Use of Recycled Vegetable Oil in the Diet of Lactating Sows

Authors: Juan Manuel Uriarte Lopez, Hector Raul Guemez Gaxiola, Javier Alonso Romo Rubio, Juan Manuel Romo Valdez Abstract: The objective of this investigation was to determine the influence of the use of recycled vegetable oil from restaurants in the productive performance of sows in lactation. Twenty-four hybrids lactating sows (Landrace x Yorkshire) were divided into three treatments with eight sows per treatment. On day 107 of gestation, the sows were moved to the mesh floor maternity cages in an environment regulated by the environment regulated $(2.4 \times 0.6 \text{ m})$ contained an area $(2.4 \times 0.5 \text{ m})$ for newborn pigs on each side, all diets were provided as a dry powder, and the sows received free access to water throughout the experimental period. After farrowing, the sows were fasted for 12 hours, the daily feed ration gradually increased, and the sows had ad libitum access to feed on the fourth day. The diets used were corn-soybean meal-based, containing 0 (CONT), recycled vegetable oil 1.0 % (RVOL), or recycled vegetable oil 1.5 % (RVOH) for 30 days. The diets contained similar calculated levels of crude protein and metabolizable energy and contained vitamins and minerals that exceeded National Research Council (1998) recommendations; sows were fed three times daily. On day 30, piglets were weaned, and performances of lactating sows and nursery piglets were recorded. Results indicated that average daily feed intake (5.58, 5.55, and 5.49 kg for CONT, RVOL, and RVO, respectively) of sows were not affected (P > 0.05) by different dietary. There was no difference in the average body weight of piglets on the day of birth, with 1.33, 1.36, and 1.35 kg, respectively (P > 0.05). There was no difference in average body weight of piglets on day 30, with 6.91, 6.75, and 7.05 kg, respectively 0.05) between treatments numbers of weaned piglets per sow (9.95, 9.80, and 9.80) were not affected by treatments (P > 0.05). In conclusion, the substitution of virgin vegetable oil for recycled vegetable oil in the diet does not affect the productive performance of lactating

Keywords: lactating, sow, vegetable, oil

Conference Title: ICASVM 2021: International Conference on Animal Science and Veterinary Medicine

Conference Location : Bangkok, Thailand **Conference Dates :** December 16-17, 2021