190 An evaluation of Peptone products on nursery pig performance. A. J. Myers*[1], M. D. Tokach[1], R. D. Goodband[1], S. S. Dritz[1], J. M. DeRouchey[1], J. L. Nelssen[1], B. W. Ratliff[2], D. M. McKilligan[2], G. Xu[3], J. Moline[3], and M. Steidinger[4], *[1]Kansas State University, Manhattan, [2]Tech Mix Inc., Stewart, MN, [3]Midwest Ag Enterprises, Marshall, MN, [4]Swine Nutrition Service, Anchor, IL.*

Two studies were conducted to evaluate Peptone products (PEP 2+, PEP-NS, and Peptone 50; Tech Mix Inc., Stewart, MN) on nursery pig performance. In Exp. 1, 360 weanling pigs (initially 5.4 kg) were used with 5 pigs per pen and 12 pens per treatment. There were 6 dietary treatments: a negative control diet containing 2.5% spray-dried animal plasma (SDAP) in phase 1 followed by no specialty protein sources in phase 2; 5% SDAP in phase 1 and 3% select menhaden fish meal (SMFM) in phase 2; 5% SDAP and 3% SMFM during phase 1 and 6% SMFM during phase 2; 5% SDAP and 3% PEP2+ during phase 1 and 6% PEP2+ during phase 2; 5% SDAP and 3% PEP-NS during phase 1 and 6% PEP-NS during phase 2; and 5% SDAP and 3% PEP 50 during phase 1 and 6% PEP50 during phase 2. Overall, pigs fed PEP2+, Peptone 50 and PEP-NS had increased ($P < 0.05$) ADG and ADFI compared with pigs fed the negative control diet with others intermediate. Pigs fed PEP2+ had improved ($P < 0.05$) G:F compared with all other treatments. In Exp. 2, 1,152 weanling pigs (initially 5.6 kg) were used to evaluate the effects of SMFM, poultry meal (PM), PEP2+, Peptone 50, and PEP-NS on pig performance. There were 6 dietary treatments: negative control diet containing 3% SDAP in phase 1 and no specialty protein sources in phase 2 or the negative control diet with 6% PM, PEP2+, Peptone 50, or PEP-NS. There were 6 pens per treatment with 32 pigs per pen. From d 0 to 21, pigs fed 6% SMFM, PM, PEP2+, or PEP-NS had improved ($P < 0.05$) ADG compared with pigs fed the negative control diet or 6% Peptone 50. Pigs fed 6% PEP-NS had improved ($P < 0.05$) ADG compared with pigs fed the negative control, 6% PM, or 6% Peptone 50. Pigs fed 6% SMFM, PM, PEP2+, or PEP-NS had improved ($P < 0.05$) G:F when compared with the negative control or 6% Peptone 50. These results suggest PEP2+ and PEP-NS can replace SMFM and PM in nursery pig diets.

Table 1

Item	Negative Control	3% SMFM	6% SMFM	6% PEP2+	6% PEP-NS	6% Peptone 50	SEM
Exp. 1, d 0 to 21							
ADG, g	251[c]	259[bc]	266[bc]	298[a]	277[b]	279[ab]	14
G:F	0.780[a]	0.778[a]	0.797[a]	0.834[b]	0.784[a]	0.775[a]	0.011
Exp. 2, d 0 to 21							
	Negative control	6% SMFM	6% PM	6% PEP2+	6% PEP-NS	6% Peptone 50	SEM
ADG, g	199[a]	242[bc]	230[b]	247[bc]	256[c]	197[a]	9
G:F	0.693[a]	0.706[bc]	0.713[bc]	0.715[bc]	0.735[c]	0.665[a]	0.015

[abc]Within a row, means without a common superscript differ P < 0.05.

Key Words: nursery pig, fish meal, Peptone

191 Effects of Liquitein on weanling pigs administered a porcine circovirus type 2 (PCV2) and *Mycoplasma hyopneumoniae* (M.*hyo*) vaccine strategy. A. J. Myers*[1], M. D. Tokach[1], R. D. Goodband[1], S. S. Dritz[1], J. M. DeRouchey[1], J. L. Nelssen[1], B. W. Ratliff[2], D. M. McKilligan[2], G. Xu[3], and J. Moline[3], *[1]Kansas State University, Manhattan, [2]Tech Mix Inc., Stewart, MN, [3]Midwest Ag Enterprises, Marshall, MN.*

A total of 180 nursery pigs (PIC 1050, initially 5.7 kg BW and 21 d of age) were used in a 35-d study to determine the effects of Liquitein and a PCV2 and M. *hyo* vaccine regimen on the growth performance of weanling pigs. Liquitein is a liquid source of nutrients provided through the water lines at a ratio of 1:50. Pigs were transported approximately 7 h (623 km) from the sow farm to the nursery and then randomly allotted to 1 of 4 treatments arranged in a 2 × 2 factorial with main effects of Liquitein (with or without) and PCV2 and M. *hyo* vaccine regimen (vaccinates or non-vaccinates). There were 5 pigs per pen and 9 pens per treatment. On d 0, pigs in the vaccinate group were given a full dose (2 mL) of each ResprisureOne (Pfizer Animal Health) and Circumvent (Intervet/Schering-Plough Animal Health, Millsboro, DE). On d 21, pigs in the vaccinate group were administered a second full dose (2 mL) of Circumvent as per label instructions. Liquitein was administered to the pigs via water medicators for the first 5 d after arrival to the nursery. There were no vaccine × Liquitein interactions ($P > 0.05$) for any response criteria. From d 21 to 35, pigs previously administered Liquitein had greater ADFI ($P = 0.05$) than those not provided Liquitein. However, overall (d 0 to 35) there were no effects of Liquitein on growth performance. From d 0 to 35, vaccinated pigs had decreased ($P < 0.01$) ADG and ADFI compared with non-vaccinated pigs. These results suggest that under these experimental conditions, administering Liquitein during the first 5 d in the nursery did not have any effect on growth performance; however, pigs administered the vaccine regimen had decreased ADG and ADFI.

Table 1. Effects of Liquiten and PCV2/M.*hyo* vaccine strategy on nursery pig performance

	Liquitein		No Liquitein				
	Non-vaccinate	Vaccinates	Non-vaccinate	Vaccinates	SEM	Vaccine	Liquitein
d 0 to 5							
ADG, g	175	160	162	135	12	0.07	0.11
G:F	1.674	1.599	1.489	1.529	0.09	0.85	0.18
d 0 to 35							
ADG, g	370	330	354	320	11	<0.11	0.21
G:F	0.671	0.666	0.669	0.664	0.02	0.76	0.88

Key Words: liquid supplement, PCV2, pigs