



QUICK GUIDE TO FATTY ACIDS IN DAIRY FEED

SATURATED

16:0

PALMITIC

Supports milkfat more than milk yield
50% of Ca Salts

18:0

STEARIC

Unprotected 18:1-3 are converted to Stearic via rumen biohydrogenation
Too much = lower digestibility of **total** fatty acids

UNSATURATED

18:1

OLEIC

Enhances digestibility of **all** fatty acids via micelle formation for greater milk, body condition
35% of Ca Salts

18:2

LINOLEIC OMEGA-6

Found in corn, corn silage, distillers, Prequel
Inflammatory immune regulator
Too much = CLA milk fat inhibitors produced*

18:3

LINOLENIC ALA OMEGA-3

Found in alfalfa, fresh grass, flax
Anti-inflammatory immune regulator

20:5

22:6

EPA/DHA OMEGA-3

Found in fish meal, algae, Strata
Anti-inflammatory immune regulator
Significant milk and reproductive benefits

* 18:1 and 18:3 have also been shown to affect production of CLA milk fat inhibitors, however typically at much lower contributions vs. 18:2.

The Fatty Acid Forum sponsored by



FATTY ACID FLOW FOR A TYPICAL DAIRY DIET

SATURATED

16:0

FATTY ACID

PALMITIC

RUMEN INTAKE (g)

150

OUTFLOW TO SMALL INTESTINE (g)

→ 150

18:0

STEARIC

35

→ 620

UNSATURATED

18:1

OLEIC

205

→ 50

18:2

LINOLEIC
OMEGA-6

430

→ 50

18:3

LINOLENIC
OMEGA-3

45

→ 5

20:5
22:6

EPA/DHA
OMEGA-3

0

→ 0

Learn how to improve your balance at