

# Designer fats that help improve energy balance, milk production and reproduction

## 6 Reasons why Ener G products are effective fat sources

- 1** Ener G products are **highly digestible** in the intestines.
- 2** Ener G products do not negatively impact rumen function unlike unprotected fats (vegetable oil), because they are **not broken down in the rumen**.
- 3** Ener G products have more than **twice the energy of barley or corn**.
- 4** Ener G products provide **extra energy to lactating cows**, which results in increased milk production.
- 5** Ener G products help **maintain the best possible body condition score (BCS)**.
- 6** Ener G products help **reproductive efficiency** through:
  - ***Enhanced progesterone productivity:*** Progesterone production and secretion is enhanced by fat supplementation which helps prepare the uterus for embryo implantation.
  - ***Better ovarian follicle development:*** Fat supplementation increases the size of the dominant follicle.
  - ***Higher conception rates:*** Including fat in the ration within the first 30 days postpartum results in dramatic improvements in conception/pregnancy rates.

*While adding extra grain or fat to feed may increase energy density, these additions may have adverse effects on rumen function and digestion. Ener G products are a dietary solution that combines high-energy availability while maintaining optimal rumen function.*





# is designed to increase energy levels specifically in transition and early lactation

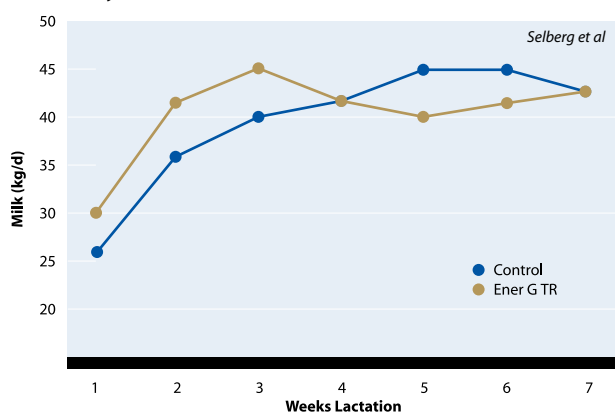
- Ener G TR improves energy balance in transition cows to help prevent metabolic problems associated with lack of available energy.
- Ener G TR frees up energy to be redirected to increase milk production and/or improve reproductive performance during early lactation.

## Research Results

### Effects on Milk Yield

Milk yield increased and peaked earlier (by week 3) in the TFA (basal diet + ~150 g/d trans-octadecenoic acid mix) group, compared to the control group (basal TMR diet).

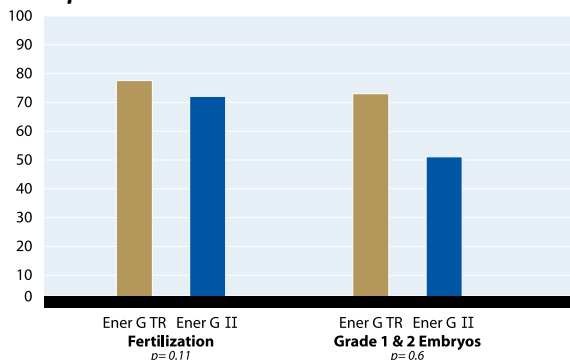
Early Lactation Milk Yield



### Effects on Reproduction

These results suggest that feeding EnerG TR improves fertilization rate and embryo quality in lactating dairy cows.

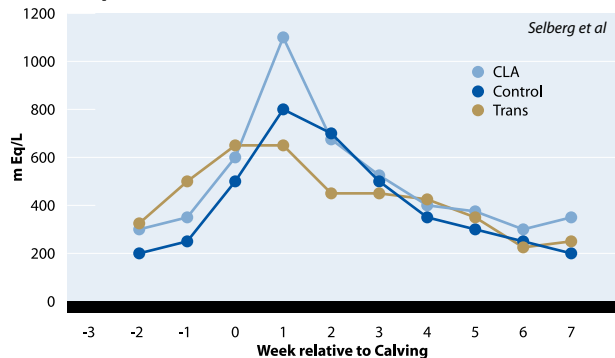
Reproductive Performance



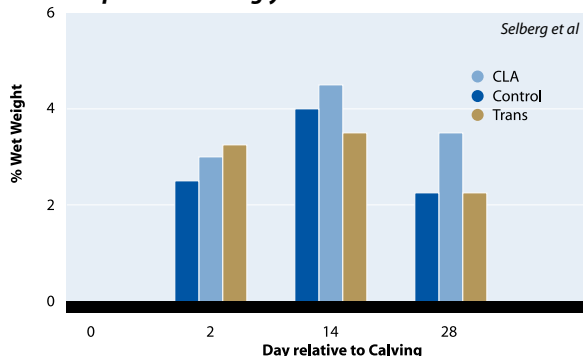
### Effects on Energy Balance

University research has shown that TFA's have a positive impact on energy metabolism by reducing plasma non-esterified fatty acids (NEFA) and fatty livers in post partum cows.

Graph 1 Plasma NEFA Concentrations



Graph 2 Liver Triglycerides



### Ener G TR is a small package with big impact

- highly effective source of dietary energy for transition cows to improve early lactation milk yield
- supports improved liver metabolism allowing cows to stay healthy in early lactation
- Feeding cows Ener G TR during the transition and early lactation will help aid reproductive performance

