

# Fatty Liver Syndrome

In late pregnancy and early lactation, energy demands for fetal growth and milk production may exceed energy intake. In response, [free fatty acids](#) (FFA) are mobilized from body fat depots. Although some of these FFA may be used directly by tissues as a source of energy, most are absorbed by the liver. The liver itself may either derive energy from FFA, or repackage them as [triglycerides](#) which it may store or transport to other tissues in the form of lipoproteins. In the lactating cow, the mammary gland uses triglycerides for milk fat synthesis.

Fatty liver develops when the rate of FFA absorption by the liver exceeds the rate at which triglycerides are exported. Although it was commonly believed that this would normally occur postpartum, the results of recent research suggest that fatty liver may routinely develop in pre-partum cows as a result of the increasing energy requirements of pregnancy combined with [reduced feed intake](#) in the last 7-10 days before calving.

for more information:

[Fresh Cow Problems: How to control them](#), *Hoard's Dairyman Books*  
[Close-Up Dry Period: Feeding Management for a Smooth Transition](#),  
*Advances in Dairy Technology*