Introduction
The main aim of sheep breeding in Austria is to produce lamb meat. Austrian mountain sheep and merino are the two breeds with the most animals.

An important factor to produce lambs with high quality is the milk yield of the ewes. High milk performance in the first 5-6 weeks of lactation is connected with a good growth of the lambs. To include milk performance in a breeding program it is necessary to know the milk yield. Merino and mountain sheep usually are not milked and it is the question how to guess the milk yield?

One possibility can be the body weight of the lambs. The question is at what time after lambing has the body weight of the lambs the best correlation to the milk performance of the ewe?

Material and method
The effect of milk performance of sheep (30 Merino (M), 30 light (BL) and 30 heavy (BS) Mountain sheep) on weight gain of their lambs was studied. After lambing dams and their lambs were kept in an individual pen. Milk yield was estimated by the oxytocin-method twice a week. For that lambs was separated from their dams for three and a half hour. Body weight of ewes and lambs was recorded twice weekly. Ewes where fed with hay (ad lib.) and concentrate, depending on milk yield. Lambs had free access to hay and concentrate after day 14 of birth. All lactations were subdivided into 6 sections (I, II, III, IV, V, VI is day of lactation 6-10, 11-15, 16-20, 21-25, 26-30 and 31-35, respectively).

Results
Milk yield was effected by breed (P=0.001), number of suckling lambs (P=0.007), and feeding conditions (P=0.044). The effect of breed became more important as lactation progressed while the number of suckling lambs lost its influence on milk yield. The highest milk yield was estimated for light BL (3.08 kg/d) in section VI. Merino ewes had significantly lower milk yields in all sections and peaked by 2.37 kg/d.

Ewes nursing twins produced 0.5 kg more milk per day than ewes with singles. This effect was greatest for BL with 23 % more milk. Regarding daily weight gain of lambs, milk yield lost significance as lactation progressed (section II and VI, P=0.014 and P=0.226, respectively), while concentrate intake gained influence until it reached significance in section V (P=0.011).

Further factors effecting daily lamb weight gain were the number of suckling lambs, breed of the ram, and birth weight with P=0.001, P=0.011 and P<0.001, respectively.

Conclusion
In the interval from day 6 to day 30 of lactation milk yield (P=0.039), birth weight (P=0.001) and number of sucking lambs (P=0.005) had a significant effect on lamb weight gain. Thus, knowing the birth weight, the number of sucking lambs and the daily weight gain until day 30 post partum, an inference on ewes’ milk yield can be made.