Energize your dairy ration by choosing the right corn hybrid

Improve the profit potential of your dairy operation – it’s as simple as planting a hybrid that provides more potential value in the field and in your feed.

Unique Enogen® Feed hybrids do just that. Proven genetics and strong agronomic characteristics bring you solid performance in the field. And in your ration, a step-change in starch and sugar availability provides more available energy to your dairy cattle.

Benefits in the field

- Excellent yield potential across a variety of soil types and conditions
- Proven genetics and traits
- No additional agronomic management challenges1, unlike some silage-specific hybrids
- Performs equal to or better than other high-performing silage hybrids2

Unlock the energy potential of your ration – simply incorporate Enogen Feed hybrids in your operation.

It’s as easy as replacing the silage you currently grow and feed.

Higher levels of sugar and starch availability provide more available energy while improved fiber digestibility helps provide improved intake.

1 Growers must comply with specific yet simple stewardship requirements.
2 Syngenta production data from more than 1 million acres, 2012-2016.
Fiber digestibility is correlated with dry matter intake – more digestible fiber is less filling because it is retained in the rumen for a shorter period of time. Cows then have the ability to consume more forage, which may positively impact production.

Neutral detergent fiber digestibility (NDFD) is a key measure of expected silage fiber digestibility taken at various time intervals, and is often used to compare feeding value of forages. High NDFD corn silage allows for greater dry matter intake potential and allows you to feed more forage.

Research Data
Research on Enogen Feed as silage showed:

Enogen Feed silage offers the potential for higher NDFD (fiber digestibility).

NDFD: 8.2% increase (30 hour), 12.6% increase (120 hour), and 6.2% increase (240 hour)

Fiber digestion as percent of NDF

<table>
<thead>
<tr>
<th>Hours</th>
<th>Enogen Feed silage</th>
<th>Other corn silage</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>50</td>
<td>55</td>
</tr>
<tr>
<td>120</td>
<td>65</td>
<td>60</td>
</tr>
<tr>
<td>240</td>
<td>75</td>
<td>70</td>
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</tbody>
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Syngenta contract research, 2016
Enogen Feed silage may provide lower levels of undigestible fiber.

*Undigestible fiber: 18.5% decrease (120 hour) and 17.4% decrease (240 hour)*

Syngenta contract research, 2016

**uNDF** is the amount of undigestible fiber measured at a defined point in time; in this study, at 120 and 240 hours post-consumption. Lower levels of uNDF equate to higher levels of potentially digestible NDF.

Enogen Feed silage may provide an increase in TTNDFD.

*TTNDFD: 6.4% increase*

Syngenta contract research, 2016

**Total tract neutral detergent fiber digestibility (TTNDFD)** combines factors from the feed and the cow to measure energy from fiber. TTNDFD offers a holistic view of fiber digestibility by assessing several time points and the rate of fiber digestion, the rate of fiber passage and indigestible fiber. A higher level of TTNDFD indicates better digestion and dry matter intake.

More available energy and improved fiber digestibility means greater profit potential for your dairy operation.
Enogen Feed silage may enable greater starch availability.

- Small particle starch: 199.5% increase
- Starch digestion: 14% increase

Enogen Feed silage may provide higher levels of available sugar.

- Total sugars: 201% increase

Starch and sugar are important energy contributors, and a high-quality forage that maximizes the use of available starch and sugar will help maximize energy in your ration.

Two determining factors in starch availability are particle size and digestibility. The chart above shows a comparable level of starch between Enogen Feed silage and other corn silage, but with a higher level of small particle starch, which is more rapidly available in the rumen, providing more immediately available energy.

Additionally, research shows a higher level of in situ starch digestion after 7 hours (isSD7) which indicates better digestibility of available starch with Enogen Feed silage. The in situ method measures the disappearance of feeds incubated in a porous bag within the rumen.

Syngenta contract research, 2016

- **Percent of Dry Matter**
- **Percent of Starch**
- Wet chemistry data
- isSD7 = in situ starch digestion after 7 hours.

Sugar is another source of rapidly available energy. Most forages, especially silage, have relatively low natural concentrations of sugar, but Enogen Feed silage offers a significantly higher level of sugar. Research indicates that feeding additional sugar, between 2% and 5% of the ration dry matter (DM), may result in improved feed efficiency and performance.5

Contact your Syngenta representative to learn more about how Enogen Feed hybrids can help you maximize your dairy operation. As a high-value output product, Enogen Feed corn must be grown as an identity preserved crop and fed on-farm only. Growers must adhere to all applicable stewardship requirements, and sign and comply with an Enogen contract with Syngenta.