The Power of Calcium Salts of Long-Chain Fatty Acids
The ADM Advantage

U.S. production of Enertia is only the final step in ADM’s quality supply chain. ADM is globally involved in procurement and processing. Combined with ADM’s international expertise in the manufacture of calcium salts, ADM’s integrated supply chain virtually guarantees quality and consistency.
What is Enertia®

- A dry, rumen bypass fat
- Calcium salts of long-chain fatty acids
- Produced from palm oil distillate by the world’s largest processor of vegetable oils
Features and Benefits of Enertia®

- **Calcium salts of long-chain fatty acids**
  - A high-energy ingredient that is highly digestible in the small intestine, does not interfere with rumen function, and provides an optimum fatty acid profile.

- **Consistent quality**
  - Because of ADM’s integrated supply chain, consistent, high-quality bypass fat is assured.

- **Exceptional energy density**
  - The use of Enertia in lactation diets provides energy to support body condition, milk production, and reproductive efficiency.

- **Excellent handling properties**
  - Enertia s/f in granular form is flowable and mixes well with feed ingredients and is not affected by weather extremes or feed processing conditions. Enertia s/f is the preferred product for inclusion in a TMR.
  - Enertia p/f and Enertia r/f in pellet form is the preferred form for top-dress feeding situations. It readily flows through bins and auguring systems without the caking that may occur with some granular fats.
Calcium Salts of Long-Chain Fatty Acids Work!

- Lactation performance (40 Trial summary*)
  - Milk yield increased 3.1 to 3.9 lbs/cow
  - Milk fat percentage increased 0.05 units
  - Fat corrected milk increased 3.7 to 4.0 lbs/cow

- Enertia supports reproduction
  - Higher energy density supports better body condition
  - Superior fatty acid profile
    - Linoleic acid content (9.5% in s/f and p/f) directly effects hormonal signaling of the reproductive axis
  - In 20 trial summary* by researchers at Florida average improvement in conception or pregnancy rate was 17%
Specifications on **Enertia**

- **Ingredient Composition**
  Calcium salts of long-chain fatty acids

- **Typical Analysis**

<table>
<thead>
<tr>
<th></th>
<th>Crude fat, min</th>
<th>Calcium, min</th>
<th>Calcium, max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enertia s/f and p/f</td>
<td>84%</td>
<td>8.40%</td>
<td>10%</td>
</tr>
<tr>
<td>Enertia r/f</td>
<td>52%</td>
<td>3%</td>
<td>4%</td>
</tr>
</tbody>
</table>

- **Physical Characteristics**
  Appearance ......................... Tan
  Bulk density ...................... 31 lb/cu ft
  Packaging ......................... Bulk, 50 lb bags, 1 ton totes
## Comparative Competitive Specifications

<table>
<thead>
<tr>
<th>Product and Supplier</th>
<th>Enertia</th>
<th>Megalac</th>
<th>EnerGII</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ADM</td>
<td>Church &amp; Dwight</td>
<td>Virtus Nutrition</td>
</tr>
<tr>
<td>Fat (fatty acids), %</td>
<td>84.0</td>
<td>82.5</td>
<td>82.5</td>
</tr>
<tr>
<td>Fatty acid profile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palmitic, %</td>
<td>44</td>
<td>47.5</td>
<td>43-50</td>
</tr>
<tr>
<td>Oleic, %</td>
<td>40</td>
<td>36.3</td>
<td>33-44</td>
</tr>
<tr>
<td>Linoleic, %</td>
<td>9.5</td>
<td>9.0</td>
<td>7-13</td>
</tr>
<tr>
<td>Stearic, %</td>
<td>5</td>
<td>4.3</td>
<td>1-5</td>
</tr>
<tr>
<td>Myristic</td>
<td>1.5</td>
<td>x.x</td>
<td>0.4</td>
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</tbody>
</table>
## 2001 Dairy NRC Suggested Energy Values

### Table 1  2001 Dairy NRC Suggested Energy Values for Fat Sources for Dairy Cows

<table>
<thead>
<tr>
<th>Fat Source</th>
<th>Fat, %</th>
<th>Digestibility, %</th>
<th>Net energy, Mcal/lb</th>
<th>Net energy, Mcal/lb of fat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium salts of fatty acids (bypass)</td>
<td>84</td>
<td>86</td>
<td>2.30</td>
<td>2.67</td>
</tr>
<tr>
<td>Hydrolyzed tallow fatty acids (bypass)</td>
<td>98</td>
<td>79</td>
<td>2.46</td>
<td>2.51</td>
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<tr>
<td>Partially hydrogenated tallow (bypass)</td>
<td>100</td>
<td>43</td>
<td>1.30</td>
<td>1.30</td>
</tr>
<tr>
<td>Vegetable oil (unprotected)</td>
<td>100</td>
<td>86</td>
<td>2.57</td>
<td>2.57</td>
</tr>
<tr>
<td>Tallow (unprotected)</td>
<td>100</td>
<td>68</td>
<td>2.06</td>
<td>2.06</td>
</tr>
</tbody>
</table>
• Daily feeding rate on s/f and p/f ranges from 0.25 to 1.0 lb per cow
  - Feed unprotected fats up to about 4 to 5% of ration dry matter
  - Use Enertia for ration fat levels above 5% of dry matter
  - Feed at least 1.0 lb of Enertia per cow daily to realize potential effects on reproductive performance

• Feed Enertia s/f in a diluted form and introduce gradually to cows that are not familiar with the product

• Recommended daily feeding rate for Enertia r/f is 1.0 lb per cow
While in name ADM Alliance Nutrition would appear to be a newcomer to the livestock feed industry, it is composed of what were once several independent livestock feed companies. Most notable of those companies were Animal Health & Nutrition®, MoorMan's®, Consolidated Nutrition®, Supersweet®, Master Mix®, and Tindle Feeds®. The roots of some of these companies trace back to the late 1800's with a focus on improving livestock feed to help enrich America's food supply. These companies, under the ADM umbrella, were unified to form one ADM operating feed company, ADM Alliance Nutrition.

There are many product possibilities with Enertia

Please contact us:

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