

Supplementary Material

Table S1. Model comparison from first to fourth orders Legendre polynomials (linear, quadratic, cubic and quartic) for milk yield (MY), body condition score (BCS), hygiene score of udders (UddHS) and of upper legs (ULHS), hock assessment score (HAS), locomotion score (LS), subclinical mastitis (SubMast) and rectal temperature (RT, in °C) via Bayesian information criterion (BIC)

Trait	BIC			
	Linear	Quadratic	Cubic	Quartic
MY	5473.45	5480.23	5484.85	5491.40
BCS	528.69	535.13	539.96	546.60
UddHS	2564.07	2582.42	2581.88	2601.95
ULHS	2564.31	2576.74	2581.22	2599.97
HAS	1473.67	1489.67	1504.57	1523.68
LS	1877.99	1888.09	1897.80	1915.46
SubMast	1315.60	1333.02	1351.69	1365.38
RT	1568.27	1621.32	1636.46	1651.11