

14. Effects of extending voluntary waiting period for dairy cows on health, development and lactation performance of their calves

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Extending the voluntary waiting period for insemination (VWP) in dairy cows is of interest to reduce the frequency of calving events and inseminate at a moment with less fertility problems. Little is known about the calves after extension of the VWP. The aim of this study was to evaluate the effect of extending voluntary waiting period (VWP) of dams on growth, health and production performance of their offspring. Holstein Friesian dairy cows (n=154) were blocked according to parity, milk yield, somatic cell count and randomly assigned to a VWP of 50, 125, or 200 days. For the current study, Holstein-Friesian female calves from cows with different VWP (n=61) were monitored from birth to calving till 100 days in milk. During the rearing phase, body weight of calves was not different among VWP groups. During the first 100 DIM, calves in VWP50 group had greater body weight (BW; $P < 0.01$) and also greater fat and protein corrected milk yield ($P < 0.01$) compared with calves in VWP125 group. When calves were regrouped according to their mothers' real calving interval (CInt; CInt_1: < 409 days; CInt_2: 409-468; CInt_3: >468), calves born to mothers with a long CInt (CInt3) had a greater body weight compared with calves in CInt_2. Whereas, shorter CInt group (CInt_1) has higher fat and protein corrected milk yield than medium group (CInt_2). In conclusion, extending VWP of dairy cows can affect their offspring's body condition and milk performance during their first lactation.