

# Penn State Study Composition

**Ron Gargasz**  
**Ron Gargasz Organic Farms**  
 129 Old Ash Rd  
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 724-530-7220

**1041% difference!**

**Gargasz Summer Sample:**  
 Breed: Limousine X Angus  
 Sex: Heifer  
 Slaughter Date: 06/06/06  
 Estimated Pasture DMI: 50%  
 Feeding Strategy: Pasture + Stored Feeds

**Gargasz Fall Sample:**  
 Breed: Limousine X Angus  
 Sex: Heifer (2)  
 Slaughter Date: 10/10/06 & 11/03/06  
 Estimated Pasture DMI: 40%  
 Feeding Strategy: Pasture + Stored Feeds

## Fatty Acid Composition: average of each feeding strategy and Ron Gargasz Samples

Feeding Strategy	Total # Samples	Omega-6		Omega-3		Omega-6:Omega-3		CLA	
		% g/g	Std Err	% g/g	Std Err	Ratio	Std Err	% g/g	Std Err
Mostly Grain-Fed	9	2.7 <sup>a</sup>	0.3	0.2 <sup>c</sup>	0.1	17.7 <sup>a</sup>	2.4	0.4 <sup>c</sup>	0.1
Grain + Forage	12	2.6 <sup>a</sup>	0.3	0.3 <sup>b</sup>	0.1	12.6 <sup>b</sup>	2.0	0.4 <sup>b</sup>	0.1
Pasture	21	2.0 <sup>a</sup>	0.2	0.7 <sup>a</sup>	0.1	3.4 <sup>c</sup>	1.5	0.8 <sup>a</sup>	0.1
Mostly Pasture + Stored Feeds	10	2.3 <sup>a</sup>	0.3	0.8 <sup>a</sup>	0.1	3.4 <sup>c</sup>	2.1	0.7 <sup>a</sup>	0.1
<i>Gargasz Summer Sample</i>		2.3		1.2		1.9		0.7	
<i>Gargasz Fall Sample</i>		2.4		1.4		1.7		0.8	

Omega-6 = (C8a:2, trans-9,12)+(C18:3,cis6,9,12)+(C18:3,cis-6,9,12)+(C20:2,cis-11,14)+(C20:3,cis-8,11,14)+(C20:4,cis-5,8,11,14)+(C22:2,cis-13,16).

Omega-3 = (C18:3,cis-9,12,15)+(C20:3,cis-11,14,17)+(C22:6,cis-4,7,10,13,16,19).

CLA = (C18:2,cis-9,trans-11)+(C18:2,trans-10,cis-12).

a, b, c indicate feeding strategies that differed significantly at p<0.05 for given fatty acid.