



## Comparison of margins for the different traits

The following table shows the margins per single trait resp. per health index and the resulting relative weight in RZ€.

EBV trait	€ per unit resp. per case	Average (and Sg)	€/Sg per lifetime	resultierende relative Gewichtung (%)			
Fat (kg)	2.56	360.7 (± 25.1)	<b>197.72</b>	20.7	41	Production traits	
Protein (kg)	4.09	305.8 (± 19.7)	<b>248.76</b>	26,0			
Lactose in F/P free milk (kg)*	-0.024	9058 (± 690)	<b>-51.13</b>	-5.3			
RZN/Herdlife (day)	1.00	1115 (± 259)	<b>258.69</b>	27.0	27	Herdlife	
Calving-to-first (day)	0.34	84.2 (± 9)	<b>6.05</b>	1.1	7	Daughter fertility	
First-to-last-insemination heifers (day)	1.64	31.3 (± 6.2)	<b>10.35</b>	0.6			
First-to-last-insemination cows (day)	3.67	51.5 (± 10.1)	<b>52.06</b>	5.4			
Stillbirth rate maternal	137.5	4.1 (± 3.1)	<b>12.81</b>	1.3	3	Calving traits	
Stillbirth rate direct	137.5	2.4 (± 2.4)	<b>9.87</b>	1.0			
Calving ease maternal	59.38	3.2 (± 1.7)	<b>4.03</b>	0.4			
Calving ease direct	59.38	3.5 (± 2.0)	<b>5.03</b>	0.5			
RZcalfit (young stock survival)	449.7	93.0 (± 4.4)	<b>54.61</b>	5.7	6	Young stock surv.	
RZudderfit	186.02	25.5 (± 12.0)	<b>61.39</b>	6.4	16	Health traits	
RZhoof (hoof health)	mortellaro	32.00	n.a. **	<b>30.13</b>			3.1
	sole ulcer	68.90					
	digital phlegmon	62.00					
	white line defect	32.00					
	laminitis	32.00					
	tylom	73.52					
RZrepro (Repro. disorders)	ovarian cycle disorders	28.00	n.a. **	<b>17.10</b>	1.8		
	metritis	97.71					
	retained placenta	99.59					
Rzmetabol (metabolic stability)	displaced abomasum	289.28	n.a. **	<b>39.86</b>	4.2		
	milk fever	139.71					
	ketosis	131.38					

\*) feed costs for non-paid lactose in delivered milk

\*\*) not available, because of several traits within the index and therefore no value per trait possible

## The Euro scale

Basis for RZ€ is – like for all EBV and indices – the current cow population, i.e. 4-6 years old cows. These base cows have in average a RZ€ of +/-0 Euro. Spreading of RZ€ is approximately 530 €.

RZ€ is calculated and published only for Holstein and Red Holsteins, because for the other breeds no health EBV are available so far. Therefore RZ€ for other breeds wouldn't be complete and comparable with Holstein.

For more details on background and calculation of RZ€ check the vit homepage [www.vit.de](http://www.vit.de) => news 'The new total merit index RZ€ - focus on economy of dairy production' (2020 July 9<sup>th</sup>).

## New relative weights in RZhealth

Within the development of the new RZ€ for the first-time detailed calculations on the economic importance of health traits were made. The results led to new relative weights within the index for total health, the RZhealth:

- RZudderfit 40 %
- RZhoof 20 % (before 30%)
- RZrepro 15 % (before 20%)
- RZmetabol 25 % (before 10%)

The relative weight for metabolic stability in RZhealth was increased significantly.