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AviCare

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Best Of Avian Care Essence for Avian Care

Adjusting intestinal microflora, morphology and immunity balance with AviCare™

使用AviCare™来调节肠道菌群,形态和免疫平衡

The formation of microflora occurs from first day of the day old chicks. From four days of age, there is a significant increase in the bacterial count. The bacterial growth starts to stabilize from second week onward. However, any stress factors such as heat stress, disease challenge or water deprivation could easily distort the balance which in turn leads to a condition called "dysbiosis".

Under dysbiosis, the undesirable microbial population acts in the gastrointestinal tract (GIT) to reduce nutrient absorption, increase mucosal thickness and feed passage time. This interferes with the nutritional requirement of the chickens, and increase turnover of enterocytes, while reducing villous height and crypt depth. The bad bacteria also produce biogenic amines (cadaverine, putrescine, histamine), ammonia and gases, which are highly damaging to mucosal integrity and intestinal health. The impaired intestinal strength will be more vulnerable to the invasion of coccidia or *Clostridium perfringens, E.coli, Salmonella sp., and Campylobacter jejuni.*

Eubiosis 生态正常 <i>(Balanced flora)</i> (平均菌群)	<→	<i>Dybiosis</i> 生态失调 (Imbalanced flora) (不平均菌群)
Main flora 主要菌群 (>90%)	Satellite flora 随体菌群 (<1%)	Residual flora 残余菌群 (<0.01%)
Beneficia 益菌	<→	Pathogenic 病原
Bacteroidaceae 类细菌科 Peptostreptococcus 消化链球菌属 Eubacterium 真杆菌属 Propionibacterium 丙酸杆菌属 Lactobacillus 乳酸杆菌属 Bifidobacterium 双歧杆菌属 10 ⁹ - 10 ¹⁰ /g	E.coli 大肠杆菌 Enterococcus 肠球菌 Clostridium 核菌 Staphylococcus 葡萄球菌 Pseudomonas 假单胞菌 10 ⁵ - 10 ⁸ /g	E.coli 大肠杆菌 Enteropathogen 肠道病原体 Proteus 变形杆菌属 Bacteroidesfragilis 脆弱拟杆菌 Serpulina/Brachyspira 蛇形/短螺旋体 Salmonella 沙门氏菌 Campylobacter 弯曲杆菌 Yersinia 耶尔森菌属 Candida 念珠菌属 <10 ⁴ /g
Bacteria that produces lactic acid and volatile fatty acids. 细菌产生乳酸和挥发性脂肪酸。	Toxins 毒素	Disease causing infections, toxins cell damage etc. 疾病引起的感染,毒素细胞损伤 等。

Figure 1: Bacterial genera and their influence on the microflora balance 图1: 细菌属及对菌群平衡的影响

鸡肠道菌群从鸡只的第一天便开始逐渐形成。从第4天的数龄起,菌群数量显著增加。菌群从第二周起便开始稳定下来。然而,任何紧迫的因素如热紧迫,疾病干扰或禁饮水可以很容易地扭曲菌群平衡的状态,从而 导致所谓的"菌群生态失调"。

在菌群生态失调下,不良的微生物群体吸附在胃肠道(GIT),减少营养的吸收,增加粘膜厚度和食料消化时间的作用。这干扰了鸡只对营养的需求,和增加肠的代谢率,同时也降低绒毛高度和隐窝深度。坏菌也会产生生物胺类(尸胺,腐胺,组胺),氮和气体,这些成份将会严重损害粘膜的完整性和肠道健康。受损的肠道会更容易受到球虫或产气荚膜梭菌,大肠杆菌,沙门氏菌属与空肠弯曲菌的入侵。







Wet litter caused by dysbiosis 生态失调引起湿粪便

Diarrhea indicates loss of intestinal integrity. *Clostridium, Salmonella and E.coli*, among other Pathogens, may be present in the litter. 腹泻显示肠道完整性损坏。梭菌属,沙门氏菌和 大肠杆菌,在这其中的病原体,可能存在粪便里。

The use of AviCare[™], a revolutionary type of in-drinking water supplement, could improve microflora balance, guts morphology and immunity. AviCare[™] is being produced from fermentation of selected strain of Saccharomyces cerevisiae in the own-formulated culture medium and condition, that maximizing the "nutrilites" production during the process. The proprietary fermentation technology from the US-based company produces its unique product comprising of more than 200 compounds such as organic acids, MOS, beta glucans, polyphenols, peptides and nucleotides.

AviCare[™] has prebiotic-like effect in stimulating the number of good bacteria, maintaining the number of good bacteria far beyond the bad bacteria and hence reducing the chance for the proliferation of bad bacteria. The increased number of good bacteria minimized that the change of intestinal movement (peristalsis) pattern. The increased bacteria will produce more volatile fatty acids that in turn provide a more conducive environment for good bacteria replication. Effective mucosal bacterial protection could reduce intestinal cells damages, increasing villi height and crypt depth, which is important for nutrient utilization (digestion and absorption). Certain "nutrilites" interacts to stimulate and balance the immunity, both specific (humoral) and non-specific (innate), as majority of functional immune organs (peyer patches and cecal tonsils) is located in the intestine. Efficient immunity associated with good gut microflora and morphology, contributing to the efficient feed conversion ratio in this competitive poultry market.

Utilizing AviCare[™] at time of production challenges is a new and safe alternative to stabilize gut microflora, and enhances animal health and zootechnical performance. It could be easily incorporated into the rearing program of any poultry farms, broiler, layer or even breeder.

AviCare[™] 一个可以提高菌群平衡,肠道形态和免疫力的全新饮用补充剂。AviCare[™] 采用精选酵母的菌株搭配 自家配方的培养基和发酵技术,在该生产过程中大幅度地提高"营养素"。这美国公司采用专有的发酵技术 含200多个独特的化合物产品,如有机酸,甘露寡糖,β-葡聚糖,多酚类,肽和核苷酸。

AviCare[™] 具有益生素般的效果来刺激益菌的数量,维持 良菌的数量远远超出了坏菌,从而减少了有害细菌的增 殖机会。益菌数量的增加确保肠道活动(蠕动)正常。 良菌的增加会产生更多的挥发性脂肪酸,从而提供了一 个更有利于良菌生长的环境。有效的黏膜菌可降低肠道 细胞的损害,增加绒毛高度和隐窝深度,这对营养物质 的应用率很重要(消化和吸收)。一些"营养素"同时 刺激和平衡特定(体液)和非特定(先天)免疫系统。 大多数的免疫器官(肠道黏膜集合淋巴结和盲肠扁桃 体)是位于在肠道。良好的肠道微生物和形态菌群与高 效免疫力有关联,将有助于饲料转化率,从而在这竞争 性高的家禽市场里胜出。

在生产期间使用 AviCare™ 是一个全新和安全的方法,以 稳定肠道微生物菌群,并且增强动物的健康和富牧者的 表现。它可以很容易地纳入任何家禽养殖场,肉鸡,蛋 鸡甚至种鸡的饲养方案。



For further information, please contact us at F.E Venture Sdn Bhd 03-5633 3493 or Dr. Ray Tan at 017-475 8679. 有关详细的资料, 请联络F.E Venture Sdn Bhd 03-5633 3493 或 Dr. Ray Tan at 017-475 8679.

FATRO Live Vaccines Improved Packaging & Cap Color Differentiation FATRO活性疫苗包装的改进和瓶盖颜色的分别

Highest Titre Concentration Of Live Vaccines In Market:

在市场最高浓度值的活性疫苗:

Newcastle Disease Virus-10^{6.5}EID₅₀ 新城疫病毒

Infectious Bronchitis Virus-10^{3.0}EID₅₀ /10^{4.0}EID₅₀

传染性支气管炎病毒







Newcastle Disease B1 Infectious Bronchitis Hitchner-120 新城疫 B1 传染性支气管炎 Hitchner-120



Newcastle Disease 6/10 Infectious Bronchitis Hitchner-120 新城疫 6/10 传染性支气管炎 Hitchner-120



Infectious Bronchitis Hitchner-120 传染性支气管炎 Hitchner-120



Infectious Bronchitis Hitchner-52 传染性支气管炎 Hitchner-52

ENCEFAL-VAC



Avian Encephalomyelitis Calnek 1143 禽脑脊髓炎 Calnek1143





Gumboro Disease Winterfield 2512 甘保罗病 Winterfield2512



Gumboro Disease 1/65PV 甘保罗病 1/65PV



Gelenczei Marty 传染性喉气管炎 ASL-L6 GelenczeiMarty

Fowl Pox HP2 鸡痘 HP2



Salmonella gallinarum/pullorum SGP695AV 沙门氏菌的母鸡/肉鸡 SGP695AV

Avian Reovirus S-1133 禽呼肠狐病毒 S-1133



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Savior for Fever & Heat Stress 发烧和暑热的解药

How is fever developed?

如何引起发烧?



Pathogens enter into the animal body 病原体进入动物体内





Stimulate the immune system 刺激免疫系统









Induce Cyclooxgenase to produce Prostagladin (PGE2) 诱导环氧化酶产生前列腺素

PGE2 trigger the hypothalamus to cause fever PGE2 触发下丘脑引起发烧

Symptoms associated with FEVER: 发烧的症状:

- 1. Appetite Loss / 食欲不振
- 2. Discomfort / 不适
- 3. Pain/疼痛
- 4. Motionless / 不活跃
- 5. Dyspnea / 呼吸困难

Paracetamol SP is suitable to be used in few of the conditions below: Paracetamol SP 适合用在以下的情况:

- 1. Fever / 发烧
- 2. Vaccination induced stress / 疫苗引起的紧迫
- 3. Prevention for heat stress / 预防暑热
- Handling stress (transportation, relocation) 管理引起的紧迫 (运输,搬迁)
- 5. Supportive treatment administer together with antibiotic for more effective treatment 与抗生素并用可达到更有效的治疗



How Paracetamol SP Works?

Paracetamol SP 如何作用?



Paracetamol reduces fever by inhibiting the action of pyrogens at the hypothalamus temperature regulation sites. Paracetamol 退烧功能是阻止下丘脑温度调节处所产生的内源性热原。

Why must choose our Paracetamol SP? 为何选择 Paracetamol SP?

Paracetamol SP is easily absorbed from the gastrointestinal tract and reaches quickly to efficient blood concentrations (bioavailability 81%). After oral intake of Paracetamol SP at dose of 30mg/kg BW, Paracetamol SP is detected in plasma after 10 minutes and reaches maximum concentrations at 90 minutes.



After multiple administration of Paracetamol SP, orally at 30mg/kg per day during 5 days, the drug is detected at 30min after administration of the medicated water and, after 12 hours, an average steady state plasmatic concentration is obtained of 4.77 mg/L.

Plasma concentration curve after oral administration of PARACETAMOL SP single dose of 30 mg paracetamol/ Kg b.w. in swine. 猪只口服Paracetamol SP 按 30mg/kg 体重的剂量的血药 浓度表。

Sources: SP Veterinaria s.a.(资料来源)

Paracetamol SP 容易被肠胃吸收,并迅速有效地达到血药浓度(生物利用度81%)。按30mg/kg 体重的剂量□ 服Paracetamol SP 10 分钟后药性进入血清内,而90分钟后达最高的血药浓度。

每天口服 Paracetamol SP 按30mg/kg的量剂,连续5天,检测到该药物在水里的30分钟和12小时后,获得4.77 毫克/升的平均稳定在血浆浓度。



How to Use Paracetamol SP?

如何使用Paracetamol SP?

Administer in the drinking water for the dosage of 0.5-1.0ml/L, for 3-5 days. Withdrawal period is 1 DAY only. 投入 0.5-1.0ml/L 的剂量在饮用水, 连续3-5天。停药期仅为1天。

For further information, please contact us at F.E Venture Sdn Bhd 03-5633 3493. 有关详细的资料,请联络F.E Venture Sdn Bhd 03-5633 3493.



By definition

"Biosecurity is essential because it reduces the potential for the introduction and spread of disease-causing organisms onto and between sites"

Medication and vaccination have traditionally played a major role in treating diseases but it is now widely accepted that they cannot, in isolation, prevent losses due to disease. Modern farming methods demand an all-encompassing holistic approach. Unless the background challenge from disease organisms can be controlled, and good management practices strictly followed, medication and vaccination alone are not capable of adequately protecting stock.

Livestock must be given an environment in which disease and infection is controlled to the point where vaccination and medication can achieve beneficial effects. Biosecurity is a key element in this triangle of disease control methods.



根据定义

"卫生安全是至关重要的,因为它减少引进了致病的微生物在农场或农场之间的传播可能性。"

一直以来在治疗疾病方面, 药物和疫苗免疫发挥了重要的作用, 但现在广泛的农友了解此管道并不能完全防止 因疾病的损失。现代的富养需要一个包罗万象的整体方法。除非农场可以控制疾病病源的挑战, 和严格遵守良 好的管理规范, 不然单靠药物和疫苗是不能够充分地保护家禽。

饲养家禽需要一个良好或受控制的坏境,这样所用的疫苗和药物才能达到互利的效果。因此卫生安全是防治疾病的一个关键因素。



Figure 1: Elements that can contribute to bio-hazards in a farm. 图1:以上是可以在农场对生物危害的元素。



Figure 2: Biosecurity that can be controlled by Continuous Biosecurity measures 图2: 农场的卫生安全可以通过连续性的卫生安全措施来控制



For further information, please contact us at F.E Venture Sdn Bhd 03-5633 3493 or Dr. Jolene at 012-455 7827. 有关详细的资料, 请联络F.E Venture Sdn Bhd 03-5633 3493 或 Dr. Jolene at 012-455 7827. Bronchopneumonia vs Farm Production 支气管肺炎VS农业生产

It is known that of all the diseases that affect growing and finishing pigs, chronic respiratory disease is most economically devastating. It is extremely common yet it can be difficult to prevent and control. When it strikes, the pigs will lose appetite and feel feverish. This will results in reduced feed intake and depressed growth rates with poor feed efficiency. It can even cause heavy mortality up to 10-15% in naive animals if appropriate treatment is not taken in time.

The control of respiratory disease requires an understanding of the complexities and interaction between the organisms that are present, the pig and the management of the environment.

据了解在所有影响猪只生长的疾病中,慢性呼吸系统疾病是最具有破坏经济性的。这疾病是非常常见但也是 难以防止和控制。当疾病来袭时,猪只会失去食欲和发烧。这会导致采食量减少和饲料换肉率差。如果不采 取及时适当的治疗,它甚至可以导致死亡率高达10%-15%。

控制呼吸系统疾病需理解现存生物体,猪只和环境管理之间的复杂性和相互影响。



- Large group size
- · Inappropriate ventilation and humidity chilling
- · Poor hygiene with high levels of ammonia, dust and bacteria in the air
- Pig movement, stress and mixing
- 富养密度高-拥挤
- •家禽饲养量大
- 不适当的通风和湿度-寒冷
- 高氮气,尘埃和空气中的细菌都是恶劣的卫生水平
- •猪的活动,压力和

There are a few things that we can actually do to help the pigs in winning this fight against chronic respiratory disease. Starting from prevention, control up to the choice of treatments. These include vaccination program, good disinfection control, good husbandry management, and prompt treatment with right choice of drugs. In this article, we shall focus on the treatment for the best cost benefits.

Chronic respiratory disease in growers or finishers usually involves a mixed infection of viruses and secondary bacteria. Thus, broad spectrum antibiotics had always been the choice. The use of Enrofloxacin in treating chronic respiratory disease has obtained good results in most of the farms currently. But, Enrofloxacin has a very low solubility in water making it difficult to be administered as oral or injectable solution. To obtain a solution sufficiently concentrated, it was necessary to increase the pH up to 11 - 14 with hydroxides. The need for such high pH is not a problem for oral administration but it will be for injectable solution as it will be corrosive to the tissues in contact. This will cause bruises and necrosis of the tissues at the site of injection once the medicine is administrated. The affected muscles will be count as lost during the processing.

To overcome this problem, S.P. VETERINARIA developed formulation way, reaching a soluble injectable product with pH range between > 3 < 6. This pH is closer to the tissue pH; consequently the preparation becomes non-corrosive and non-irritant for animal tissues. Below are some pictures from a study done showing injection sites 7 days after treatment comparing injectable Enrofloxacin with alkaline pH and COLMYC-E from S.P. VETERINARIA.

From the study, we observed that treatment of COLMYC-E injection showed less local reaction compared to the reference treatment while having similar systemic tolerance. The use of COLMYC-E will help to reduce the meat lost due to local reaction caused by injection while securing an effective treatment choice of drug.



ENRO-Alkaline-pH

COLMYC-E INJECTION

J.Goutalier and col, 2008 (Phathophy, Francia)

其实我们可以帮助猪只抗击慢性呼吸疾病这场战斗。从预防开始,需控制选择治疗的方法。这些措施包括疫 苗免疫计划,做好消毒控制,良好的饲养管理,并正确选择药物及时治疗。在这篇文章中,我们将重点放在 最佳成本效益的治疗方法。

慢性呼吸系统疾病在发育或成熟猪只里引发通常是涉及混合病毒和继发性细菌的感染。因此,广谱的抗生素 一直是被选择使用来治疗。目前大多数养殖场使用 Enrofloxacin 来治疗慢性呼吸系统疾病都取得了良好的效 果。但是, Enrofloxacin 在水里具有非常低的溶解度,因此如口服或注射溶液的投药方法都比较困难。为了获 得充分浓缩的溶液,有必要使用氢氧化物来增加 pH 值高达 11-14。口服投药在如此高 pH 值并不是一个问 题,但使用注射方法则会使被接触的组织高度腐蚀。将导致瘀伤和组织坏死在注射部位。这受影响的肌肉在 屠宰过程中将被计算为成本的损失。

为了克服这个问题, SP VETERINARIA开发研制可溶性注射产品在 3 < pH < 6 范围之间。该pH是接近组织的 pH;因此对动物的组织将变得非腐蚀性和非刺激性。以下是一些研究照片显示注射碱性pH的 Enrofloxacin 和 SP VETERINARIA的 COLMYC-E 在7天后的注射部位。

从研究中,我们观察到,注射 COLMYC-E 肌肉局部表现出较少的反应,相比其它具有同样效果治疗慢性呼吸系统疾病的产品。使用 COLMYC-E 注射将有助于减少猪肉的损失,同时也确保有效的治疗慢性呼吸系统疾病的药物首选。

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RECENT EVENT / 最新事件.....

VIV, Bangkok 2015 / VIV, 曼谷2015



Kota Kinabalu & Kuching Roadshow / 哥打京那巴鲁和古晋座谈会



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