2023年第8期总383期

动物营养专题

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中国农业科学院农业信息研究所
联系人：熊本海;郑姗姗;顾亮亮
联系电话： 010-62816017
邮箱：agri@ckcest.cn
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前沿资讯

1．国家统计局：1月份CPI环比上涨0.8% 猪肉价格环比下降10.8%

简介：国家统计局2月10日消息：2023年1月份，全国居民消费价格同比上涨2.1%。其中，城市上涨2.1%，农村上涨2.1%;食品价格上涨6.2%，非食品价格上涨1.2%;消费品价格上涨2.8%，服务价格上涨1.0%。1月份，全国居民消费价格环比上涨0.8%。其中，城市上涨0.8%,农村上涨0.5%;食品价格上涨2.8%,非食品价格上涨0.3%;消费品价格上涨0.7%,服务价格上涨0.8%。一、各类商品及服务价格同比变动情况：1月份，食品烟酒类价格同比上涨4.7%，影响CPI(居民消费价格指数)上涨约1.33个百分点。食品中，鲜果价格上涨13.1%，影响CPI上涨约0.27个百分点;蛋类价格上涨8.4%，影响CPI上涨约0.06个百分点;鲜菜价格上涨6.7%，影响CPI上涨约0.16个百分点;畜肉类价格上涨6.6%，影响CPI上涨约0.21个百分点，其中猪肉价格上涨11.8%，影响CPI上涨约0.16个百分点;水产品价格上涨4.8%，影响CPI上涨约0.09个百分点;粮食价格上涨2.7%，影响CPI上涨约0.05个百分点。其他七大类价格同比六涨一降。其中，其他用品及服务、教育文化娱乐、交通通信价格分别上涨3.1%、2.4%和2.0%，生活用品及服务、医疗保健、衣着价格分别上涨1.6%、0.8%和0.5%;居住价格下降0.1%。二、各类商品及服务价格环比变动情况：1月份，食品烟酒类价格环比上涨2.0%，影响CPI上涨约0.57个百分点。食品中，鲜菜价格上涨19.6%，影响CPI上涨约0.41个百分点;鲜果价格上涨9.2%，影响CPI上涨约0.19个百分点;水产品价格上涨5.5%，影响CPI上涨约0.10个百分点;畜肉类价格下降5.3%，影响CPI下降约0.19个百分点，其中猪肉价格下降10.8%，影响CPI下降约0.18个百分点;蛋类价格下降2.1%，影响CPI下降约0.02个百分点。其他七大类价格环比四涨两平一降。其中，教育文化娱乐、其他用品及服务价格分别上涨1.3%和1.1%，医疗保健、交通通信价格分别上涨0.3%和0.2%;居住、生活用品及服务价格均持平;衣着价格下降0.5%。

来源：中国饲料行业信息网

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全文链接:

http://agri.ckcest.cn/file1/M00/10/1D/CsgkOGPpgzyABQVkAAML5sG39cM324.pdf

2．U of M researchers lead major breakthrough to combat African swine fever(Minnesota大学研究人员领导了抗击非洲猪瘟的重大突破)

简介：University of Minnesota researchers recently led successful efforts to work on African swine fever virus (ASFV) and developed and validated a surrogate virus for ASFV, a disease that has devastated pig populations and pork production in countries around the world, according to a news release from the university. The U of M was one of only a handful of facilities in the US to have access to the highly contagious ASFV. The lab's work represents a major breakthrough in efforts to develop effective mitigation strategies to control ASFV and keep it from entering North America. In addition to working directly on ASFV, a surrogate virus, Emiliania huxleyi virus (EhV), which is strikingly similar to ASFV in terms of its structure and stability, was proposed and developed in the Schroeder Lab. It can safely be used in field studies to help scientists understand more about how the virus is transmitted in real-world conditions, and what strategies are effective to prevent its spread. One of the

main benefits of EhV is its low-risk, because it only infects one specific species of marine algae and poses no harm to humans, plants or animals. The team, led by Gerald Shurson a professor in the College of Food, Agricultural, and Natural Resource Sciences, and Declan Schroeder an associate professor from the College of Veterinary Medicine, used a novel testing method to measure and compare the two viruses based on their ability to survive and potentially become infectious under various environmental conditions. The study found both viruses were able to survive temperatures up to an astounding 100 degrees Celsius — the temperature at which water boils. This has significant implications for animal health and feed safety, as it shows that ASFV is much harder to destroy than previously thought, which suggests that current biosecurity protocols in the US may be inadequate. "The negative impact on the US economy in the event of a foreign animal disease, such as ASFV entering our swine farms, cannot be overstated," said Schroeder. “Given the possible routes of entry of a foreign animal disease into the US, imports of feed and feed ingredients from ASFV-positive countries pose a risk. If a potentially ASFV-contaminated feed ingredient were to enter the US, results from our recent 23-day feed transport study that used EhV as a surrogate for ASFV show it continues to be remarkably stable." “This is a major breakthrough to reach our goal of accelerating research for understanding the survival of ASFV in various feed ingredients and complete feeds, as well as evaluating the effectiveness of various mitigation strategies to inactivate ASFV in feed and decontamination strategies for feed mills if they were to become contaminated with ASFV,” said Shurson. With a validated surrogate now available, researchers' next step is to determine exactly how US protocols should be changed to keep pigs and the feeds they are fed safe.

来源：The Pig Site 官网

发布日期:2023-02-10

全文链接:

http://agri.ckcest.cn/file1/M00/03/4B/CsgkOYhAi1yAWNpnABHBrDMVYDo860.pdf

3. 国家统计局：2022年全国粮食总产量68653万吨

简介：国家统计局局长康义：全年全国粮食总产量68653万吨，比上年增加368万吨，增长0.5%。其中，夏粮产量14740万吨，增长1.0%;早稻产量2812万吨，增长0.4%;秋粮产量51100万吨，增长0.4%。分品种看，稻谷产量20849万吨，下降2.0%;小麦产量13772万吨，增长0.6%;玉米产量27720万吨，增长1.7%;大豆产量2028万吨，增长23.7%。油料产量3653万吨，增长1.1%。全年猪牛羊禽肉产量9227万吨，比上年增长3.8%;其中，猪肉产量5541万吨，增长4.6%;牛肉产量718万吨，增长3.0%;羊肉产量525万吨，增长2.0%;禽肉产量2443万吨，增长2.6%。牛奶产量3932万吨，增长6.8%;禽蛋产量3456万吨，增长1.4%。年末生猪存栏45256万头,增长0.7%;全年生猪出栏69995万头，增长4.3%。

来源：国际畜牧网

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全文链接:

http://agri.ckcest.cn/file1/M00/03/4B/CsgkOYhANh-AH63mAAYrV3EUluc003.pdf

学术文献

1．Comparison of digestible and available phosphorus release values for a novel phytase determined with fecal phosphorus digestibility and bone mineralization in weaner pigs(用粪磷消化率和骨骼矿化测定了一种新型植酸酶在断奶仔猪上的消化和有效磷释放值的比较)

简介：The objective of this study was to compare digestible and available P release from phytase through measuring fecal P digestibility and bone mineralization. A total of 336 weaner pigs (7.4 ± 0.9 kg) were used in a randomized complete block design. Three diets were established by including 2.5 (control), 6.0 or 9.5 g/kg monocalcium phosphate (MCP) to establish the standard response curves. The other 4 diets included a novel phytase at 500, 1000, 2000 or 3000 phytase units (FYT)/kg feed to the control. Each diet was fed to 6 pens of 8 pigs each for 21 days. All diets included 3 g/kg TiO2, and fecal samples were collected on d 1315 of trial. At the end, one pig per pen was sacrificed for the collection of tibias. The results showed that increasing supplementation of MCP linearly (P < 0.001) improved growth performance (body weight gain, feed intake and gain:feed and bone mineralization (percent bone ash and weights of dry bone, bone ash, and bone Ca and P). These parameters responded to the supplementation of phytase both linearly and quadratically (P < 0.01). Supplemental phytase or MCP increased apparent total tract digestibility (ATTD) of Ca and P as well as the amount of ATTD P, but reduced the ATTD Ca-to-ATTD P ratio both linearly and quadratically (P < 0.01). Both MCP and phytase linearly (P < 0.05) increased percent bone ash P. The true total tract digestibility (TTTD) coefficient of P in MCP was estimated to be 0.94 by regressing the ATTD P against the dietary P concentration. The available P release increased from 1.58 to 2.21, 1.772.62, 1.171.82 and 1.251.97 g/kg feed when body weight gain, gain:feed, percent bone ash and bone P weight were used as the response variables, respectively, with increasing phytase dose from 500 to 3000 FYT/kg feed, whereas the digestible P release by phytase calculated from ATTD coefficient of P increased from 1.05 to 1.99 g/kg feed. By multiplying the TTTD coefficient of MCP (0.94), the available P release values based on bone P weight were transformed to their equivalent digestible values of 1.181.86 g/kg feed. In conclusion, the available P release from phytase depends on the response variables. Using the TTTD coefficient of P in MCP to convert the available P release values to digestible P values for phytase did not generate comparable results as measured from ATTD coefficient of P.

来源：中国知网

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全文链接:

http://agri.ckcest.cn/file1/M00/10/1D/CsgkOGPp1jSAayQ8AAnejLTfBi0903.pdf

2．共生益生菌酵素制剂对断奶仔猪肠道形态和肠黏膜免疫能力的影响

简介：试验旨在探究共生益生菌酵素制剂对断奶仔猪肠道形态和肠黏膜免疫能力的影响。选取28日龄断奶体重为(10.10±0.47)kg的杜×长×大三元杂交仔猪180头，

随机分为对照组、共生益生菌酵素组(FAM组)、抗生素组，每组3个重复，每个重复20头。FAM组、抗生素组分别在基础日粮中添加0.1%FAM、复合抗生素，试验期30 d。结果表明：与对照组相比，添加0.1%FAM可以提高断奶仔猪小肠绒毛高度/隐窝深度比值(P<0.05)，改善断奶仔猪肠道形态，增强肠黏膜总抗氧化能力(P<0.05)；增加回肠派尔氏结节(PPs)数目以及CD4+ T细胞和IgA+浆细胞数量(P<0.05)，提高回肠内容物分泌型免疫球蛋白A(SIgA)含量(P<0.05)，且部分效果优于抗生素。由此可见，FAM可以改善断奶仔猪肠道形态和肠黏膜免疫功能维护仔猪肠道健康，具有抗生素的同等功效。

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http://agri.ckcest.cn/file1/M00/03/4B/CsgkOYhAOGGAOvPiABBoW-lvP_c209.pdf