

## **A herbal vitamin D source improves the performance of piglets fed low-calcium starter diets**

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Weaning is a stressful period for piglets that can negatively affect their performance. Plants contain a variety of secondary metabolites that act as antioxidants or anti-inflammatory agents that can support piglets after weaning. In a trial with 192 crossbred Topigs weaned at 27 days of age, effects of *Solanum glaucophyllum* (SG) alone or in combination with a mixture of essential oils (EO) on the performance of weaning pigs fed calcium (Ca)-reduced diets was tested. The piglets were kept in 48 pens and fed one of four diets for 35 days, with a prestarter diet from d0-14 and a starter diet from d14-35: control (PC), a standard diet; negative control (NC), diet with reduced Ca and phosphorus; NC supplemented with SG (SG) and NC supplemented with SG and EO (SG+). Individual and pen body weight were measured on d0, d14, and d35, and pen feed intake was measured on d14 and d35. Body weight and daily weight gain did not differ among the treatments. In the prestarter period, SG had the lowest FCR ( $1,539 \pm 0,127$ ;  $p < 0.05$ ). In the starter period, the FCR of NC ( $1.455 \pm 0.144$ ) was significantly ( $p < 0.05$ ) higher than that of SG+ ( $1.297 \pm 0.195$ ), while the FCR of the two other diets was intermediate. The results indicate a better feed use in diets with lower dietary Ca. Adding SG alone had a strong effect on post-weaning performance, while combining SG and EO showed minor synergies. Additional analysis to better understand the underlying mechanisms is currently underway.