RNI No. 7030/2002

Price Rs. 60/-

हिंद पोल्ट्री

HIND POULTRY

Vol. XXI March 2023 No. 9

Hind Poultry Strengthens its Global presence at VIV Asia

VIV ASIA 2023

Pg. 09

New Dynamic Leadership Team at CLFMA OF INDIA

Pg. 21

HIND PUBLICATIONS # 204, PLOT NO. 19, HUDA COMPLEX, SAROORNAGAR, HYDERABAD - 35. TELANGANA. INDIA. PH : 9391378805

HPAI - LPAI - IBD - ND

जैसे गंभीर रोगों से बचने का आसान उपाय

INTERMUNE®

इण्टरम्यून

&

MULTIMUNE®

मल्टीम्यून

सबसे ज्यादा विश्वसनीय प्रोडक्ट
क्योंकि यह कभी धोखा नही देता#

यह लगा तो रोग सफ़ा

INTERFACE PHARMACEUTICALS PVT. LTD.

An ISO 9001 : 2015 (QMS) & WHO GMP, HACCP,ISO 22000 : 2018 (FSMS) Certified Company

For further detail

Contact: +91-11-40047455, +91-11-40047655

#उचित मात्रा में उपयोग करने पर

Proteon Pharmaceuticals

ACTION ON THE GROUND

IS THE NEED OF THE HOUR

What the food production industry needs is some real work on the ground that makes a difference or it can potentially lose the multiple benefits of modern medicine like antibiotics due to antibiotic resistance.

Studies have indicated that millions have lost lives due to illnesses in which bacterial anti-microbial resistance played a role. In fact, nearly 60,000 newborns in India lose their lives annually due to antibiotic-resistant neonatal infections.

Is antibiotics the answer to offering safe & wholesome food to consumers?

The rampant misuse for commercial gains has led to the emergence of antibiotic-resistant bacteria. Antibiotic usage is primarily used to control and manage the outbreak of E. Coli and Salmonella which can cause significant disruption to profitability and productivity.

The silver lining on the horizon for the industry and consumer today is the humble but potent bacteriophage. These are natural and sustainable solutions to successfully manage and prevent outbreaks of bacterial infections. Bacteriophages allow farmers and businesses to considerably reduce the need for antibiotics, adhere more easily to improve food safety norms, and enhance productivity by improving overall health of the flock and lowering maintenance costs.

Proteon Pharmaceuticals is a leader in bacteriophage technology for livestock farming and aquaculture. Harnessing the power of bacteriophages, farmers, and businesses can considerably reduce the need for antibiotics while easily adhering to food safety norms or other regulations.

Our leading products to prevent and manage *E. Coli* and *Salmonella* infection in poultry are BAFACOL and BAFASAL+G. They destroy bacteria effectively and without side effects or impact on the bird's body and do not affect the beneficial gut microflora balance. The result is increased **food safety** and **farm productivity*** across parameters such as **FCR**, **mortality rate**, or **weight gain**.

Our Products

*When administered as per recommended dosage. results can vary from farm to farm

marketing.india@proteonpharma.com | www.proteonpharma.com

हिंद पोल्ट्री

MONTHLY POULTRY MAGAZINE

VOL. XXI No. 9 March 2023

Publisher :
SUGANDHA VYAS

Editorial & Regd. Office
HIND PUBLICATIONS
204, Plot No. 19, Huda Complex,
Saroor Nagar,
Hyderabad - 500 035.
Telangana. INDIA
Phone : 040-40212359
Mobile : 093913 78805
093470 28641
E-mail : hindpoultry@hotmail.com
Website : www.hindpoultry.com

YEARLY SUBSCRIPTION :
India Rs. 500/-
OTHER COUNTRY : $ 60 or Equivalent

Edited, Printed, Published and owned by
M.K. Vyas and Published from
204, Plot No. 19, Huda Complex,
Saroor Nagar, Hyderabad - 500 035. INDIA.
Design and Typesetting
Akshaya Graphics, Hyderabad.
Printed at
Akruti Offset Printers, Hyderabad.
A Magazine of
HIND PUBLICATIONS
RNI No. **7030/2002**
Subject to Hyderabad Jurisdiction

11

CONTENTS

Mr Suresh Rayudu was Announced as Chairman IAICC Hyderabad Chapter

Indian American International Chamber of Commerce was founded in 1990 in Washington DC, with the core purpose of promoting and fostering economic development of the United States of America, Republic of India together with the rest of the world for the benefit of all. Towards the above purpose, IAICC provides a sustainable platform and leadership forum for entrepreneurs, professionals, businesses and governments in the United States, and India to interact, exchange and promote economic development and improve relationship between U.S., India, and rest of the world. As a part of their growth strategy, IAICC recognised Hyderabad's importance and IAICC Hyderabad Chapter was inaugurated on 13-February- 2023.

Mr. Suresh Rayudu Chitturi, VC& MDof Srinivasa Farms Private Limited has been chosen as the first chairman of IAICC Hyderabad Chapter. Mr. Rayudu already worked as CII Chairman - Combined AP and as also Chairman, International Egg Commission. His global outlook and industry exposure will benefit this IAICC Hyderabad chapter in fulfilling it's mission

The inaugural function was graced by : 1. Sri Jayesh Ranjan, IAS Principal Secretary, ITE&C, Government of Telangana 2. Mr. K V Kumar, Executive Chairman, IAICC 3. Mr. Vagish Dixit, Chairman of CII, Telangana .

Mr Suresh Rayudu was announced as Chairman, IAICC Hyderabad Chapter during the inaugural function held at Hotel Marigold, Hyderabad, which was attended by prominent business & industry personalities

Hind Poultry Strengthens its Global presence by participating in VIV Asia as an Exhibitor

Meat pro Asia co-located with VIV Asia 2023 concludes with amazing response from the people of Poultry, meet and livestock industry."A great enthusiasm was shown towards Hind Poultry and PDF magazines and also for the books on Poultry and livestock, published by HIND publications from India at its booth number 1492 in Challenger 1 at impact Bangkok."Hind Poultry takes this opportunity to thank all of our well wishers and visitors who visited our booth and shown interest in our books and magazine.

VIV Asia is one of the largest international exhibitions for animal husbandry and processing in the Asia-Pacific region. It is held every two years in Bangkok, Thailand, and attracts a large number of professionals and companies from the animal husbandry industry. This year, after a long gap of 4 years; VIV Asia 2023 collocated with Meat Pro Asia 2023, celebrated its 30th Anniversary with great footfall for all 3 days; from 8-10 March. This VIV Asia held at a new venue – Impact arena, Hall 1 to 3.

The show was officially opened by Mr. Jeroen van Hooff, CEO Jaarbeurs, Mrs. Birgit Horn , Managing Director VIV worldwide VNU Europe, Ms Panadda Kongma, Director Agribusiness VNU Asia Pacific, Mr Johannes

Schmid-Wiedersheim, director IFFA, Mr Chiruit Isarangkun Na Ayuthaya, President Thailand Convention & Exhibition Bureau (TCEB) and Mr. Narapat Kaeothong, Vice Minister of Ministry of Agriculture and Cooperatives.

The largest trade show for the animal protein industry in Asia, VIV brought together professionals and more than 1200 companies from around the world to showcase the latest technologies, products, and services related to animal husbandry, animal health, and animal feed. The visitors enjoyed a range of sectors, including poultry, pigs, dairy, fish, and aquaculture. The event also featured seminars and conferences on topics such as sustainable animal farming, food safety, and emerging trends in the animal protein industry. Using the fair as a launching pad to a wide range of relevant food producers, manufacturers and retailers from the region. Visitors and delegates at Meat pro Asia co-located with VIV Asia are also witnessing a wide range of seminar and forum sessions for future food, sustainability and food safety.

VIV Asia provides an opportunity for attendees to learn about the latest trends in the industry, as well as to network and share knowledge with others in the field. Overall, VIV brought a great way to learn about the latest trends in the industry, network with other professionals, and discover new products and services. Poultry Industry and Visitors also appreciated the booth of Poultry Dairy & Feed News Point and Hind Poultry from India; (#1492) in Hall no. 1. Hind Publications displayed around 70 titles on Poultry & livestock along with their monthly magazines. Visitors from the Philippines, Australia, United States, Canada, Turkey, Nepal, Pakistan, Sri Lanka, Bangladesh, Vietnam, South Korea, Taiwan, Japan, Indonesia, Malaysia, and Hongkok were among the Buyers who also showed interest in Subscribing PDF News Point and Hind Poultry Magazines.

Hind Publication also announced its participation in VIV Turkey 2023; going to be held in Istanbul- Turkey from July 6 to 8 in Istanbul Expo Centre.

Meat Pro Asia co-located with VIV Asia 2023 concludes with thumping success at Impact Bangkok

A new chapter for the meat processing and packaging industry concluded in South East Asia as the first edition of Meat Pro Asia from 8 – 10 March. Using the fair as a launching pad to a wide range of relevant food producers, manufacturers and retailers from the region, over 100 exhibitors from 20+ countries and regions took part, while 20+ seminar and forum sessions were scheduled, headlined by future food, sustainability and food safety.

"We're delighted to bring the curtains up, and above all to welcome trade visitors from across South East Asia to explorethis first edition,"says Mr Jack Wong, Deputy General Manager, Messe Frankfurt (HK) Ltd. "There's always a lot of anticipation when a new trade fair opens, and this project is something that we are especially excited about because of its links to IFFA, the world's leading trade fair for processing and packaging. This connection has helped us attract a quality line-up of international exhibitors including many European brands, putting visitors in touch with the latest technologies: from testing, processing and sanitation, to packaging and preservation solutions."

The European contingent includes leading suppliers such as Adifo, AVITEC, Baader Food Systems Denmark, Bayle, Bolidt, Brødrene Hartmann, Colubris Cleantech, Europack, GMMI, Hiperscan, Marelec Food Technologies, Munkfors, NECTRA, Nuovo BV, Ovotherm International, Rational Labelling and many more. Influential brands from Asia and the United States were also well represented.

As one of South East Asia's only net food exporters, exhibitors have identified Thailand and Meat Pro Asia as the ideal destinationto connect with relevant food producers and manufacturers. Ms Panadda Kongma, Director of Agribusiness and Operations, VNU Asia Pacificfurther explains: "The co-location and visitor synergies with VIV Asia, hosting more than 1,200 exhibitors from the protein production supply chain,further cements the opportunities available to participants.While VIV Asia covers feed to food, Meat Pro Asia presents the final steps in processing and packaging: a crucial step in delivering meat from farm to table. These synergies, together with a quality exhibitor line-up and conference programme means the full range of industry topics are available for exploration and partnership."

Sustainability and future foods in focus

With ethical eating as a growing concern for consumers in South East Asia, the Meat Pro Asia conference programme echoes the major trends in this area that took hold around the world. Some highlights include:

- How Meat Producers Can Benefit from the Alternative Protein Boom:Good Food Institute Asia Pacific (GFI APAC)
- Alternative Protein Solutions for Meat Producers:Bühler Southeast Asia & Oceania
- Cultured Meat: Trends of Technology and Future: Department of Pharmacology, Faculty of Veterinary Science, Chulalongkorn University
- How North America/Europe is Overcoming the Alternative Meat Processing Challenges and How Asia Can Benefit from ItSchellhas Food Technology Consultants

- Delighting Customers and Consumers with Alternative Proteins through Application Development: Thai Union Group PLC

Reducing food wastage and streamlining manufacturing is another important topic that will be covered in depth on day two of the conference programme:

- A Look Into The Future: The Smart Factory:Multivac Group
- Natural Five: The Power of Natural Refrigerants:Mayekawa
- Food and Material Wastage At the End of Production Line:Bizerba Southeast Asia
- How to Reduce Manufacturing Costs while Maintaining Quality Standards: HiperScan GmBH
- Driving Food Safety and Productivity with Innovations: Ecolab
- Fail-Safe System by Mettler Toledo
- Food Safety in the Egg Business: MOBA
- Automating Traceability to Maximize Food Safety: Marel

Day three is tailored for manufacturers and suppliers targeting the Halal market:

- Halal Certification: More Than Just a Religion: LLPOM MUI

- Halal Food Industry:The Halal Science Center, Chulalongkorn University
- What to consider when designing a Food safety program for the Halal community: Vikan A/S
- Future Food Trend in Meat Industry Sector:Thai Automation and Robotics Association
- Trends, Challenges and Opportunities of Alternative Proteins in Asia at VIV Square

Held together with VIV Asia – the largest fair in Asia for livestock production and animal husbandry, Meat Pro Asia focused exclusively on solutions that deliver meat from farm to table. This includes slaughtering, the full processing chain, packaging, labelling, cold chain logistics, quality control, hygiene, IoT and automation, waste water treatment and more.

The inaugural edition, organised by Messe Frankfurt (HK) Ltd and VNU Group, and took place from 8 – 10 March 2023 in Challenger 1, IMPACT, Bangkok.

Messe Frankfurt accompanies the dynamic growth of the food industry with four trade fairs on four continents. The global industry meets at the events in Thailand, the USA, Argentina and Germany. The international trade fairs showcase trends and innovations and bring together experts from all over the world. Learn more at: www.food-technologies.messefrankfurt.com

Background information on Messe Frankfurt

The Messe Frankfurt Group is one of the world's leading trade fair, congress and event organisers with their own exhibition grounds. With a workforce of some 2,200* people at its headquarters in Frankfurt am Main and in 28 subsidiaries, it organises events around the world. Group sales in financial year 2022 were around •450 million*. We serve our customers' business interests efficiently within the framework of our Fairs & Events, Locations and Services business fields. One of Messe Frankfurt's key strengths is its powerful and closely knit global sales network, which covers around 180 countries in all regions of the world. Our comprehensive range of

services – both onsite and online – ensures that customers worldwide enjoy consistently high quality and flexibility when planning, organising and running their events. We are using our digital expertise to develop new business models. The wide range of services includes renting exhibition grounds, trade fair construction and marketing, personnel and food services. Sustainability is a central pillar of our corporate strategy. Here, we strike a healthy balance between ecological and economic interests, social responsibility and diversity.

For more information, please visit our website at: www.messefrankfurt.com/sustainability. With its headquarters in Frankfurt am Main, the company is owned by the City of Frankfurt (60 percent) and the State of Hesse (40 percent). For more information, please visit our website at: www.messefrankfurt.com

* Preliminary figures for 2022

About VNU Asia Pacific:

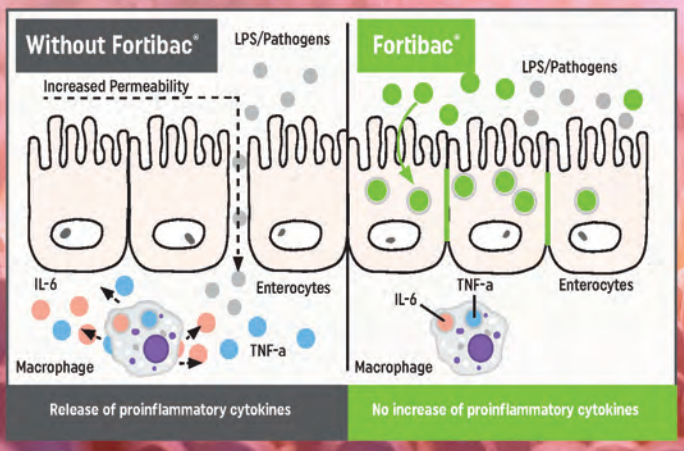
VNU Asia Pacific is part of VNU Group, a globally operating exhibition company with offices in Utrecht, Shanghai as well as in Bangkok, and consolidates the international exhibition business of Royal Dutch Jaarbeurs. In South East Asia, Jaarbeurs has formed a Joint Venture with TCC Group. From its business hub located in Bangkok, VNU Asia Pacific co-vers all key exhibition markets in South East Asia. VNU Asia Pacific has a constantly expanding portfolio with currently 12 trade shows and event formats including brands from the AgriTech, Animal Husbandry, Animal Companion, Food, Life Sciences and Biotechnology industries.

ADDICOO
Additives & Cooperation

Fortibac®

RESPONSIBLE APPROACH TO GUT HEALTH

- Control of intestinal microflora independent of pH
- Support for the development and regeneration of the intestinal wall
- Reduction of intestinal and systemic inflammation
- Better animal performance



ADDICOO
Additives & Cooperation

Produced by:
ADDICOO GROUP s.r.o.
Bohdíkovská 2438/7, 787 01 Šumperk
Czech Republic
www.addicoo.com

Marketed in India by
RAVIOZA Biotech
Enriching Animal Wealth
G/15, Neelkanth Udyog Bhavan, Sakinaka Junction,
Andheri Kurla Road, Mumbai - 400072 (MH) India
Email: contact@raviozabiotech.com


SPACE
SPACE
SPACE
SPACE
SPACE


1492


1600


SPACE
SPACE
SPACE


GOOD BUSINESS
Aviagen


OnePlus


HIND POULTRY
ASIA
1492
1492

New Dynamic Leadership Team at CLFMA OF INDIA 2022-2024

CLFMA OF INDIA is a Non-Profit Organization and an Apex Chamber, nurturing "One Voice" of the Livestock Industry.

It was formed in the year 1967 with the objective of helping the promotion of overall animal husbandry, including the promotion of the concept of balanced feeding of animals in accordance with their nutritional requirements for deriving from them maximum output through productivity improvement. It was broad-based to include members from all sectors of livestock production during 2002.

CLFMA has a membership base of around 250 nos. representing Dairy, Aqua, Poultry, and other sectors related to the Indian Livestock Industry viz. manufacturers and suppliers of feed additives, raw materials, feed plant and machinery, Laboratory equipment and also breeders, integrators, meat processors and exporters, vaccine manufacturers, animal health, etc.

On 16th February, 2023, CLFMA's Election was held in the Extra-Ordinary General Meeting (EGM) and the new leadership team took charge for the period 2022-2024. The outgoing Chairman Mr. Neeraj Kumar Srivastava, Managing Director, South Asia & South – East Asia, Novus International, expressed his appreciation and conveyed his best wishes to the new team led by Mr. Suresh Deora, Director – S.A. Pharmachem Pvt. Ltd., who got elected as the new Chairman of CLFMA OF INDIA for the period 2022-2024.

Mr. Neeraj Kumar Srivastava outgoing Chairman said that, it was indeed a great pleasure to work with CLFMA as a Chairman and after 2 years CLFMA has decided to appoint Mr. Suresh Deora, who is an accomplished, talented business leader having a vast experience in managing the businesses of Livestock Sector as a whole and is actively involved into Human & Animal Nutritional business.

Mr. Suresh Deora, is also the Chairman of Indian Red Cross Society – Mumbai, President and Trustee of KARM, Hon. General Secretary of India – China Chamber of Commerce and Industry. He presides over many education institutes. He is a well-seasoned and networked businessman connected with many industry stake holders including government authorities, BIS, FSSAI, etc and under his Stewardship, we anticipate CLFMA would continue to grow to greater heights.

CLFMA Managing Committee 2022-2024

He thanked Mr. Neeraj Kumar Srivastava and CLFMA and said that, it was a great honour to be appointed as Chairman in a renowned association like CLFMA, as it is the single leading voice of the Animal Husbandry Industry. He promised to do his level best to help CLFMA work for the benefit of its' members and the industry at large. He added that he was truly honoured and thrilled to carry the great legacy of many distinguished leaders, which has served the livestock industry for more than 5 decades. He promised to do his level best towards building the visibility of CLFMA, its image & reputation and working towards betterment of the livestock industry.

He also said that Mr. Neeraj Kumar Srivastava's team has done a great job especially with regard to government engagements and conducting relevant seminars during his tenure.

CLFMA Office Bearers 2022-2024

Following Office Bearers were elected for the period 2022 – 2024

1. Chairman : Mr. Suresh Deora, S. A. Pharmachem Pvt. Ltd.
2. Dy. Chairman : Mr. Sumit Sureka, Shivshakti Agro (India) Pvt. Ltd.
3. Dy. Chairman : Mr. Divya Kumar Gulati, Nurture Aqua Technology Pvt. Ltd.
4. Dy. Chairman : Mr. Naveen Pasuparthy, Nanda Feeds Pvt. Ltd.
5. Dy. Chairman : Mr. Sandeep Kumar Singh, Godrej Agrovet Ltd.
6. Hon. Secretary : Mr. Abhay Shah, Spectoms Engineering Pvt. Ltd.
7. Treasurer : Mr. Nissar F. Mohammed, Coastal Exports Corporation
8. Immediate Past Chairman : Mr. Neeraj Kumar Srivastava, Novus Animal Nutrition (India) Pvt. Ltd.

Executive Director : Ms. Chandrika Venkatesh

The other members of the Managing Committee 2022 - 2024 comprises of:

9. Dr. Prashant Shinde : Cargill India Pvt. Ltd.
10. Mr. Anil M : KSE Limited
11. Dr. Devender Hooda : Huvepharma SEA (Pune) Pvt. Ltd.
12. Mr. R. Ramkutty : Niswin Enterprises
13. Dr. Saikat Saha : Evonik India Pvt. Ltd.
14. Mr. Ramakanth V. Akula : The Waterbase Limited
15. Mr. Vijay Bhandare : Bhavani Agrovet Pvt. Ltd.
16. Mr. Abhay Parnerkar : Godrej Tyson Foods Ltd.
17. Mr. R. Lakshmanan : Shanthi Feeds Pvt. Ltd.
18. Mr. Balaram Bhattacharya : Indian Herbs Specialities Pvt. Ltd.
19. Mr. K. Narender Reddy : Natural Remedies Pvt. Ltd.
20. Dr. Anup Kalra : Ayurvet Limited
21. Dr. Vijay Makhija : Intervet India Pvt. Ltd.
22. Mr. Jaison John : U. S. Soybean Export Council, Inc.

How Phytogenics Really work – A new Lens for Animal Nutrition

By Ellen Hambrecht
Global Product Manager Phytogenics,
Trouw Nutrition Global &
Melchior de Bruin
Development & Deployment Manager,
Trouw Nutrition Global

Phytogenics were introduced to animal nutrition decades ago with a specific objective: to find alternatives for the use of antibiotics as growth promotors. Considering that narrow focus, phytogenics – specifically essential oils – were screened for antimicrobial properties and selected for their ability to kill relevant pathogenic bacteria. However, even though some phytogenics may have antimicrobial activity in vitro, at the in-feed inclusion levels commonly used, they have little to no antimicrobial effect.So, it is time to reconsider the mode of action for phytogenics in the animal and trulyharness the full power of this fascinating category of molecules.

Generally, phytogenic means 'derived from plants' and, in the present context more specifically, bioactive components from plants that function as defence mechanisms or signalling compounds. As feed additives, phytogenic compounds have the potential to modulate signal transduction pathways relevant for physiological processes such as nutrient absorption or immune response, to name just two examples.When used at the right dosage, phytogenics are a powerful tool in supporting the animal to come closer to its genetic potential.

The gut – so much more than a digestive organ

One of the focus areas in broiler production is the intestinal tract because it is one of the most prominent sites of interaction of the animal with its environment. Moreover, it is the site where dietary energy and nutrients need to be optimally digested, absorbed and converted into molecules required for maintenance and growth. So, when focusing on improving production efficiency of broilers, the gut is the place to be.

Traditionally, animal nutritionists have focused on formulating diets that meet the animal's nutritional requirements at minimum cost; on exploring ways to remove or mitigate the effects of anti-nutritional factors in feed raw materials; and on manipulating the gut ecosystem by using antibiotics, pre- and probiotics and other compounds. Only in recent decades have researchers realised that the gut serves as so much more than a digestive organ.

Furness et al. (2013) describe the gut as a sensory organ, which detects and processes 'messages' from its environment through a myriad of receptors located on intestinal cells facing the gut lumen. Targeting these receptors through molecules supplied in the animal's diet can trigger systemic physiological responses that in turn affect

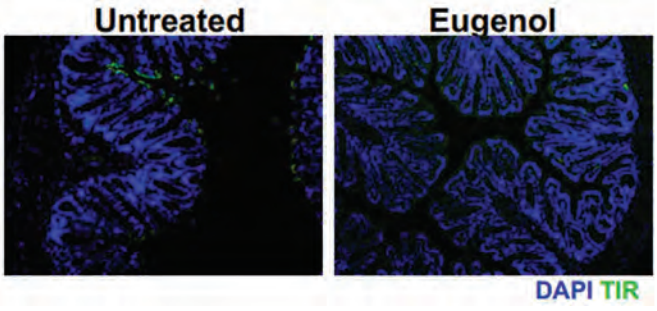
metabolism, immunity, hormonal secretion, inflammation,etc. and, ultimately, animal performance.

Rethinking the role of phytogenics – considering mode of action

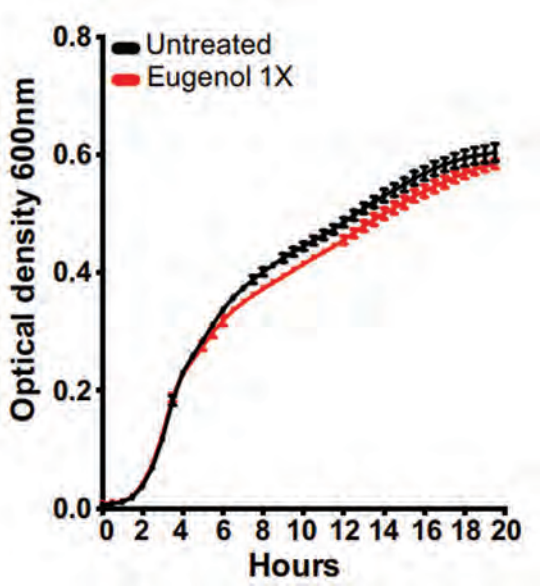
Co-evolved during the ever-ongoing 'animal plant warfare',plant bio actives (i.e. phytogenics)have the potential to act upon said receptors along the animals' gastrointestinal tract. These receptors are conserved across species, which is whymechanistic effects will be similar independent of species though their relevance and impact on productive outcome may shift.

Wlodarskaet al. (2015) studied the ability of six different phytogenic compounds on mice' resistance to enteric pathogen infection. Figure 1 shows that mice receiving eugenol (the main component of clove essential oil)had reduced colonizationof Citrobacterrodentium, an enteric pathogen. Astonishingly, however, growth of C. rodentiumappeared to be quite unaffected by eugenol as such!Instead, eugenol was shown to strengthen the mucosal barrier that protects against invading pathogens and disease, rather than affecting the pathogen directly.

A



B



C

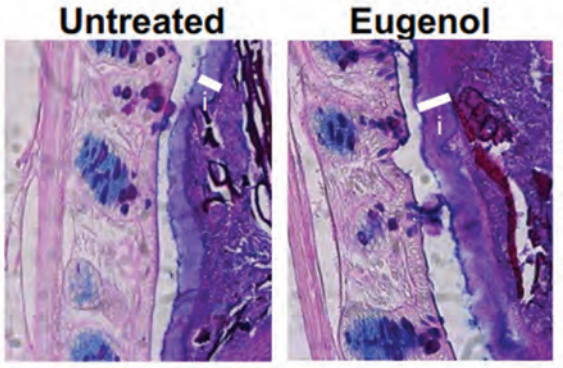


Figure 1. (A) Green immunostaining indicating colonization with C. rodentium in untreated mice but not in mice receiving eugenol; (B) almost identical growth of C. rodentium with or without eugenol; and (C) thickening of inner mucus layer in mice receiving eugenol. Images adapted from Wlodarska et al. (2015), used under https://creativecommons.org/licenses/by/4.0/.

Another example of systemic effects that go far beyond direct interaction between phytogenic compounds and the gut microbiota are presented in a study by Mousavi et al. (2020). Mice supplemented with carvacrol (the main component of oregano essential oil) and challenged with Campylobacter jejunishowed a lower pro-inflammatory immune response not only in the intestinal tract but also on a systemic level andin other organs such as liver, kidneys and lungscompared to non-supplemented mice.

Inflammation comes at a cost

These two examples prove that phytogenicscan trigger systemic physiological responses. What's more, the anti-inflammatory properties of carvacrol demonstrate the link tolivestock performance becauselow-level, chronic inflammation of the gut is a well-known condition in modern broiler production. Inflammatory processeshave a negative impact on productivity by impairing nutrient absorption and diverting nutrients away from growth towards support of the immune system.

A wide range of environmental factors such as poor-quality feed, feed changes, high stocking densities, reused litter, (mild) disease challenges and the intestinal microflora itself can trigger or contribute to this chronicinflammation in broilers. Figure 2 shows inflammation in theduodenum of an otherwise healthy broiler that was triggered by feed withdrawal for a mere four hours. By acting on receptors that ameliorate such an inflammatory response, phytogenics can help optimizenutrient availability for growth thereby improving broiler performance.

Figure 2. Inflammation of duodenum of a broiler at 42 days of age after only four hours of fasting.

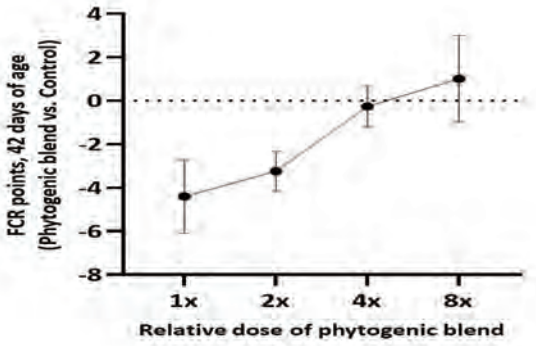


Figure 3. Effects of a phytogenic blend onfeed conversion ratio in broilers relative to annon-supplemented control (Selko, unpublished data).

Interestingly, one of the most accepted theories for the mode of action of sub-therapeutic levels of antibiotics (i.e., antibiotic growth promotors) is their role in reducing low-level inflammation and immunologic stressrather than their direct antibiotic influence on the microflora (Niewold, 2007).

The dose makes all the difference

It is important to realise that many phytogenics show a biphasic dose-response, meaning that their effects can be the complete opposite depending on dose (Jodynis-Liebert and Kujawska, 2020). For example, low doses of a specific phytogenic compound can act as an anti-inflammatory, but the same phytogenic can trigger an inflammatory response at higher levels. The authors' own research with a phytogenic blend showed that FCR improvement was highest at the lowest dose whereas,on the contrary,at higher doses the effect diminished or disappeared altogether (Figure 3).Consequently, it is not only important to conduct dose-finding studies to identify the optimum supplementation level of phytogenics but equally crucial that every batch be subjected to rigorous quality control and standardization to ensure consistent active content and efficacy.

With a new lens harnessing the full potential of phytogenics

These examples clearly demonstrate that phytogenicsoffer opportunities to improve farm economics. Figure 2 shows that adding a phytogenic blend to broiler diets led to an improvement in FCR of more than 4 percentage points compared to anon-supplemented control group. Together with the large scientific body of evidence on individual phytogenic compounds,such research supports the notion that many classical challenges in livestock production can be addressed by phytogenics.It should be acknowledged, however, that phytogenics are not therapeutics. The lens for phytogenics should be broadened beyond their in vitro antimicrobial effects andtheir use as agents in a narrow, oversimplified silver-bullet approach.

Why production efficiency is so important

A growing world population and more people entering the middle class are fuelling the demand for animal protein(especially poultry) and highlighting the need for efficient production practices. Geopolitical events contributing to inflation, raw material volatility and high energy prices additionally necessitate poultry producers to focus on production efficiency.The boundaries of animals' genetic potential have expanded in recent decades, contributing to greatly improved animal performance indicators such as average daily gain and feed conversion ratio (FCR). But despite such advances, the performance of most livestock animals today is still about 40% below their genetic potential.Genetics and environment are interdependent. Animal performance observed on the farm is the result of the interaction of the animal with its environment. Environmental factors that come into play include housing, nutrition, climate, disease challenges, farm management and others. Today's performance levels suggest that the environment often is suboptimal and provide a powerful incentive to help close the gap between an animal's performance and its genetic potential. Recognizing phytogenics' contribution to the host's natural defence mechanisms as well as robust physiological functions in all kinds of environmental conditions will help harness the true potential of phytogenics in supporting efficient and profitable livestock production.

For further information, kindly write to us at customercareindia@trouwnutrition.com or visit our website: www.trouwnutrition.in

SAI KRISHNA
POULTRY EQUIPMENTS

Deluxe Drinker
(Standard & Large)

Chick Feeder

Chick Drinker

Turbo Feeder

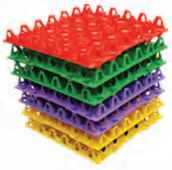
Deluxe Jumbo Drinker

Feeder

Jumbo Drinker

Gas Brooder

Parent Feedar
Male & Female



Egg Tray

Chick Feed Tray

Nipple Drinking System

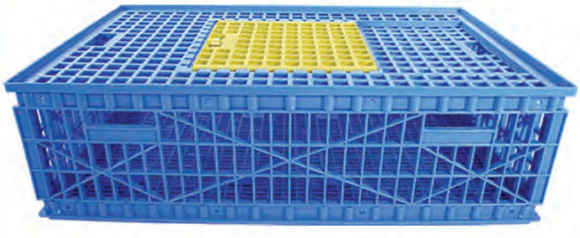
SAI KRISHNA PLASTIC INDUSTRIES

Manufacturers of Innovative Poultry Equipments

Factory : Behind Petrol Bunk, Padmanagar, Karimnagar - 505002, Tel : 0878 - 6504508, Mobile : 94404 06200

Sales Depot : Plot No : 16, Road No:2, Opp : Nimanthran Function Hall, Mamatanagar Colony, Nagole, HYDERABAD - 68, Telangana

Tel : 040 - 64610508, Mobile : 92466 59508, E-mail : info@saikrishnapoultry.com, Web : www.saikrishnapoultry.com



Bird Transportation Crate

Chick Transportation Crate

Balaji Polymers

Factory : Akkaram Village, Gajwel Mdl, Medak Dist. Regd. Office : Karimnagar : 98490 59508, Hyderabad: 96523 98686

email : balajipolymers.hyd@gmail.com

HUVEPHARMA

Glimpses of Kolkata International Poultry Fair 2023

Huvepharma team would like to thank all the delegates & industry friends
who attended Kolkata International Poultry Fair 2023 and visited our Huvepharma stall.
Thank you for making this event successful & memorable for us.

Glimpses of Kolkata International Poultry Fair 2023

held at Science City, Kolkata
9, 10, 11th February, 2023

The Pelleting Process: Factors Influencing Phytase Recovery

Lode Nollet, Huvepharma

The heat susceptibility of a phytase depends on its intrinsic heat stability. However many factors will have an impact during pelleting and these need to be considered when evaluating the heat stability of a phytase.

The heat susceptibility of a phytase depends on its intrinsic heat stability. However many factors will have an impact during pelleting and these need to be considered when evaluating the heat stability of a phytase.

During pelleting, the feed mixture is heated in the conditioner by adding steam. Conditioning has several aims: it improves pellet quality, it reduces power consumption during compression in the die and it increases the hygienic status of the feed. Dry steam is injected at 1.5 to 2 bar and at 127°C to 134°C. The conditioning temperature may vary from 65°C to 90°C, and conditioning times vary from short (30 sec.) to extended (3 to 4 minutes). Afterwards, the conditioned feed is compressed in a die to form the pellet. The transfer of the mash feed through the die holes generates friction, which can potentially lead to an extra loss of phytase activity. After die compression, the pellets are cooled (and dried) in a vertical countercurrent cooler. The final temperature should be around room temperature, and the moisture content should be below 13%.

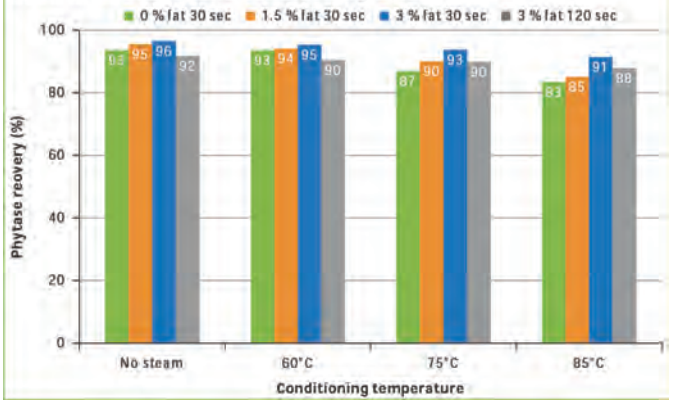
Processing factors affecting enzyme recovery

The following factors have been shown to significantly affect the enzyme activity in the feed pellet.

Conditioning temperature and time

Enzyme inactivation increases with temperature and residence time in the conditioner. Adding enzymes in feed mills using a hygieniser or extended conditioning will result in rather low enzyme recovery.

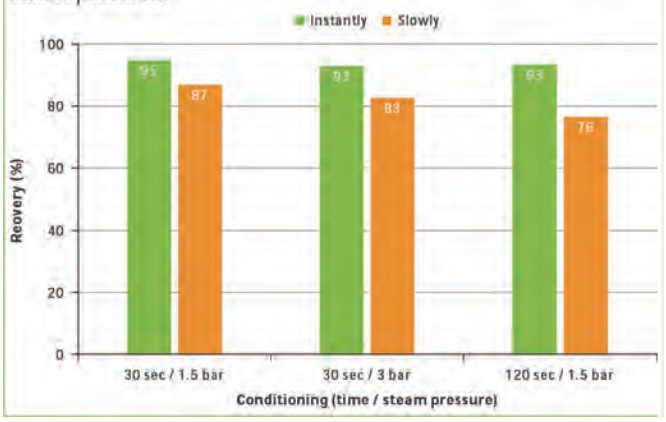
Figure 1 - The recovery of OptiPhos Plus in feed with different levels of added fat and conditioning time.



Moisture content of the mash feed

Dry heat has less effect than wet heat, thus low-quality steam (oversaturated steam containing water droplets) negatively impacts enzyme stability.

Figure 2 - The impact of slow and fast (instant) cooling on recovery of OptiPhos Plus at different conditioning times and steam pressure.



Diameter and length of the die

Die friction will increase temperature at the pellet surface, so small pellets (2 mm) tend to have lower recovery than large (5 mm) pellets. The L/D ratio (length to diameter ratio) of a die is therefore an important parameter: the higher this value, the more friction heat and the less recovery is to be expected. Minerals and fibre negatively affect the die throughput as they increase friction. However an increase in free fat percentage results in higher throughput as fat is a lubricant. A recent trial conducted at Ghent University in Belgium investigated the heat stability of an intrinsic heat stable phytase (OptiPhos plus) in a feed supplied with different levels of fat. The results showed that phytase recovery was 8% higher at 85°C when 3% fat was added, even at prolonged (120sec) conditioning time (Fig.1)

Speed of cooling down of the pellets

Slow cooling causes a post-effect of the heat. A study conducted at Ghent University demonstrated that fast cooling of pellets increased recovery by 10% at 30 sec conditioning time & 3 bar stream pressure. This effect even reached 17% when a long conditioning time was applied (120 sec; Fig.2)

Conclusion

The recovery of phytase during pelleting depends on many factors. However, high intrinsic heat stability is the best guarantee for obtaining the highest level of recovery under all pelleting conditions at the feed mill.

To know more, please contact Huvepharma technical tea Huvepharma SEA (Pune) Pvt. Ltd. 42, ' Haridwar', Road 2 A/B, Kalyani Nagar, Pune 411006 Customer Care Contact: +91 20 2665 4193

Email: salesindia@huvepharma.com

Website: www.huvepharma.com

VIV TURKEY 2023

ISTANBUL,TURKEY | 6 - 8 JULY | POWERED BY VIV

10th INTERNATIONAL TRADE FAIR FOR POULTRY & TECHNOLOGIES

ISTANBUL EXPO CENTER
HALL 1-2-3

VNU EUROPE

Diamond Sponsor:
BİRSEN KİMYA

Platinum Sponsor:
myfarm

Gold Sponsor:
MAKROVIT ANIMAL FEED PREMIX

Gold Sponsor:
JRS Fibers for Life.

Silver Sponsor:
FEEDTECH

Supporting Authorities, Associations and Organizations:
BESD-BİR
vivad
GLADER

Organizer:
ufi Member Host of the 75th UFI Congress in 2008
hkf Fuarcılık AŞ Trade Fairs
www.hkftradefairs.com

THIS FAIR ORGANIZED BY THE APPROVAL OF UNION CHAMBERS AND COMMODITY EXCHANGES OF TURKEY ACCORDING THE LAW NUMBER 5174.

"According to a Niti Aayog report from August 2021, there are about 3.47 lakh moderately malnourished children and 7,908 severely malnourished children in the state"

Karnataka Govt. ignored Protests Against Eggs in Mid-day Meal and why it needs to continue

A survey conducted by the Karnataka's Department of Public Instruction, as of December 14, 2022, showed that about 80% of children from Class 1-8 chose eggs for their mid-day meal. Out of 44 lakh students surveyed from all four divisions of Karnataka, 38.37 lakh said they wanted eggs, while only 3.37 and 2.27 lakh chose bananas and chikki (peanut-jaggery bar) respectively. According to a Niti Aayog report from August 2021, there are about 3.47 lakh moderately malnourished children and 7,908 severely malnourished children in the state. This is mainly concentrated in the Kalyana-Karnataka region, with the districts of Kalaburagi, Raichur and Koppal topping the list.

In the first half of 2022, a study was conducted in Yadgir district and Gadag as a control district, where they provided either eggs or bananas alongside the standard mid-day meal. Aside from about 98% of children choosing to consume eggs, "allaying the fears of a cultural or traditional barrier," the researchers attributed a positive weight gain and an increase in BMI (body mass index) due to this addition. These studies reinforce that Karnataka government's decision to introduce eggs in mid-day meals was a much needed one. However, this was not an easy decision as the government faced stiff opposition from powerful Hindu and Lingayat groups as well as some BJP leaders in the state. The suggestion of providing eggs as a part of mid-day meal in school was first mentioned by a committee headed by Justice NK Patil in 2013, who submitted it as one of the 112 recommendations to tackle malnutrition especially in northern districts of Karnataka. Since then, the Karnataka government made several announcements to start distribution of eggs in schools and did so sporadically in a few places. Finally, in September 2021, the schools in seven districts of Raichur, Bidar, Ballari, Yadgir, Kalaburagi, Koppal and Vijayapura were provided eggs along with their mid-day meal. When the study in 2022 concluded that eggs were indeed popular and beneficial, the state decided to supply eggs for schools in the rest of the state. Hindu religious leaders such as Sri Vishwaprasanna Theertha Swami of the Pejavar Matha in Udupi (National President of Lingayat Dharma Mahasabha), Channa Basavananda Swami, Bhattaraka Charukeerthi Swami and Lingayat groups including Rashtriya Basava dal, Lingayat Dharma Mahasabha, Akkanagalambika Mahila Gana Karyakartharu, Basava Mantapa and the Rashtriya Basava dal, opposed the move.

Despite immense pressure from these groups, the Basavaraj Bommai government went ahead and decided to extend the supply of eggs throughout the state for 46 days in the academic year.

The battle to get eggs included

A National Education Policy (NEP) position paper was released in June 2022, purporting, "Given the small body frame of Indians, any extra energy provided through cholesterol by regular consumption of egg and meat leads to lifestyle disorders." The paper, authored by a committee headed by John Vijay Sagar, the head of the Department of Child and Adolescent Psychiatry at NIMHANS, received much flak, even from six NIMHANS alumni who called the paper "outrageous, outdated, unscientific and

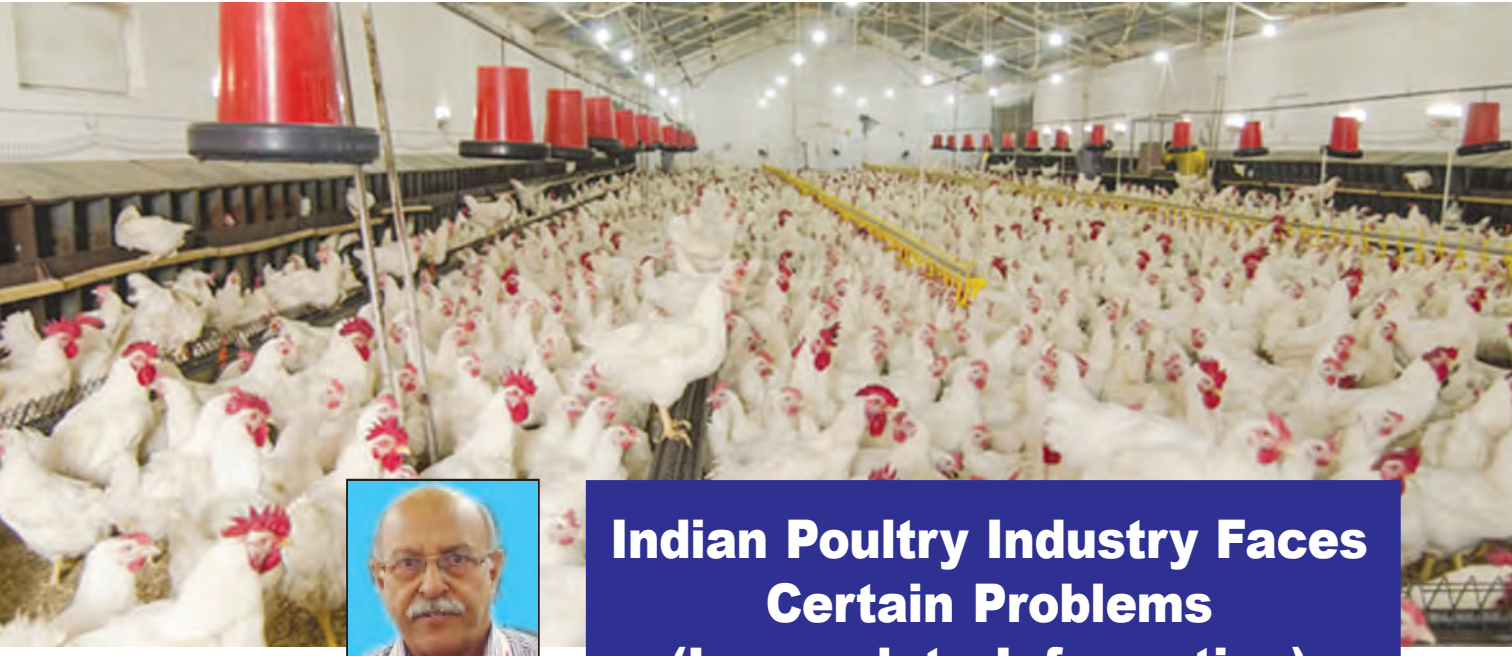
frivolous." Though this may sound preposterous, this was just one of the many grounds on which the introduction of eggs was opposed. Some called the order exclusionary, others threatened agitation and court battles.

For example, in August 2022, Tejaswini Ananth Kumar, the co-founder of Adamya Chetana, another NGO contracted to serve mid-day meals, tweeted that, "Why has our Karnataka govt decided to give eggs in mid-day meals? These are not the only source of nutrition. It is also exclusionary to many students who are vegetarians. Our policies are to be designed in such a way that every student has equal opportunity." Tejaswini Ananth Kumar is the wife of late BJP leader Ananth Kumar and her NGO gives mid-day meals to over 2 lakh kids. Lingayat seer Channabasavananda Swamiji had said that schools would become military canteens if eggs were served and that grains and pulses should be given instead. He had also warned of a much severe protest if the order was not withdrawn.

But despite all the opposition, the Education Department's pilot initiative to bring eggs into the mid-day meal scheme in the seven districts of Kalyana-Karnataka had favourable results. Once the results of the study showed desirable conclusions, there was an order to expand this to the entire state. Out of the Rs 34,711 crore approved under the PM Poshan Shakti Nirman scheme, about Rs 4,494 crore was kept for the supplementary nutrition programme so that children could be served eggs or alternatives along with the mid-day meal for 46 days in the 2022-23 academic year.

Data endorses, but lack of will on ground

The data gives us a concrete picture of how many of these children have no apprehensions about eating eggs and come from communities that already do. However, things are not smooth on the ground. While a few schools complained that they did not have enough staff to allocate time for shelling eggs, the main opposition to this move was from NGOs and religious groups that objected to the provision of eggs due to their belief in a vegetarian diet. According to the Department of Public Instruction, there are about 71 NGOs that feed 9.31 lakh children across Karnataka. There were already controversies earlier around groups like Akshaya Patra not being ready to serve eggs, or use onion and garlic in their foods. Aside from not providing an effective solution to combat malnutrition, this has also created a problem where children dislike the taste of the food served, as it is different to what they are used to eating. Dr Sylvia Karpagam, a public health doctor and researcher working on the right to health and nutrition, said, "Only the very marginalised Dalit, Adivasi and OBC children access government and government-aided schools whereas most of the opposition is coming from groups whose children don't even study in these schools." She is no stranger to the issue. For more than 10 years now, Sylvia has been a part of a group of food rights activists in the state, who have been demanding eggs be supplied in schools. A good part of that fight has been about debunking myths about children being 'forced' to eat eggs, deftly separating and pushing nutrition and science over religious beliefs and persistently pushing successive state governments to include eggs in mid-day meals. As an alternative, the state plans to provide two bananas or 60 grams of chikki for students who choose not to eat eggs. Yet, according to Dr Karpagam, "Bananas are not known for their protein content and chikki ends up being more of a sweet due to the jaggery in it instead of a protein-rich nutritious food." She believes that the only suitable alternative is an extra glass of milk. Yet, schools are reluctant, according to a memo sent out on January 10 by Commissioner of the Department of Public Instruction Vishal R, calling attention to schools that seem to be providing vegetarian alternatives to children who opted for eggs. One of the main reasons given by the government for this inability to supply eggs regularly is because of the inflation in prices recently. In October, an egg used to cost Rs 4.20 which increased to Rs 5.80 in January. Even though there is a budget of Rs 6 per student for eggs, including transportation and other logistical charges, the money granted hasn't been enough. One of the ways this has been tried to account for is by using the SDMC (School Development and Monitoring Committee) formed by parents, health workers and the headmaster of each school; to procure eggs locally rather than the centralised system. Since this puts the responsibility on individual members, which might not be the most efficient system, there has been some debate on whether a system like the Tamil Nadu tender system that procures eggs on a state level might be better.



Indian Poultry Industry Faces Certain Problems (Incomplete Information)

Dr S.K.Maini, Vesper Group, Bengaluru

Many companies are involved in manufacturing and marketing of Phytase Enzyme for use in the poultry feeds, to make phosphorus available to the birds, by hydrolysing the phytate complex's present in the feed ingredients, releasing the phosphorus simultaneously sparing the inorganic phosphorus, and preventing soil contamination, but they never give full details of the product being promoted.

Phytates and Phytic acid are a naturally occurring anti-nutritional factor in plants, that binds with certain minerals, vitamins and amino acids, forming complexes.Incorporating phytase enzyme in the feed of poultry, increases the nutritional bioavailability while reducing significant Phosphorus (P) build up in manure, which creates environmental complications such as water contamination, algae growth, fish mortality, and changes in plant and animal life.

Phosphorus (P) is a key and essential component of plant cells, and it plays a role in energy metabolism, acid production, and cell membrane biosynthesis. This is also a key macronutrient for plant growth and developmental processes. Phytic acid is a primary source of biological phosphorus in the soil, accounting for 10 to 50% of available organic phosphorus content. The majority of soils contain considerable levels of total soil P, which may be found in both organic and inorganic forms. Plant based feed ingredients can store phosphorus upto 80 % , as phytin phosphorus or as phytate. This phytate is an anti-nutritional complex, it can inhibit other digestive enzymes and have negative effects on the birds performance. Therefore, the use of phytase enzyme becomes essential to digest it, thus reducing the P level in soils.

Phosphorus(P) plays a major role in several metabolic pathways in the birds body, it is required along with calcium and Vit D3 for the bones and the egg shells, and is required for the energy metabolism at the cellular level, for synthesis of protein and for the transportation of sodium and potassium across membranes. All Phytases available in the market are not same. Four distinct classes of phytase's have been characterized in the literature: histidine acid phosphatases (HAPS), beta-propeller phytases (BPPs, also referred to as alkaline phytase), purple acid phosphatases (PAPs), and protein tyrosine phosphatase-like phytases (PTP-like phytases). The first and most extensively studied group of phytases is the histidine acid phosphatases (HAPs).

PhytaseProduction : Certain Microorganisms are used to produce the enzyme phytase, which is scaled up utilizing bioengineering and recombinant DNA technology. Fungi and E-coli are commonly used to produce phytase enzyme. Various microbial

fermentation processes and techniques , such as submerged, semi-solid state, and solid-state fermentation, are used for the phytase's production. Phytase mode of action: Phytase (myo-inositol hexakisphosphatephosphohydrolase) catalyzes the stepwise removal of phosphate from phytic acid or its salt phytate. The removal of the phosphate group starts with a fully phosphorylated phytic acid (IP6), followed by penta- (IP5), tetra- (IP4), tri- (IP3), di- and mono-esters of inositol in descending order of preference. This means that the phytases first hydrolyze all of the available fully phosphorylated phytic acid molecules to penta-esters of inositol before they hydrolyze the latter to tetra-esters of inositol and so on, with inositol and phosphoric acid as the end products. In an ideal situation, a complete hydrolysis will result in a myo-inositol and phosphate (plus amino acids, minerals and other nutrients which are linked to phytic acid). However, in the in vivo situation, hydrolysis will be incomplete and therefore normally result in a mixture of inositol-phosphate esters.

Different Phytase enzymes are involved in different catalytic processes. When 3-phytase works on phytic acid, first it hydrolyzes the ester bond at the 3rd carbon site to liberate inorganic phosphorus, subsequently releasing phosphorus from additional carbon sites one at a time, eventually esterifying the overall phytic acid. The catalytic reaction of this enzyme needs the presence of divalent magnesium ions (Mg^{2+}). Factors Influencing PhytaseActivity : Many factors can have an influence on phytase activity, including Phytase-related factors such as optimal pH range, type of phytase used and resistance to protease. Animal-related factors include species, age of animals and retention time. Dietary-related factors such as phytate content, calcium levels and ingredient composition (e.g. type of substrate and intrinsic phytase activity) are important and need to be considered seriously.

Marketing Companies and their Distributors/ Promoters of their products never speak of the above mentioned points, they claim sparing of DCP or MCP in the feed, reducing the environmental contamination, and making many trace minerals, vitamins and amino acids available that were earlier trapped by the phytates etc., the fact is total DCP or MCP should never be stopped, as the phytase enzyme releasing the required phosphorus is uncertain and dependent on several factors not in the control of any nutritionists or promoters of Phytase enzyme.

21% dip in Poultry Slaughtered for Meat in Gujarat

Gujarat recorded a 21 per cent dip in the number of livestock and poultry slaughtered for meat, states National Bank for Agriculture and Rural Development (NABARD) in its "State Focus Paper 2023-24" published last month. Compared to 2.99 crore livestock which includes buffaloes, goat, sheep, pigs and poultry that were slaughtered for meat production in 2018-19, the numbers have fallen to over 2.34 crore livestock in 2019-20, states NABARD quoting pre-Covid data. While there has been a 24 per cent increase in the number of buffaloes and a 4.4 per cent increase in number of pigs slaughtered for meat in 2019-20, there has been a 24 per cent, 18 percent and 21 per cent dip respectively in the number of sheep, goat and poultry slaughtered for meat production in Gujarat.

"Meat production for the year 2018-19 was 33.33 metric tonne, which increased slightly to 33.46 metric tonne during 2019-20. There is an overall decline in number of animals slaughtered for meat purpose except for pig and buffalo," the focus paper stated adding that the data on animals slaughtered are sourced from "registered slaughter houses only." Highlighting "critical infrastructure gaps", NABARD recommended setting up of modern slaughter houses or skin or leather processing units across four districts of Ahmedabad, Junagadh, Banaskantha and Aravalli. NABARD officials could not be contacted for comments on the recommendations made to the Gujarat government. The total egg production in Gujarat during 2020-21 is estimated at 17,863 lakh eggs, showing a decrease from previous year's production of 19,274 lakh eggs. "This needs focused attention from the state government and poultry sector," stated NABARD about the state where 22 percent of the eggs are sourced from "desi" birds.

Telangana Top Producer of Meat, Fish

Thanks to the Integrated Fisheries Development Scheme introduced by the Telangana government four years ago for advancement of pisciculture in the State has resulted in increase in consumption of meat, fish and prawns and according to recent National Family Health Survey data 98 per cent of the population was consuming meat products.

It has also emerged as a major state in prawn and fish cultivation and growth in the livestock population. According to the socio-economic survey, the sheep population had seen an increase of about 50 per cent after the government launched sheep distribution programme. The statistical data said that the meat production (including chicken) in 2014-2015 was 50,000 tonnes and it has now crossed one lakh tons of production and the availability of meat at affordable price could be achieved. Telangana was also exporting some meat to other states. The data shows that prawn production had doubled in eight years from 6,500 tonnes in 2014-15 to 13,800 tonnes in 2021-2022. The leap frog jump in prawn production became possible because of the new Aqua policy adopted by the Telangana government, they said. New natural techniques were adopted to promote prawn culture with the available water resources in canals and reservoirs constructed on Kaleshwaram lift irrigation project and other projects on river Godavari and Krishna. Earlier, Telangana was completely dependent on Andhra Pradesh for prawns.

Books Published by HIND PUBLICATIONS, Hyderabad, Telangana, INDIA

1.	An Entrepreneurs Guide to Start a Poultry Business	450/-
2.	Avian Influenza (Bird Flu)	395/-
3.	Biotechnology in Poultry	395/-
4.	Bio-security in Poultry Chart (Chart Size : 18' x 25")	80/-
5.	Biosecurity in Poultry	355/-
6.	Breeder Management Guide	295/-
7.	Commercial Chicken Nutrition	445/-
8.	Chicken Egg's Nutrition Functions & Cooking Techniques	345/-
9.	DNA Based Identification of Animal Spices	330/-
10.	Doctors Be Aware- Ignorance of law is no excuse	245/-
11.	EMU Farmers Management Manual	395/-
12.	EMU Meat Processing	335/-
13.	FAQ on Poultry	225/-
14.	Glimpse of Indian Poultry Industry	235/-
15.	Guidelines For Quail Farming	250/-
16.	Guide Lines for Broiler Farming	200/-
17.	Guidelines for Rural Poultry Production	295/-
18.	Guidelines for Turkey Farming	850/-
19.	Good Production Practices for Poultry Feed Industry	300/-
20.	Goat Disease DiagNosis & Treatment	325/-
21.	Hand Book of Poultry Husbandry	395/-
22.	Hand Book of Poultry Disease Diagnosis and its Treatment	240/-
23.	Hand Book of Integration in Poultry	250/-
24.	Hand Book of Hatchery Technology	325/-
25.	Hind's Dictionary of Poultry Management	550/-
26.	How to Start a Poultry Hatching Business	250/-
27.	Indian Poultry Directory (Name, Address & Phone No.) 3rd Edition	750/-
28.	Knowledge Engine of Chicken Eggs	295/-
29.	Management of Environmentally Controlled Houses in Poultry	210/-
30.	Management of Parents Stock	450/-
31.	Poultry Feedstuffs & Feed Additives	395/-
32.	Poultry Diseases Chart (Chart Size : 25" x 36")	140/-
33.	Poultry Development and Alternative Poultry	295/-
34.	Poultry Feed and Formulation	495/-
35.	Postmortem Techniques and Poultry Diseases : A Colour Atlas	1800/-
36.	Poultry Vision 2020	325/-
37.	Profitable Goat Farming	275/-
38.	Principle & Practices of Hatchery Management	495/-
39.	Recipes Book- Telugu & English	35/-
40.	Recepee Book- Hindi & English	35/-
41.	Recent Advances in Broiler Chicken Nutrition	760/-
42.	Seven Stages of Layer Management	180/-
43.	Science of Buffalo Farming	295/-
44.	The Essentials of Biosecurity of Indian Dairy Farms	245/-
45.	Scientific Poultry Farming	750/-
46.	Vaccination in Poultry	495/-
47.	Value Added Chicken – An Entrepreneur's Guide	195/-
48.	आधुनिक ब्रायलर पक्षियों का उत्पादन	260/-
49.	मुर्गियों की बिमारियाँ एवं उपचार	325/-
50.	क्यों होता है ऐसा ?	185/-
51.	लेयर अण्डा देने वालीमुर्गियों का उत्पादन	325/-

To get these books Contact

contact: M.K.VYAS,

Hind Publications

204, Plot No 19, HUDA Complex, Saroor Nagar HYDERABAD 500035

Call : 09391378805 Whatapp : 9502159098

Website: www.hindpoultry.com E-mail: hindpoultry@hotmail.com

'J&K Govt aims to enhance output of Poultry sector from Rs 709 Cr to Rs 1982 Cr annually'

These eggs again are im-ported and on average reach J&K after 15-30 days of being laid. With the increasing demands the sector has become dependent on imported poultry produce and raw material which has become a cause for concern and puts the local poultry industry at a disadvantage.

Poultry farming in Jammu and Kashmir has a long history, with traditional farming methods dating back centuries. However, in recent years, the sector has undergone significant modernisation and expansion. The introduction of new technologies and improved breeding techniques has led to an increase in the production and quality of poultry products, transforming the sector from a source of supplementary income and proteinic foods for families to a major commercial activity that generates significant revenue. This growth can be attributed to a number of factors, including changes in food habits, the rise of the middle class and their increased income, the presence of private companies in the industry, and increasing demand for poultry products in the market. The UT government has played a key role in promoting the development of the poultry sector.

It has implemented various initiatives and schemes to support farmers and encourage the growth of the industry like providing subsidies and financial assistance to farmers, promoting backyard poultry farming, establishing training and capacity-building programs, and encouraging the use of modern technology in poultry farming. However, with the increasing demands the sector has become dependent on imported poultry produce and raw material which has become a cause for concern and puts the local poultry industry at a disadvantage. To put the poultry sector on the path of sustainability and self-reliance the Agriculture Production Department has approved a 'Roadmap for poultry development in J&K' under its mission for Holistic Development of Agriculture and Allied Sectors in the UT.

"Every year the UT experiences a flight of capital on account of poultry imports to the tune of Rs. 1273 Cr. Among these table eggs account for Rs. 473 Cr, day-old chicks for Rs. 110 Cr, poultry feed worth Rs. 300 Cr and broiler birds for Rs. 390 Cr", said Atal Dulloo, Additional Chief Secretary APD. The ACS said that this flight, however, can also be viewed as an opportunity for generating local enterprises and creating jobs for our educated youth for which various interventions under the project are being implemented.

He added that a total of 420 enterprises and 4250 direct jobs are being created under this project over the next five years. 'Roadmap for poultry development in J&K' is one among the 29 projects approved by the Jammu and Kashmir administration after being recommended by the UT Level Apex Committee for holistic development of Agriculture and Allied Sectors in UT. The prestigious committee is headed by Dr Mangala Rai, Former DG ICAR and has other luminaries in the field of Agriculture, Planning, Statistics & Administration like Ashok

Dalwai, CEO NRAA; Dr P. K Joshi, Secretary, NAAS; Dr Prabhat Kumar, Horticulture Commissioner MOA & FW; Dr H. S Gupta, Former Director, IARI; Atal Dulloo, Additional Chief Secretary, APD J&K, apart from the Vice Chancellors of the twin Agriculture Universities of the UT.

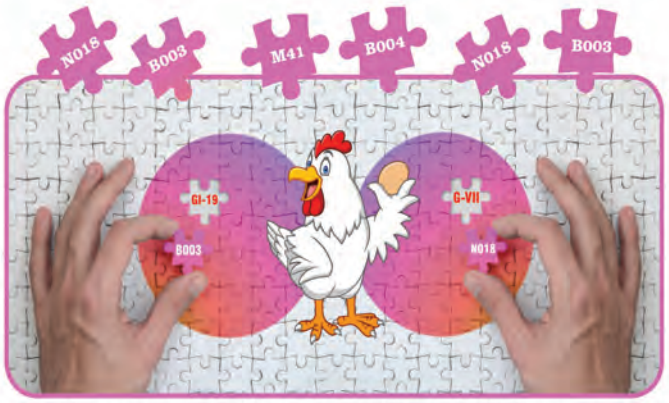
The project is expected to transform the Agriculture sector of Jammu and Kashmir with a specific focus on the poultry industry also. "The project encompasses all three verticals in the poultry industry including producing day-old broiler chicken to feed the broiler industry, establishing layer farms in intensive and free-range mode to meet the demands for eggs and boost quality feed manufacture through the establishment of feed processing units", said Dr Azmat Alam Khan, Professor, Poultry Sciences, SKUAST-K. Currently, the UT imports 440 lakh day-old chicks every year worth Rs 110 crores.

The birds are transported for over two days which creates stress and decreases their productivity. This takes toll on the economy of the farmer too who has to spend more to counter this stress, thus increasing his cost of production and reducing the competitiveness of his produce. To overcome this 125 parent breeding farms (each 3000-parent capacity), with hatcheries and in-house feed manufacturing plants will be established within a span of five years each having a production capacity of 4 lakh day-old chicks. This would facilitate in achieving self-sufficiency in day old chicks within a span of five years.

Similarly, the UT spends Rs. 473 crore on the import of table eggs annually. These eggs again are imported and on average reach J&K after 15-30 days of being laid. Eggs are an important source of nutrition for all age groups especially children and freshness is the most important component when evaluating the quality of an egg. Under the project 200-layer farms, each of 10000 bird capacities are being established to produce 60 crore eggs within a span of five years. In addition, backyard and the free range poultry farming have also been covered under various incentives for which inputs are being provided through the establishment of 66 Mother Units, each of 1000 parent stock. These mother units shall provide birds to more than 2000 free-range farms housing 500 birds each. One of the main challenges facing poultry farmers in Jammu and Kashmir is the high cost of feed, which can make production expensive. To address this issue, the project has put a target of producing 85000 Metric Tons of poultry feed within a span of five years by establishing 35 units (7 feed units per year) of 1 ton per hour capacity. Apart from this, the APD has implemented measures to increase the production of feed locally, including promoting the cultivation of maize and other feed crops under other projects.

All these interventions shall boost the gross output of the Poultry Sector in J&K from Rs 709 Cr to Rs 1982 Cr per year and ensure that the poultry industry is well-positioned for continued growth and development in the coming years.

vaksindo



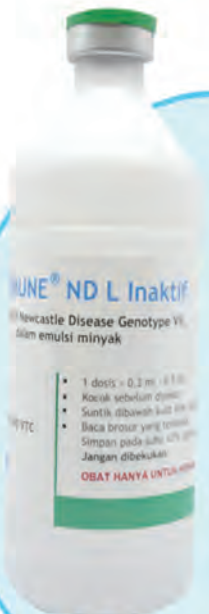
Broader Protection against - NDV virulent genotypes and - IBV Genotype I variants.

"Under perfect conditions, many vaccines work, but conditions are not perfect in the field.

Combined Inactivated Vaccine in oil emulsion
Newcastle Disease virus - N018 strain
IBV multi strains : M-41 + B003 + B004 strain

VAKSIMUNE® ND L -IBplus

NDL IBplus



NDL Inaktif

NDL Inaktif 0.1

Inactivated Vaccine in oil emulsion

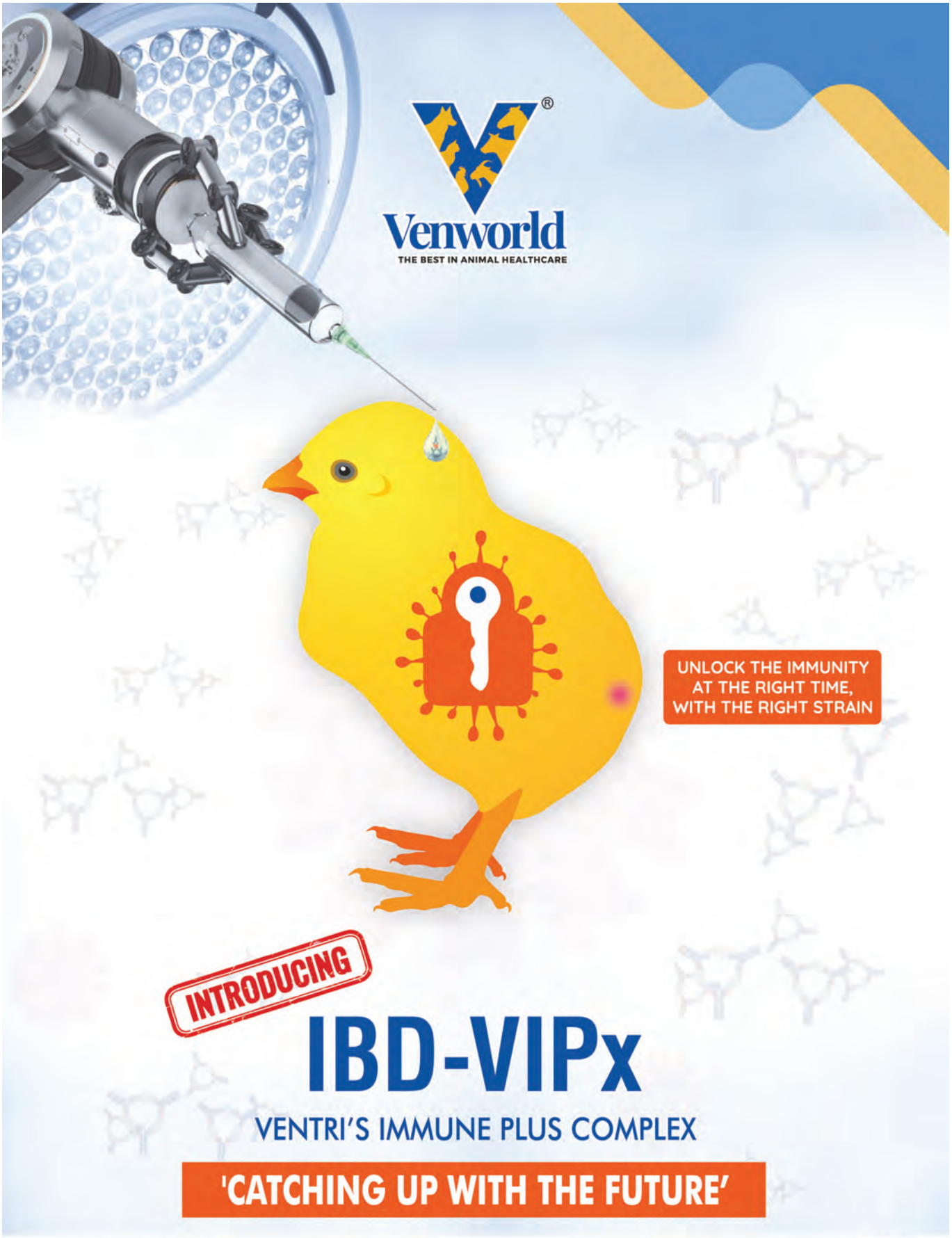
VAKSIMUNE® NDL Inaktif
VAKSIMUNE® NDL Inaktif 0.1

Newcastle Disease virus - N018 strain

BEING EFFECTIVE IS GOOD ALWAYS

VAKSINDO ANIMAL HEALTH PVT. LTD. | RESEARCH BASED VACCINES

H No. 8-7-89/C/P-II/125, Ground floor, Chaitanya Nagar, Kharmanghat, Saroor Nagar, Ranga Reddy Hyderabad, Telengana- 500070. Tel: +91 40679 34239 | Web : www.vaksindo.co.id | customercare@vaksindo-india.com



VENTRI BIOLOGICALS
(Vaccine Division of VHPL)

'Venkateshwara House', S. No. 114/A/2, Pune Sinhagad Road, Pune 411030. **Tel.:** +91 (020) 24251803, **Fax:** +91-20-24251060 / 24251077.

Email: ventri.biologicals@venkys.com **www.venkys.com**