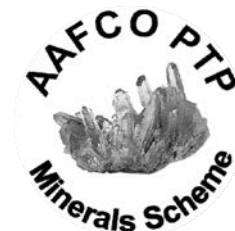
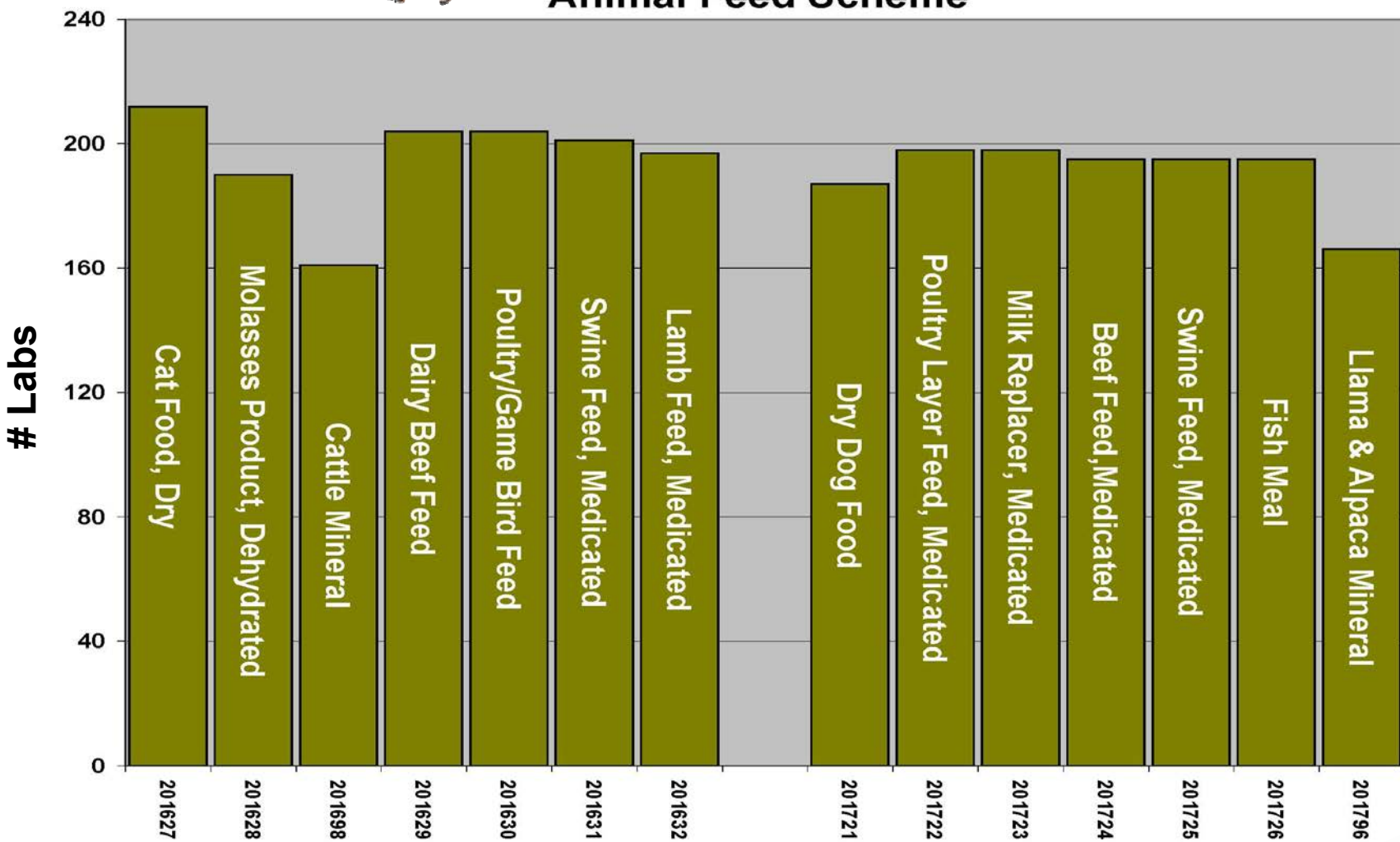


# AAFCO Proficiency Testing Program: Participation







## Animal Feed Scheme




# Animal Feed Scheme

## 2016-17 Z-Cut Homogeneity Screen

Code	Sample	Pass Z Cut	% Prot.	# in Cut
201627	Cat Food, Dry	0.52%	33.6	88
201628	Molasses Product, Dehydrated		9.4	80
201698	Cattle Mineral		1.7	20
201629	Dairy Beef Feed	0.38%	30.6	91
201630	Poultry/Game Bird Feed	0.00%	27.9	92
201631	Swine Feed, Medicated	0.00%	20.8	87
201632	Lamb Feed, Medicated	0.49%	19.5	89

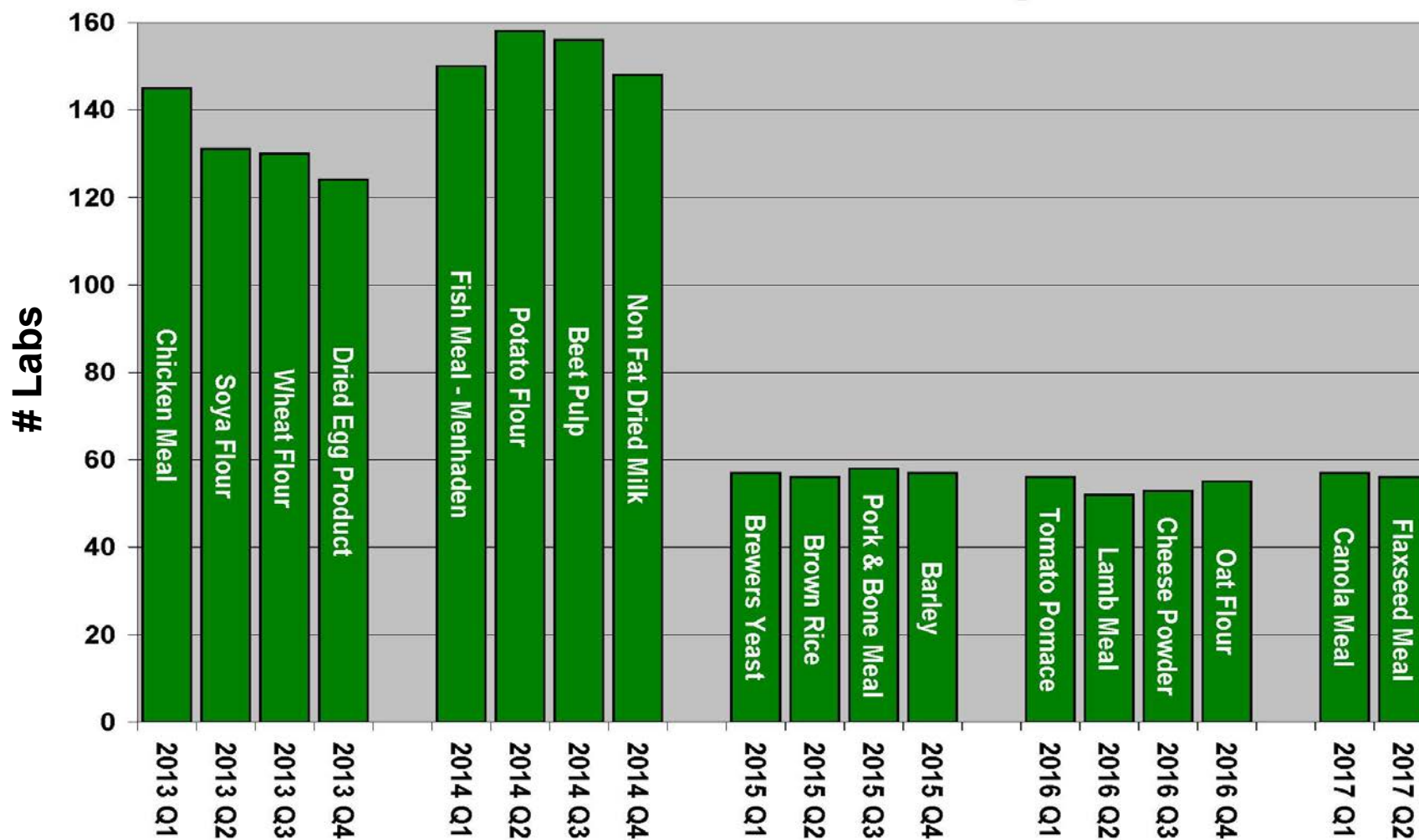


201721	Dry Dog Food	0.00%	28.9	84
201722	Poultry Layer Feed, Medicated	0.72%	19.0	95
201723	Milk Replacer, Medicated	0.00%	23.2	84
201724	Beef Feed, Medicated	0.00%	34.8	82
201725	Swine Feed	0.00%	21.3	84
201726	Fish Meal	0.00%	61.5	86
201796	Llama & Alpaca Mineral		5.9	28





## Pet Food Scheme Participation







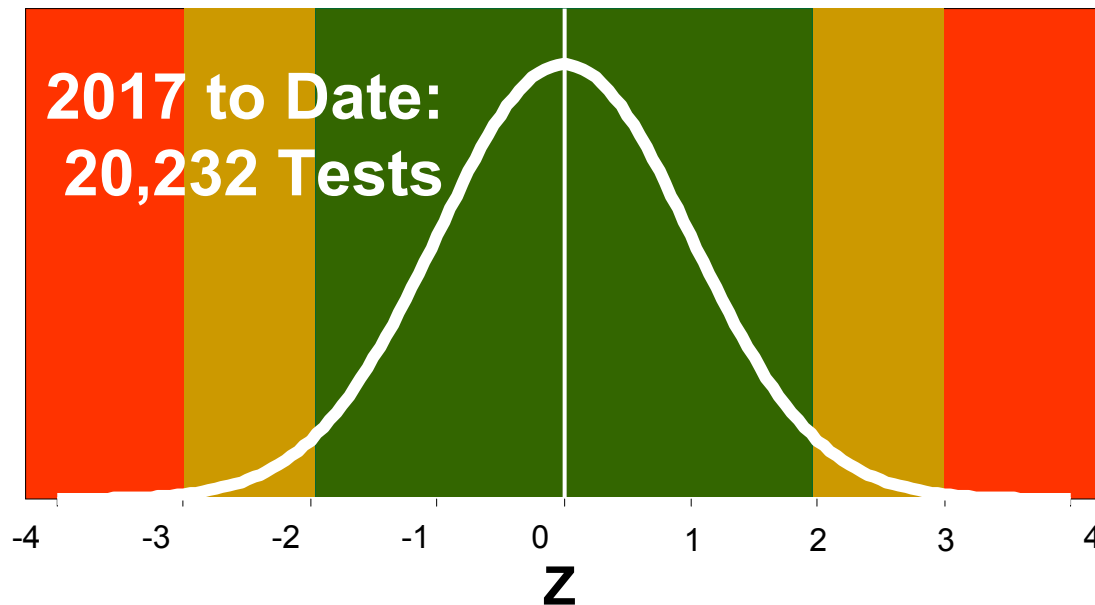
## Pet Food Scheme 2016-17 Z-Cut Homogeneity Screen

Sample #	Sample Name	Pass Z-Cut %RSD	% Protein	# in Z-Cut
201641	Tomato Pomace	0.51%	20.7	26
201642	Lamb Meal	0.00%	55.3	24
201643	Cheese Powder	1.38%	15.0	24
201644	Oat Flour	0.00%	13.0	27

201741	Canola Meal	0.00%	33.0	30
201742	Flaxseed Meal	0.00%	21.1	32



# Z-Score Indications in Animal Feed Scheme and Pet Food Scheme



<b>Compliance</b> $2 > Z > -2$	<b>Warning</b>	<b>Actionable</b> $3 < Z < -3$
<b>89.4%</b>	<b>4.9%</b>	<b>5.7%</b>

# Mycotoxin Scheme Sample Engineering

Trilogy sources the base feeds.



Materials thoroughly  
processed with regard to  
particle size and blending.



**70,000 lb**

## Masters Collection

- Carefully sourced feeds naturally contaminated with Mycotoxins.
- Incubated to raise concentration.

## NEW Homogeneity Testing

- 10 Sample bags analyzed in Duplicate.
- Randomized sampling & testing.
- We analyze raw data.

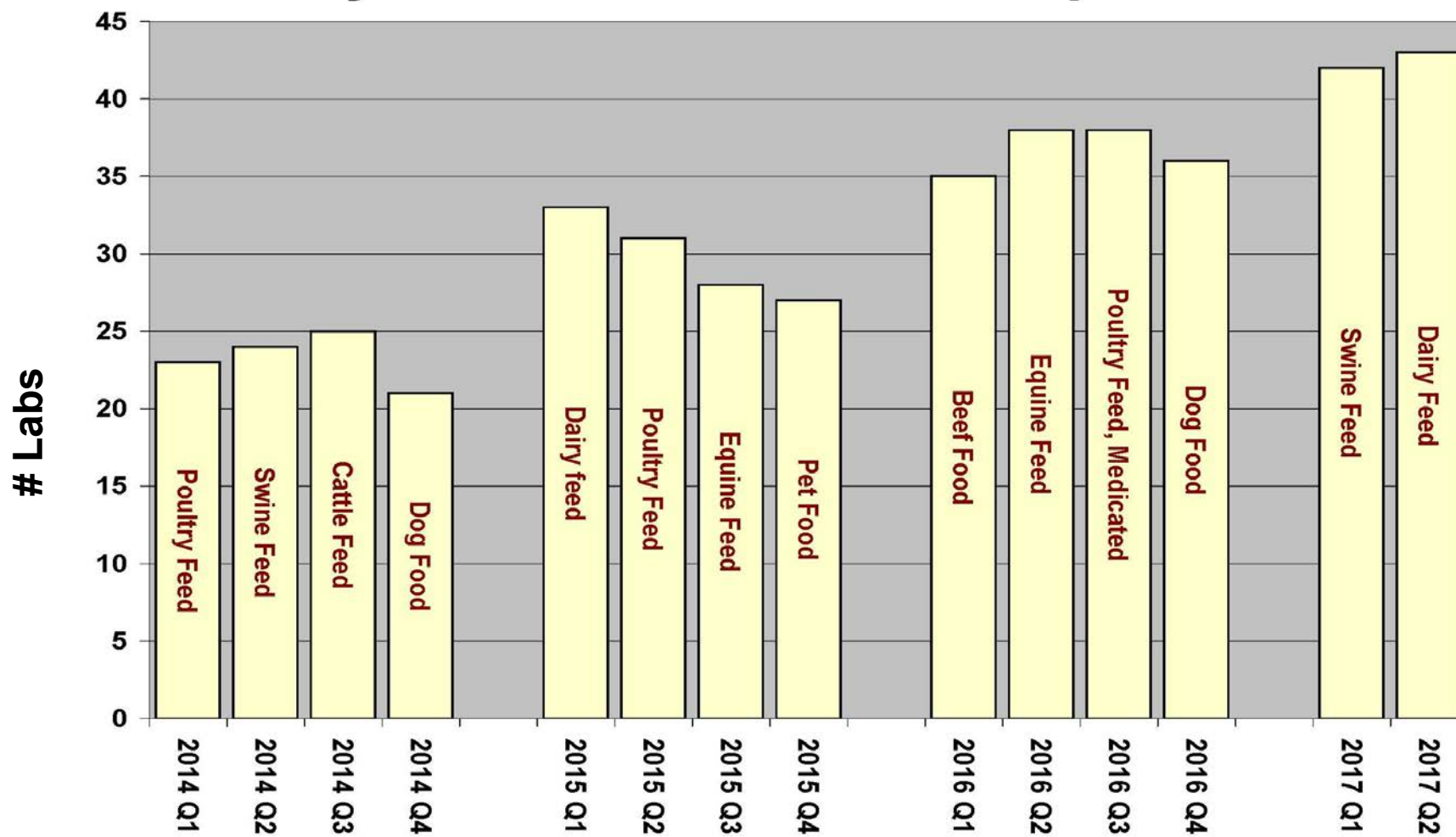


## NEW Stability Testing

- 5 additional sample bags held until post due date.
- Duplicate test portions randomized & analyzed.
- Data compared with prior Homogeneity testing data.



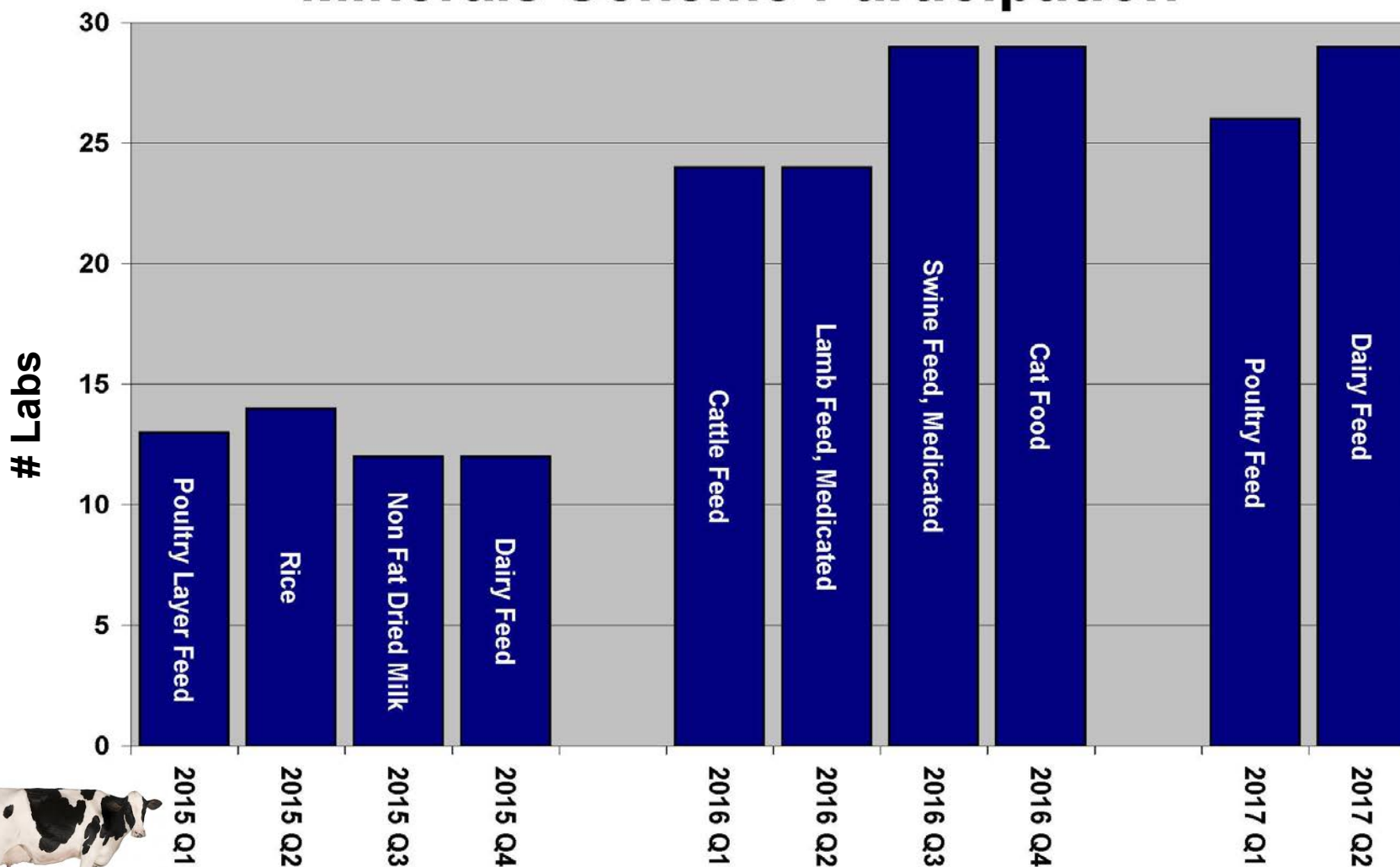
## Mycotoxin Scheme Participation







## Minerals Scheme Participation



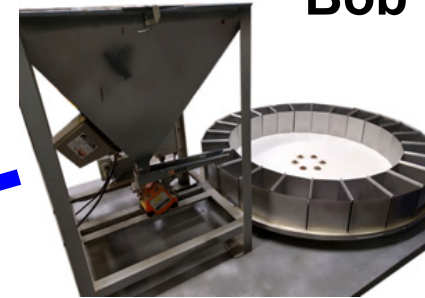
# Minerals Scheme Sample Engineering

Base feed sourced from prior Check Samples.  
Minerals sourced separately.

Able Laboratory Inc.  
Bob Kieffer



Existing Minerals in base  
feed established during  
prior testing round.



- Added Minerals solubilized and sprayed over existing pre-ground base feed prior to blending and sample portioning.
- Spike concentrations calculated.
- **NEW** Homogeneity testing results.



**Homogenous** Samples for distribution.

## Minerals Scheme: Sample Homogeneity

### Validate Sample Preparation Blending Process

- 4 Labs Participated. **Thank you!**
- 4 AAFCO PT Samples used.
  - 201554 - Dairy Feed
  - 201651 - Cattle Feed
  - 201652 - Lamb Feed
  - 201653 - Swine Feed

### Homogeneity Testing Protocol

- 10 Sample bags analyzed in Duplicate.
- Randomized sampling & testing. Analysis as discussed previously.
- 30% of **Horwitz  $\sigma$**  compared with extracted **Variation due to sampling**.
- **FAIL at > 3% PASS Threshold.**

# Minerals Scheme: Sample Homogeneity

## Full Reports On File!

Sample	2015-54	2016-51		2016-52		2016-53
Analyte\Lab	LAB 1	LAB 1	LAB 2	LAB 1	LAB 3	LAB 4
Aluminum					PASS	PASS
Arsenic	PASS	PASS		PASS	PASS	PASS
Boron					PASS	
Cadmium	PASS	PASS		PASS	PASS	PASS
Chromium	PASS	PASS		PASS	High AV	High AV
Cobalt	PASS	PASS		PASS	PASS	PASS
Copper	PASS	PASS		PASS	High AV	PASS
Fluorine			FAIL			
Iodine						
Lead	PASS	PASS		PASS	High AV	High AV
Mercury	NA	NA		PASS	High AV	
Molybdenum	PASS	PASS		PASS	PASS	PASS
Nickel					PASS	High AV
Selenium	PASS	PASS		PASS	PASS	PASS
Sulfur	PASS	PASS		PASS	PASS	PASS
Vanadium			PASS		PASS	



**All is Good!**  
**Thank You!**

**AAFCO**  
Proficiency Testing Program