



# What lipid analysis are available commercially for animal feed?

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# What lipid analysis are available commercially for animal feed?

## Feed Fat Analysis

- Total Lipid (ether extract)
  - Includes fatty acids
  - Non-lipid contaminants
- Acid-Ether Extract
  - Extruded and high Ca fats
  - Includes fatty acids and non-lipids
- Fatty acids
  - Best predictor of animal performance



What lipid analysis are available commercially for animal feed?

Compounds extracted in EE?

- Lipids

- Nonglycerol-based
  - waxes, alkanes
- Glycerol-based
  - Triglycerides
  - Phospholipid
  - Galactolipids

- Non-lipid

- Water
- Fat-soluble vitamins
- Pigments





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## EE vs Acid EE

	EE			Acid EE
	Lab 1	Lab 2	Lab 3	
Corn	3.1	2.7	4.0	5.8
Alfalfa	3.6	3.7	3.8	6.2
TMR	4.5	4.1	4.5	6.0
Ca Salt	1.2	2.4		85.1



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## Ether Extract vs. Fatty Acids

Forage	Ether Extract (% of DM)	Fatty Acid (% of DM)
Alfalfa	3.50	2.28
Corn grain	4.23	4.03
Corn Silage	3.19	2.21



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- Fatty acids





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