



# Meat Messenger

North Dakota State Meat and Poultry Inspection Program

2018 Quarter 1

## What's in the Flop? Pork Fat Quality and Feeding DDGS

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### Overview

In recent years, feeding dried distillers grains with solubles (DDGS) to pigs has enabled pork producers to save money. DDGS serves as a partial replacement for other more expensive ingredients such as corn, soybean meal, and inorganic phosphorus and is often valued at 80 to 90% the price of corn.

### Effects of feeding DDGS and Pork Fat Quality

Body fat in the pig mimics the fat composition in the diet. When high levels of DDGS are included in grower-finisher diets, backfat and belly firmness is reduced. Belly firmness is typically measured by draping a belly, skin-side down, on a stainless-steel bar, and the distance between ends is recorded. The shorter the distance, the less firm the belly

(Figure 1). Conversely, a longer distance indicates a more firm belly (Figure 2). When increasing levels of DDGS are included in the diet, pork fat iodine value (IV) is increased. Iodine Value is a measure of the proportion of unsaturated fatty acids in pork fat. A high IV value indicates high levels of unsaturated fatty acids and is soft compared to low IV values that indicate a firmer fat.

### What causes soft pork fat?

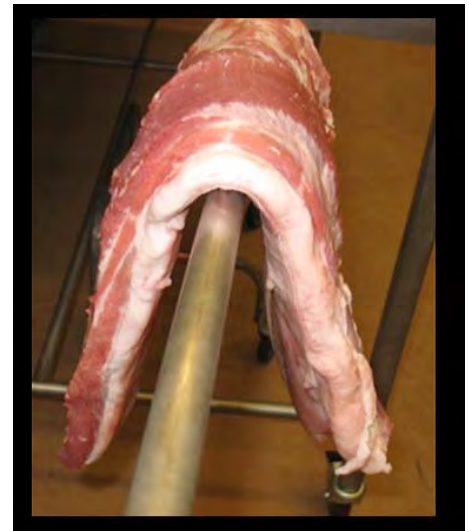
The main cause of softer pork fat when feeding DDGS is its high (10%) corn oil content, and corn oil contains approximately 60% is linoleic acid. This fatty acid is unsaturated. Unsaturated fatty acids have a lower melting point, which means they are softer compared to saturated fatty acids.

### Why is soft pork fat a concern?

Soft pork fat may have a negative impact on carcass handling and fabrication, processing yields, product attractiveness, and acceptability in some export



*Belly from a pig fed corn-soy diet*



*Belly from a pig fed 30% DDGS*

markets. Soft pork fat may also cause challenges in bacon slicing

*(continued on page 3)*

### What would you like to read in the next issue?

The Meat Messenger is your newsletter. If you like the content, please feel free to share this issue with your employees, your livestock producers and customers. We welcome any questions, comments, or suggestions for future topics. Please contact **Nathan Kroh** at [nkroh@nd.gov](mailto:nkroh@nd.gov) or 701-328-4767 or **Julie Nilges** at [jnilges@nd.gov](mailto:jnilges@nd.gov) or 701-204-3248.

## Meat Messenger

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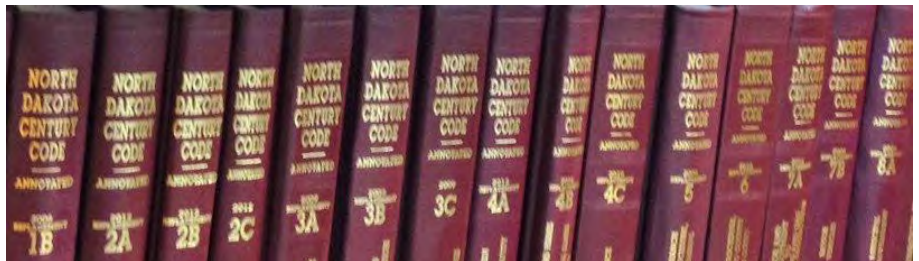
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## Regulation Reminder

### Verification Instructions Related to Specified Risk Materials in Cattle of All Ages (FSIS SRM's Directive 6400.4 Rev. 1)

**NOTE:** "Clean and sanitize" (9 CFR 310.22(f)(1)(ii)) refers to the sanitizing of food contact surfaces (e.g., splitting saws, knives) used to cut through Specified Risk Materials (SRMs) from cattle 30 months and older before using on cattle less than 30 months of age with 180°F water or chemical equivalent. This requirement applies without the presence of visibly intact or identifiable SRM contamination.

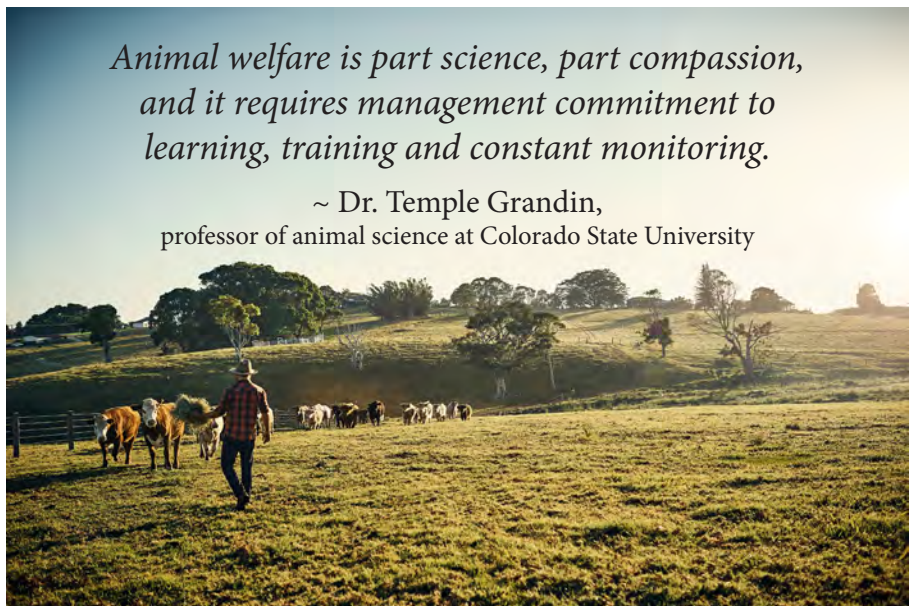
During slaughter or processing when equipment is used to cut through SRMs of cattle 30 months and older, Inspection Plant Personnel (IPP) are to verify that the establishment:

1. Uses routine sanitary procedures whenever equipment is contaminated with visibly intact or identifiable SRM material to prevent adulteration of edible product;
2. Cleans and sanitizes all equipment used to cut through SRMs from cattle 30 months and older before using on cattle less than 30 months of age per 9 CFR 310.22(f); or
3. Handles all cattle as 30 months and older.

United States Department of Agriculture Food Safety and Inspection Service. <https://www.fsis.usda.gov/wps/portal/fsis/home>.

*Animal welfare is part science, part compassion,  
and it requires management commitment to  
learning, training and constant monitoring.*

~ Dr. Temple Grandin,  
professor of animal science at Colorado State University



# What's in the Flop? (continued)

*(continued from page 1)*

and processing and it is resulting in some pork packer/processors setting limits for accepting market hogs from producers based on carcass IV. However, the current suggested IV standard of 70 for back fat is being questioned and is not universally accepted across the U.S. pork industry.

## How can we prevent soft pork fat?

A producer's ability to meet pork fat quality standards depends on the level and length of time DDGS is fed. University of Minnesota research has shown that feeding grower-finisher diets containing 30% DDGS and withdrawing it 3 weeks prior to harvest will achieve acceptable pork fat quality. Other strategies include working with your nutritionist to formulate diets on an Iodine Value Product basis or adding conjugated linoleic acid (CLA) to the diet.

Pomerence, J. and Shurson, J. "What's in the Flop? Pork Fat Quality and Feeding DDGS." *University of Minnesota Extension*. <http://www.extension.umn.edu/agriculture/swine/>

## Timing for Record Completion, Sanitation SOP

Establishments may not consider they have a built in 'insurance policy'. Sanitation Standard Operating Procedures (SSOP) records are a way of saying we inspected our facilities and equipment before and during operations. Cleaning is and can be continuous during a shift, so when is the completion of this daily record due?

If you're asking the question "we process Monday and Tuesday, when should Sanitation SSOP records for Monday operations be available for inspector to review"?

9 CFR 416.16 requires official establishments to maintain daily records. FSIS clarified that establishments have until the beginning of the same shift the next operating day to have the records available. The Sanitation SOP is for the entire establishment. Therefore Monday's records should be available for FSIS review at the beginning of the processing shift on Tuesday.

*United States Department of Agriculture Food Safety and Inspection Service*. <https://www.fsis.usda.gov/wps/portal/fsis/home>.

## Meat Inspection Information Available Online

The State Meat Inspection Program was enacted by the 1999 Legislature to increase the opportunities for meat processors and livestock producers in the state of North Dakota. Our website, [www.nd.gov/ndda](http://www.nd.gov/ndda), has helpful information to answer all your questions regarding:

- Developing labels for official state meat inspection
- Donating meat
- Facility requirements
- Frequently asked questions about official meat inspection
- Guidelines for meat processing establishments processing venison
- Inspection requirements for meat and poultry businesses
- Official state meat inspection
- Guidelines for operating a business
- And more!



# Identification Requirements for Animal Disease Traceability



The Animal Disease Traceability Rule (ADT) went into effect March 11, 2013. The rule is available along with a Question & Answer Factsheet at the following link: [https://www.aphis.usda.gov/traceability/downloads/rule\\_movement\\_general.pdf](https://www.aphis.usda.gov/traceability/downloads/rule_movement_general.pdf).

Identification requirements to move cattle from North Dakota to another state may have changed. Please check with the state of destination for current identification requirements.

North Dakota's importation requirements should meet most of the identification requirements within the ADT rule. North Dakota's importation requirements can be found at <https://www.nd.gov/ndda/animal-health-division/animal-movement-and-importation-requirements>. The only change for cattle being imported to North Dakota is that all cattle for exhibition, regardless of age or sex, must now be officially identified.

Currently, all licensed auction markets are considered approved tagging sites.

Board updates or changes in North Dakota's importation requirements will be posted to our website at <https://www.nd.gov/ndda/animal-health-division/animal-disease-traceability>.

***Please call the State Veterinarian of the state of destination to determine when an OSS is requested to accompany a shipment. The Owner-Shipper Statement (OSS) form may be found here: <https://www.nd.gov/ndda/sites/default/files/legacy/resource/SFN60375OSS.pdf>.***

North Dakota's Voluntary Location Registration program started in 2005 as a cooperative effort between the North Dakota State Board of Animal Health and the North Dakota Stockmen's Association (NDSA). The 2005 brand renewal process by the NDSA combined with individual mailings from the Board led to the voluntary registration of approximately 8,000 locations within the state of North Dakota. The Premises Registration program has transitioned to the Location Identification program. Premises Identification Numbers (PINs) and Location Identification numbers (LIDs) are confidential at the state level and are used by the state and federal animal health officials for official disease testing and investigation purposes only. A producer can choose to use PINs and LIDs for their own purposes, such as livestock movement or age and source verification programs.

A producer's location can be voluntarily registered in the state by filling out the form below. The North Dakota State Board of Animal Health will continue to register new locations and update existing location information on an as-needed basis. During disease investigations or required disease testing, locations will be registered by the state.

"Animal Disease Traceability." *North Dakota Department of Agriculture, 1 Mar. 2018, <https://www.nd.gov/ndda/animal-health-division/animal-disease-traceability>*

# Classified Ads

We are always looking for industry related items to advertise in the Meat Messenger. We post sale and want ads FREE. Contact Julie Nilges (701-204-3248) at [jnilges@nd.gov](mailto:jnilges@nd.gov) or Nathan Kroh (701-328-4767) at [nkroh@nd.gov](mailto:nkroh@nd.gov) with product description and contact information.

**A Golden Opportunity Awaits. For Sale: The Butcher Block in Oakes, N.D.**

A thriving business that does custom and state inspected slaughter and processing. A large retail business, with good sales volume. Willing to train the right person or sell outright. Call Ron at 701-742-2713.

**True Brand cooler:** Cooler has two sliding doors and was manufactured in 2001 - \$1,000;

**New one-quart plastic containers with lids:** - \$20 per lot of 50.

Please contact Calvin or Alex for more information at 701-743-4451. Located in Parshall.

**Hobart HCM-450 Vertical Cutter Mixer:** This 45 quart chopper mixer is in excellent shape and like new. Comes with all the attachments and operating manuals. Model HCM-450, Serial Number 31-005-158; Volt 230/460. Asking \$3850. Please contact the Hazen Public School District for more information at 701-748-2345.

**Hope Lockers:** Looking for a plant manager with potential to sell. Custom-exempt slaughter, processing and retail processing. Call Neal Ihry at 701-840-0334 with inquires or to schedule a visit.

**Wanted - Carcass Rail:** 50 ft of overhead carcass rail for small animal slaughter facility. Call Fred at 701-429-8066 if you have rail for sale.

**Wanted - Next-to-New Band Saw:** Please call Bruce at 701-254-4232, if you have a nice condition band saw to offer for sale.

## FSIS Recalls & Alerts Count Oct - Dec 2017

Presence of undeclared allergens		3
Presence of foreign materials (hard silica, glass fragments, aluminum, metal shavings, plastic)		4
Products were not presented at the U.S. point-of-entry for inspection		1
Products may be contaminated with specified risk materials (SRMs)		1
Total Recalls in 4th Quarter 2017		9 recalls
<b>Class 1 recalls - 6</b> Reasonable probability that eating the food will cause health problems or death	<b>Class 2 recalls - 3</b> Potential health hazard situation in which there is a remote probability of adverse health consequences from eating the food	<b>Class 3 recalls - 0</b> Situation in which eating the food will not cause adverse health consequences
More than 483,816 lbs. of meat and poultry implicated in recalls		

Further information on all current recalls and alerts can be found at: <http://www.fsis.usda.gov/wps/portal/fsis/topics/recalls-and-public-health-alerts>

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