What is REI?

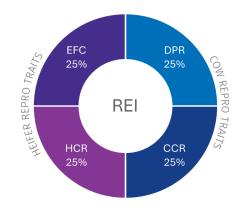
REI stands for Repro Efficiency Index. This index is a genetic selection tool developed by PEAK Genetics to support overall improved female fertility.

REI combines the most relevant female fertility traits together into one index. This index drives improved reproduction in both cows and heifers, while maintaining a more positive relationship with both production and longevity traits. With REI, dairies can focus on improved production while also improving repro efficiency across the full herd. This makes REI a truly revolutionary index!

What traits are included in REI?

- 25% Daughter Pregnancy Rate (DPR)
- 25% Cow Conception Rate (CCR)
- 25% Heifer Conception Rate (HCR)
- 25% Early First Calving (EFC)

This means that half of the weight within REI focuses on improved heifer fertility – through HCR and EFC, and half of the weight focuses on improved cow fertility – through DPR and CCR.



How is REI calculated?

REI is calculated and maintained by PEAK Genetics, using the four fertility traits measured and reported by CDCB. REI is not calculated by or associated with any official industry organizations. REI is shared with Alta for the express purpose of genetic selection for improved repro across the whole herd.

What makes REI different from Holstein USA Fertility Index?

Holstein USA recently released an updated version of their Fertility Index (FI), which is different from REI. Both The Repro Efficiency Index and Holstein USA's Fertility Index have similar goals in mind toward improved female fertility. The key difference is that REI puts equal weight on cow fertility and heifer fertility, while Fertility Index focuses 80% of the index weight on cow reproduction and only 20% on heifer reproduction. The comparison between these two indexes is shown here:

	Trait	Weight within Repro Efficiency Index	Weight within Fertility Index
Cow Repro —	Daughter Preg Rate	25%	40%
	Cow Conception Rate	25%	40%
Heifer Repro —	Heifer Conception Rate	25%	10%
	Early First Calving	25%	10%

How can you include REI within a genetic plan?

For farms that want to ensure female fertility in their next generation, REI should be considered as part of their customized genetic plan. Repro Efficiency Index is included in Alta Bull Search so you can view the REI values on Alta sires. You can also use the Advanced Search option in Alta Bull Search to build REI directly into a customized genetic plan – find it under the Health & Efficiency traits section.

We encourage dairies to work with their Alta advisor when building a new genetic plan or changing any selection criteria.