



PURINA® NUTRITEK™ TECHNOLOGY

Combines the benefits of Original XPC™ and a NEW proprietary fermentation technology that delivers a unique product with elevated levels of antioxidants, polyphenols and beneficial metabolites to deliver **GREATER PEAK MILK FOR PRE-FRESH AND LACTATING DAIRY COWS.**

The transition period, 21 days before through 21 days after calving, is a challenging time for the dairy cow. Changes in pens, hormones, metabolism, rations and weather add stress, increasing a cow's energy requirements. At the same time, her feed intake may be compromised-particularly, in the five days before freshening.

If a cow is not getting sufficient energy, she may mobilize body reserves to compensate, which can further depress feed intake. Even if there are no obvious metabolic issues, cow health and performance are put to a test during a critical time.

EXCLUSIVELY FROM PURINA ANIMAL NUTRITION

Purina® NutriTek™ Technology, available exclusively from Purina Animal Nutrition, can provide the critical nutritional support to help cows get through these challenges.

Diamond V Original XPC™ is a trusted part of dairy rations that enhances year-round lactation performance, proven by extensive peer-reviewed research. Purina® NutriTek™ Technology couples the power of the Original XPC™ with a novel component featuring elevated levels of antioxidants, polyphenols and beneficial metabolites, designed to support cow health and lactation performance.



To learn more about NutriTek™ Technology for your pre-fresh and lactating dairy cows, contact your local Purina Animal Nutrition representative or visit www.dairyfeedtechnology.com.



DID YOU KNOW?

Polyphenols have some of the same molecular characteristics as Vitamin E and can act as additional antioxidants, helping to detoxify free-radicals. The immune system produces free-radicals to help destroy pathogens during a health challenge. Usually the body is capable of “cleaning-up” after itself, but under challenging situations like those prior to and after calving, the body may need help neutralizing these free radicals once their job is done. Antioxidants can help this clean-up and protect the cow.

KEY BIOACTIVES IN PURINA® NUTRITEK™ TECHNOLOGY:

Antioxidants

Immune modulation: remove free radicals that have the potential to cause damage to cells and tissues.

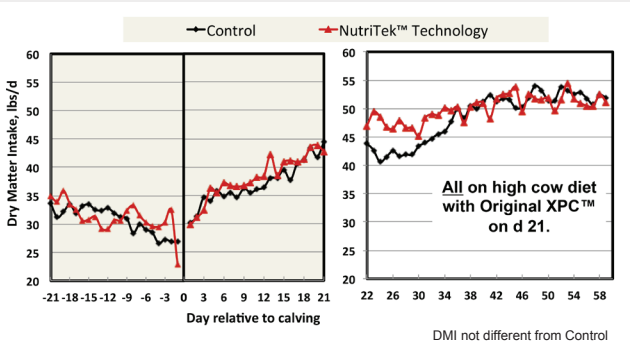
Polyphenols

Immune modulation: remove free radicals that have the potential to cause damage to cells and tissues.



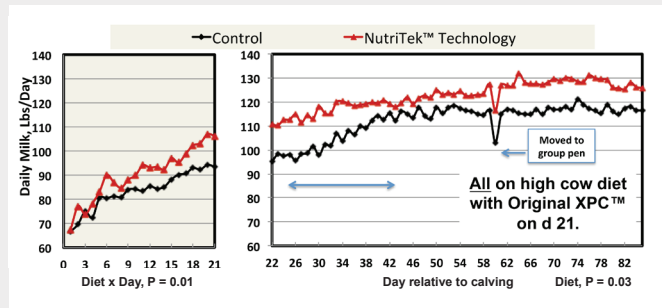
RESEARCH BEHIND NUTRITEK™ TECHNOLOGY

In a research trial, cows' performance on NutriTek™ Technology was compared to those fed a control diet. Both groups received the same base diet in the 21-day pre-fresh and 21 day post-fresh period, with NutriTek™ Technology added as the treatment.



Dry matter intake (DMI) and milk production were numerically but not significantly higher for the

NutriTek™ Technology group through 21 days in milk (+1.0 lbs DMI and +7.0 lbs milk). At 22 days in milk, all cows were switched to the herd ration with Original XPC™.



Dairy Feed Trial DC546, Purina Animal Nutrition Center, 2014

The NutriTek™ Technology cows significantly outperformed the control group (+7.6 lbs Energy-Corrected Milk (ECM)/day). Cows got a better start with NutriTek™ Technology and went on to peak higher than the control cows.

In another research trial, performance of cows fed NutriTek™ Technology was compared to those fed Original XPC™. Treatment diets were fed from 21 days pre-fresh to 70 days in milk.

The NutriTek™ Technology group showed higher DMI (+2.9 lbs) and milk production (+4.4 lbs/cow/day) than the Original XPC™ group. Both performance advantages were statistically significant, with a very high (99% and 98%) probability that the positive results were due to the technology fed and not due to chance.

Day 1 to 70 Multiparous Cows		Original XPC™	NutriTek™ Technology	Diet P-value
DM Intake	lbs/d	45.6	48.5	0.01
DMI, % of BW	%	3.21	3.36	0.13
Daily Milk	lbs/d	102.4	106.8	0.02
Milk Protein	%	2.86	2.91	ns
Milk Fat	%	4.07	3.93	0.08
ECM	lbs/d	109.3	112.9	ns
FCM	lbs/d	110.5	113.3	ns

Dairy Feed Trial DC560, Purina Animal Nutrition Center, 2014

CALCULATE THE ADVANTAGE FOR YOUR HERD WITH PURINA® NUTRITEK™ TECHNOLOGY

PROFIT POTENTIAL CALCULATOR

IMPROVED PEAK MILK LB. _____

X 200 = LBS MILK PER LACTATION _____

MILK PRICE PER LB. _____

VALUE OF MILK (a) \$ _____

CHANGE IN DMI/DAY LB _____

X FEED COST /LB _____

= CHANGE IN FEED COST /DAY _____

X 305 = CHANGE IN FEED COST PER LACTATION (b) _____

NET COST OF NUTRITEK™ TECHNOLOGY/COW/ DAY _____

DAYS FED _____

NET COST OF NUTRITEK™ TECHNOLOGY /COW (c) _____

NET PROFIT = (p= a-b-c) _____

ROI = (p/c) _____

This ROI Calculator is provided as resource to estimate potential return on investment. Because there are countless factors that may impact a producer's operation, return on investment and financial performance cannot be guaranteed by Purina Animal Nutrition LLC. The estimates generated by the ROI Calculator are provided solely for illustration purposes. Producers should conduct their own independent research and investigation regarding feed choices. Purina Animal Nutrition LLC, its affiliates, subsidiaries, agents and employees disclaim any liability relating to or arising out of any estimates generated by the ROI Calculator.

NutriTek™ is a registered trademark of Diamond V. Results not typical due to variables present in all farm operations. Because of factors outside of Purina Animal Nutrition LLC's control, individual results to be obtained, including but not limited to: financial performance, animal condition, health or performance cannot be predicted or guaranteed by Purina Animal Nutrition LLC.

