

Holstein improves trend for udder cleft with revised udder index

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Nordic Holstein farmers have decided to slightly change the weights of the linear udder type traits in the udder conformation index. Motivation for this change has been a wish to improve the genetic progress especially for udder cleft.

The changes were implemented in connection to the implementation of the revised NTM in November 2018. The previous and the current weights are given in Table 1. The major change is that the weight on udder cleft has been doubled. At the same time the very small weights (below 0.10) given earlier for some traits have now been set to zero.

Table 1. Weights on linear type traits in the combined udder conformation index

Linear type trait	Previous weight	Current weight
Fore udder attachment	0.17	0.20
Rear udder height	0.10	0.10
Rear udder width	0.00	0.00
Udder cleft	0.10	0.20
Udder depth	0.24	0.25
Teat length	0.05	0.00
Teat thickness	0.05	0.00
Teat placement, front	0.07	0.00
Teat placement, rear	-0.12	-0.15
Udder balance	-0.10	-0.10

Better udder attachment

The consequences of the changes in weights can be described by the correlations between breeding values for the combined udder conformation index and the linear udder traits given in Table 2. With the current udder conformation index, one can expect that the attachments of the udder, including udder cleft, will have a higher relative genetic progress. This should help to breed for cows with longlasting and functional udders, that can sustain the increased milk production.

Current udder conformation index is expected to have virtually no impact on size or position of the teats, nor on udder balance.

Correlation between the previous and the current udder conformation index is 0.92. This means that there will be some re-ranking of the bulls based on their udder conformation index.

Table 2. Correlations between the individual linear type traits and the combined udder conformation index. Based on 1128 daughter proven nordic HOL bulls born in 2007-2011.

Linear type trait	Previous udder conformation index	Current udder conformation index
Fore udder attachment	0.71	0.72
Rear udder height	0.52	0.57
Rear udder width	0.22	0.28
Udder cleft	0.01	0.23
Udder depth	0.89	0.80
Teat length	0.14	0.00
Teat thickness	0.06	-0.04
Teat placement, front	0.16	0.07
Teat placement, rear	-0.02	0.06
Udder balance	0.14	0.00