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Use of foster cows to produce rosé veal of spring-born dairy calves in an organic setting

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Most non-replacement calves born by organic dairy cows are sold to conventional rosé veal fattening. Due to a requirement of milk-feeding until 3 months (mo) of age, grazing, and at least 60% roughage in the fattening ration, very few calves are raised and slaughtered as organic, and only a few traditional steers slaughtered at 2½ years of age are produced within the organic system. Thus, currently no rosé veal of organic origin is available. Our aim was to develop and test a novel organic beef production concept producing three types of beef; 8-mo rosé veal (reported in this abstract), medium red beef from 16 mo-steers, and red beef from 26 mo-steers. The hypothesis was that performance as well as meat quality would be as good as similar types of conventional beef. To produce organic rosé veal we utilized culled dairy foster cows to rear the calves. A total of 24 Holstein cows each received two spring-born ½-mo old Holstein bull calves. Following successful bonding indoor and castration at 1 mo, cow-calf-pairs were grazing a grass-clover sward for 4 mo, and housed in the autumn. The 8 best-performing cow-calf pairs continued, and the 16 calves had access to the same TMR as the foster cows, were weaned at 6½ mo, and were slaughtered at 8.2 mo (ORG). There were no health-related issues with the calves. ADG from birth to slaughter was 1.23 kg/d, and carcass weight was 180 kg. Carcass, meat and eating quality was compared with 10 conventional 9-mo rosé veal calves (CONV, 211 kg carcass). EUROP conformation (ORG 3.2 vs CONV 3.6) and fatness (2.6 vs 2.4) were similar. Meat quality (intramuscular fat and colour measures: L\*, a\*, and b\*) was similar. However, ORG had more intense taste and was more tender than CONV.