



Changes in USDA-DHIA genetic evaluations (November 2000)

AIPL RESEARCH REPORT

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Interbull reliabilities

Reliabilities for multi-trait across country evaluations (MACE) calculated by Interbull now use the effective number of daughters from each country instead of the raw number of daughters. This makes national and international reliabilities more similar, and differences between the two better reflect the added information from foreign daughters. See [Impact of Improved Weightings on Interbull Reliability Calculations for US bulls](#) document.

Multitrait Productive life

A revised correlation matrix was used in the productive life (PL) calculations. The new matrix generally reduced the influence of other traits on PL. Foreign bulls now receive credit for correlated yield and type traits instead of just parent average or breed average for PL. See [Multitrait Productive life](#) documentation.

Heritability increase for Jersey and Brown Swiss

The heritability for Jersey and Brown Swiss was increased to .35 from .30. The repeatability remained at .55, so the other variance components were adjusted giving

.35 Animal
.08 Herd by Sire
.12 Permanent Environment
.45 Residual

A higher heritability means an animal's own information receives more weight and other relatives receives less weight. Research at AIPL had found higher heritabilities for these two breeds. See [Journal of Dairy Science](#) article.

3-character error codes

The editing system was revised to provide 3-character error codes to simplify correction of records. This change was implemented for records submitted after October 10, 2000. See [Complete Error Documentation](#).

Improvements in ID checking

Checks were added to reduce the likelihood of invalid ID's entering the system. For ID with a CAN country code, only ID's validated by the Canadian Dairy Network are accepted. For American ID, only numbers in the ranges that have currently been allocated are accepted.