

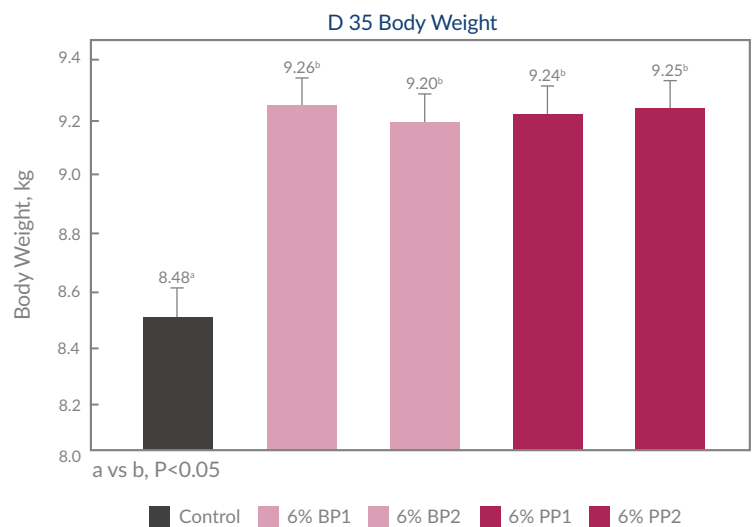


BOTH BOVINE AND PORCINE PLASMA SUPPORT ANIMAL HEALTH

Spraydried plasma (SDP) has long been used as an effective health tool in managing animal health. SDP is a complex mixture of active components that impact health and performance, particularly under stress or challenge conditions. SDP consistently reduces inflammation while improving gut function and the immune response resulting in improved feed intake, growth and survival in multiple species.

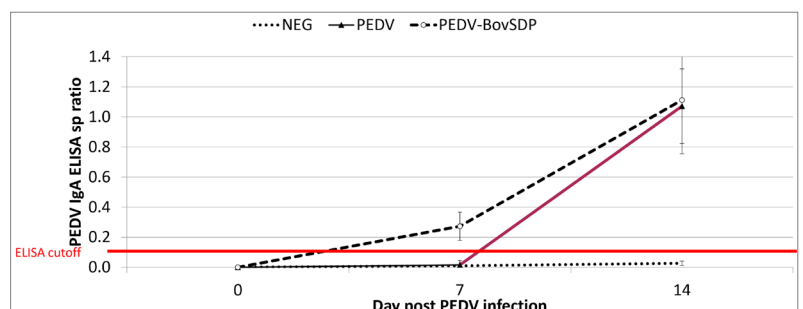
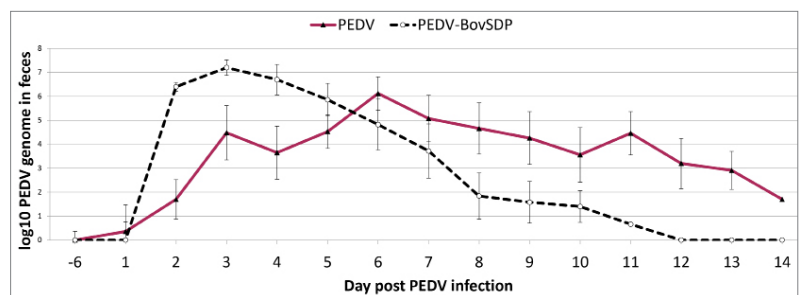
BOTH BOVINE AND PORCINE PLASMA IMPROVE BODY WEIGHT IN NURSERY PIGS¹

Bovine or porcine plasma provide equal advantages over a non-plasma diet.



BOVINE PLASMA CAN EFFECTIVELY ENHANCE IMMUNE RESPONSE TO PEDV CHALLENGE²

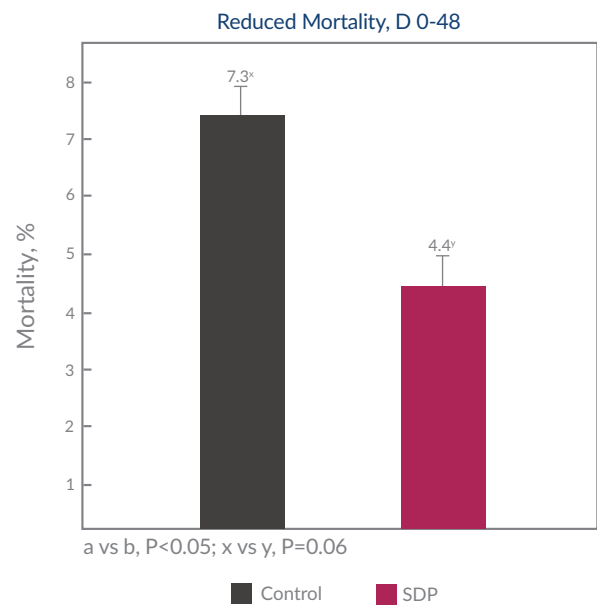
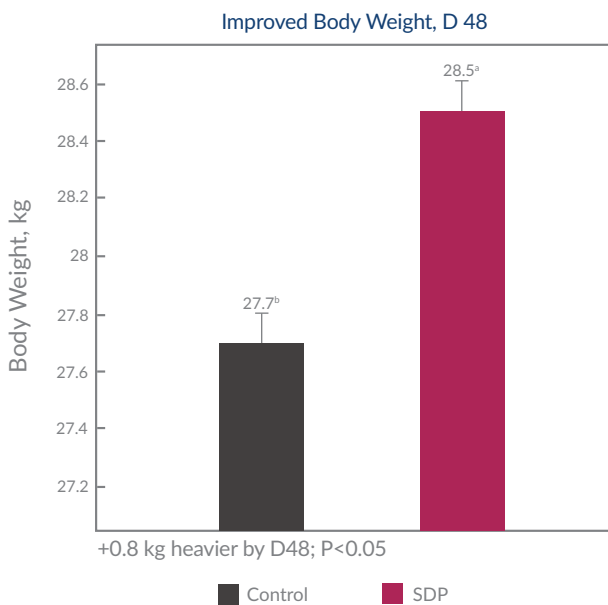
- Weaned pigs fed diet with 0% or 5% spray dried bovine plasma.
- Pigs experimentally infected with PEDV d 7 of study and monitored to d 21 of study.
- Bovine SDP induced an earlier anti-PEDV antibody response in pigs.
- Bovine SDP induced an earlier clearance rate of fecal PEDV genome.



SPRAY DRIED BOVINE PLASMA IMPROVES PERFORMANCE AND REDUCES MORTALITY IN PRRSV POSITIVE PIGS³

PRRS positive pigs fed diets with SDBP in this study had higher average Body Weight by day 7 and at the end of the nursery than pigs fed a diet that did not include SDBP. By the end of the study pigs fed diets with SDBP were 0.8 kg (1.7 lb) heavier than control pigs.

PRRS positive pigs fed SDBP regimen tended to have a lower mortality (21 of 480 pigs) compared to the regimen that didn't include SDBP (35 of 480 pigs). At the end of the study mortality rates were 40% lower in the pigs whose diet contained SDBP.



BOTTOM LINE

IMMUNE RESPONSE



BODY WEIGHT



MORTALITY

40%



¹Crenshaw et al. 2015. J. Anim. Sci. 93(Suppl 2):138-139:Abstract #312

²Duffy et al. 2018. Transl. Anim. Sci. 2:349-357

³Crenshaw et al. 2017. JSHP 25(1): 10-18