

## Base Change Summary - April 2011

Each year, the genetic base used to express genetic evaluations in Canada is updated in conjunction with the first official release. The definition of each genetic base used is therefore as follows:

Breed(s)	Traits	Genetic Base Definition Used
All	Production	Cows born during a 3-year period centred seven years ago (2003, 2004 or 2005) that have test day records in the Canadian Test Day Model genetic evaluation analysis.
Holstein	Conformation	Proven bulls born in the most recent complete 10-year period (1996 to 2005).
Coloured	Conformation	Proven bulls born in the most recent complete 15-year period (1991 to 2005). For Canadienne and Milking Shorthorn breeds, the base period starts with proven bulls born in 1984.

The table below indicates the amount of base change realized in 2011 compared to 2010 for each trait and breed.

### Base Changes for 2011 Versus 2010

	AY	BS	CN	GU	HO	JE	MS
LPI <sup>1</sup>	133	75	-8	14	141	114	24
Milk (kg)	50	62	7	80	82	41	25
Fat (kg)	2.9	2.4	-0.6	3.5	2.2	1.8	1.0
Protein (kg)	2.1	2.3	0.0	2.1	2.3	1.4	0.9
Conformation	.73	.79	.30	.22	.96	.78	.36
Mammary System	.69	.82	.40	.24	.89	.79	.31
Feet & Legs	.43	.00	.23	-.12	.66	.53	-.18
Dairy Strength	.61	.86	.07	.38	.69	.61	.29
Rump	.24	.29	-.10	.06	.39	.46	.33
Herd Life <sup>2</sup>	.28	.06	.00	-.13	.44	.42	-.16
Somatic Cell Score <sup>3</sup>	-.03	.04	.02	-.01	-.03	-.01	.00
Daughter Fertility <sup>2</sup>	-.01	-.07	-.27	-.11	-.30	.04	-.08

1 – Base change for LPI is based on a direct calculation as for each of the individual traits.

2 – Traits expressed on scale of Relative Breeding Values (RBV).

3 – For Somatic Cell Score only, negative base change values represent a desirable trend in genetic progress.