

# FECAL STARCH VS. STARCH AVAILABILITY - WHICH IS MORE IMPORTANT?

Is fecal starch or starch availability a more important measurement in relationship to feedlot profitability? We have recently heard this question from you, our customers, so we thought we would try to give you our thoughts on the matter. Our experience is that fecal starch is a much more reliable measure (when done correctly) of what is actually happening at a feedlot; whereas starch availability is a less accurate measurement, since it attempts to predict what is *going* to happen from one end of the animal to the other. Over the past year at SarTec we have helped customers measure their fecal starch using a protocol that we developed with the help of Professor Richard Zinn at UC Davis in California. To date we have made measurements at over 40 feed yards and taken over 4,000 samples. Figure 1 is a summary of our findings. As you can see from the plot, the average percent fecal starch is much lower in the case of steam flaked grain than for dry rolled grain. However, as shown in the table below Figure 1, within these 4 different types of grain processing methods the range of fecal

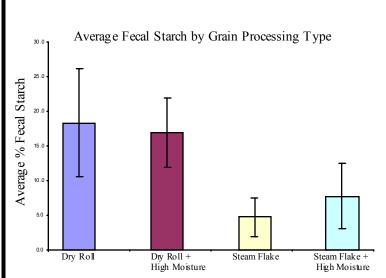


Figure 1: Summary of over 4,000 fecal starch measurements at more than 40 different feed yards in the U.S. Error bars are +/- 1 standard deviation.

Grain Processing	Av e % Fecal Starch	Low % Fecal Starch	High % Fecal Starch	Range % Fecal Starch
Dry Roll	18.3	7.2	27.8	20.6
Dry Roll + High Moisture	16.8	11.4	24.1	12.7
Flake	4.7	1.6	12.6	11.0
Flake + High Moisture	7.8	4.3	14.0	9.7

starch numbers is very wide (as high as 20% for dry roll). Such a wide range in results means that it is very important to try to know exactly where your operation falls in this spectrum. We at

SarTec can help. Our team can help you measure where you are today and help you get to where you want to be. Call us today at 1-800-472-7832 for more information.

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# Special Points of Interest:

- Fecal starch is better than starch availability
- The SarTec RSF Program - learn how it works
- SarFord's kitchen
- SarTec celebrates 20 years of business!
- Employee feature: Dr. Peter G. Greuel

## SARTEC'S RSF PROGRAM-HOW CAN IT HELP YOUR FEEDYARD?

SarTec's RSF program is designed to take advantage of the yucca-formulated dry and liquid products that SarTec manufactures to add more money to a feedyard's bottom line. Here is how it works:

- First cattle are drenched with a 50cc dose of SarStart® Plus when they arrive at the yard. This gets cattle off on the right foot with SarTec's Yucca based vitamin and pro-biotic drench for cattle. Our customers tell us that this part of the program helps get the cattle up on feed fast!
- Next, apply 1 gram per head per day of SarStart® DSC, for the first 28 days on feed, using a microingredient machine. Research at Texas Tech University has shown an increase in gain and feed efficiency during the first 28 days on feed with this level of SarStart® DSC.

 Add SarStart® DSC at a rate of 0.5 gram per head per day, or SarTemp® yucca flavored grain conditioner at 5.5 fluid ounces per ton of processed grain, for the remainder of the feeding period. That is all there is to it.

We are excited for you to try our new RSF Program. This simple 3-step program is designed to maximize the effects of the SarTec yuccaformulated products to maximize the feeding benefits that we have seen in numerous University and commercial feeding trials. Copies of all of the feeding trials on SarTec products are available to you and your nutritionist (see website). Just give us a call today and we can send you all the information you need to make a good decision based on well documented feeding trials.



Help your cattle get a fast start for a strong finish with SarTec's RSF program!

### SARFORD'S KITCHEN

This edition's winner is Denise McNeff from Anoka, MN. She calls her recipe "Tenderloin with Porcini Mushrooms."

Cook Time: 25 minutes

#### Ingredients:

- 3 oz. porcini mushrooms rehydrated in water
- Four 8 oz. tenderloin
- Salt and Pepper

- 8 tbsp. butter
- 1/2 med. white onion thinly sliced
- 1/4 cup white wine
- 1 cup marsala
- 1/4 cup lemon juice
- A pinch of basil

#### Preparation:

Rehydrate porcini mushrooms with warm water until soft. Drain all but 2 Tbsp (save for later). In sauté pan melt 2 Tbsp butter and sauté onion for 3 minutes.

Turn heat to med/high and add white wine and marsala. Bring to simmer and then add lemon juice and porcini water. Reduce heat for 5 minutes. Add butter & porcini mushrooms to sauce. Allow to thicken for 15 minutes. Add a pinch of basil and pour sauce over cooked tenderloins, which have been grilled to desired taste.

You'll be pleased with the results! Please send us your recipes and let us know if you enjoyed this one.

### SARTEC CELEBRATES ITS 20TH YEAR IN BUSINESS!

2003 marks SarTec's 20th year of being in business and everyone at SarTec is celebrating this accomplishment! Larry McNeff, SarTec's founder, says, "SarTec has been growing steadily over its 20 year history due to the excellent people that make up the company. Today we have over 30 employees and distributors, which means we are small enough to give the best service in the industry, but large enough to meet our customers' goals." SarTec opened its doors in 1983 in Anoka, MN with a mission to provide high quality yucca-based products to the cattle industry. SarTec began as a "one-



product" company with its SarTemp® grain conditioner. Today, SarTec's product line has developed into a suite of yucca-based liquid and dry products that can be incorporated in the ration. Larry's wife and son, Dr. Marie McNeff and Dr. Clayton McNeff, respectively are part of the SarTec team too, which is dedicated to providing its customers with the highest standard of customer service as well as access to the latest that both technology and science have to offer the industry. As we look back over the past 20 years, we take pride in how SarTec started and how it has grown. We will continue to work hard to earn your valued trust over our next 20 years.

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### **SARTEC® CORPORATION**

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Specializing in Saponin Technologies





**SarTec**® is a family owned and operated corporation located in Anoka, MN. Established in 1983, our mission has been to provide high quality, natural products and service to the agricultural industry. From our equipment to our products, we have a number of ways to help you best reach your goals. Individually we can make a difference; together we can perform miracles.



# SARTEC EMPLOYEE DR. PETER GREUEL

Dr. Cool Pete, as we call him at the office, joined SarTec Corporation in early 1997 as the General Manager of Operations. He was born in Fairbanks, Alaska and spent a few years in Wisconsin before moving to Minnesota. Pete comes from a medium sized family and has 4 siblings. While in Alaska, Pete's father was the Speaker of the State House of Representatives in the early 1960s. Pete has many degrees including a B.B.A. and a B.S. from the University of Wisconsin, Oshkosh, as well as a Ph.D. in materials chemistry from the University of Minnesota. At the University he studied the mechanisms of growing thin diamond films. His interests include fishing, basketball, football, volley-

ball and he is a self-proclaimed Miami Dolphin fanatic. While not running in a marathon, Pete spends his days overseeing all the general operations of SarTec as well as conducting cutting edge research on new SarTec products. To date his work has resulted in one U.S. patent with two more in the works. His latest project is focused on the extension of shelf-life of wet distillers grain through the addition of feed-grade micro-additives. Pete is currently single, but we believe that this state will not last long. His girlfriend, Jocelyn, also has a Ph.D. in pharmacology.

Picture: Pete showing off the huge silver salmon he caught in Ketchikan, Alaska, 2002.





It's another newsletter. I hope you enjoy reading it. - SarGus

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Don't forget to take a look at our website at www.sartec.com It's full of information and of course I am there too! - SarFord