasing production, we voluntarily streamlined our air permits in Iowa.

We now collect more precise data on our emissions for better impact tracking. This aligns with other efforts to refine our environmental reporting and analysis by leveraging SAP software capabilities and identifying potential risks.

Garner, IA | 19 air permits modified
Shell Rock, IA | 10 air permits modified

More Benefits with Less Product

In the research studies described in this report, the overall results consistently show that Zinpro Performance Minerals® are able to reduce trace mineral supplementation through substitution of inorganic minerals in the diets while also maintaining or improving growth performance and the health status of the animals.

This mineral strategy is proof of how Zinpro contributes to a healthier and more sustainable world, not only from an environmental standpoint, but also by:

making
agriculture more
profitable

maintaining
food supply

providing
healthier and
safer food

supporting
agricultural
activities

Social

Through 2020 charitable contributions, community service, education and research, we shared knowledge and backed meaningful causes.

Giving From the Heart During Crucial Need

Employees in Central America and Mexico took the initiative to organize regional COVID-19 protection efforts. They sent 1,600 face shields to customers in Costa Rica, Dominican Republic, Guatemala and Panama and donated 1,000 masks to three health care facilities in Mexico through Cáritas de Monterrey.



Corporate Giving

Zinpro supplied funds to tackle mental illness in the United States and assist animals and people affected by Australian bushfires.*

Employee Giving

Through the company's matching gift program, employees gave generously to organizations such as Community Food Bank of Central Alabama, For Jake Sake Foundation, Japan America Society of Minnesota and St. Jude Children's Research Hospital.

Anderson Foundation

Reflecting the giving spirit of Zinpro founders Dean and Mary Anderson, the Anderson Foundation empowers young women and girls in impoverished areas to complete schooling, prevent diseases and support families. The foundation partners with Mona Foundation, Center for the Arts, Port-au-Prince and LIDÉ.

*Charitable organizations supported in 2020: Australian Red Cross, Earl Bakken Medical Device Center (University of Minnesota), Family Pathways, Heifer International, Gillette Children's Hospital Network, LEAP Foundation, LEP Foundation, National Alliance on Mental Illness Minnesota, People Reaching Out to People, South African Solidarity Fund to Combat Coronavirus, United Heroes League, University Hospital of Maringa and YMCA Child-Care Centers

2020 Young Scholar Recognition Awards & Scholarships

Doctoral Award:



Chad Page, Ph.D.
Sheep research,
University of Wyoming

Master's Awards:



Rebecca Swanson
Feedlot research, University
of Nebraska-Lincoln



Robert Ziegler
Cow-calf research, University
of Nebraska-Lincoln

Zinpro/Schugel Scholarship:



Joshua Brown
Outstanding academic
accomplishments, University
of Minnesota College of
Veterinary Medicine

Sourcing the Best From Nature for Human Health

Zinpro has pioneered the research and development of trace minerals and bioactive ingredients for 50 years. In our mission to contribute to a healthier, more sustainable world, **we launched one of our most exciting advances in 2020: Mend + Defend® supplements for humans.**

As scientists, we live to solve problems. Now our experts in formulating performance nutrition solutions for animals have found a way to restore imbalances in the human body.

Mend + Defend is a line of premium nutritional supplements for people struggling with gastrointestinal and immunity issues. These supplements use the same amino acid transporters and metabolic absorption technology as Zinpro solutions for animals, achieving a notable level of nutrient absorption and utilization.

“This marks a bold move of doing more together. We’re using elements from nature to create gut-mending probiotics, immune-boosting essential minerals and gut-defending colostrum to help people get the most from life.”

- Rob Sheffer, President and CEO, Zinpro Corporation

MEND + DEFEND®



Learn more at
www.menddefend.com

All products are manufactured in the
United States at an FDA-registered facility.





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