

Replacing corn with bakery meal in weanling pig diets: effect on welfare and growth performance A. Luciano<sup>1,2</sup>, C.D. Espinosa<sup>1</sup>, L. Pinotti<sup>2</sup> and H.H. Stein<sup>1</sup> <sup>1</sup>UIUC, Animal Sciences Department, 1207 West Gregory Drive, Urbana, IL 61801, USA, <sup>2</sup>UNIMI, VESPA Department, Via Trentacoste 2, 20134 Milan, Italy; alice.luciano@unimi.it

Bakery meal (BM) consist of bread, breakfast cereals, cookies and other foods that cannot be used for human consumption. BM can be used in animal diets, reducing competition between feed and food industries. This study was conducted to test the hypothesis that replacing corn with BM will not influence pig growth performance if diets are balanced for digestible nutrients. A total of 160 newly weaned pigs were allotted to 1 of 5 dietary treatments. A 2-phase feeding program was used (d1 to 14 phase 1 and d15 to 35 phase 2). There were 4 pigs per pen with 8 replicate pens per treatment. A total of 10 diets were formulated. In each phase, a control diet (CTR) containing corn and soybean meal was formulated. For each phase, 4 additional diets in which BM replaced 0, 25, 50, 75, or 100% of the corn in CTR diet were also formulated. Individual body weights (BW) were recorded on d 1, 14 and 35. Feed addition was recorded daily and the weight of feed left in the feeder was recorded on d 14 and 35. Diarrhoea scores were assessed visually per pen every other day using a score from 1 to 5. At the end of each phase, 1 blood sample was collected from 1 pig per pen via vena puncture. Average daily feed intake (ADFI), average daily gain (ADG), and gain to feed ratio (G:F) within each pen and treatment group were calculated. Results indicated that there was no effect of increasing concentrations of BM on final BW, ADG, ADFI, or G:F from d 1 to 14, but ADG from d 15 to 35 and for the overall experimental period tended to decrease (P