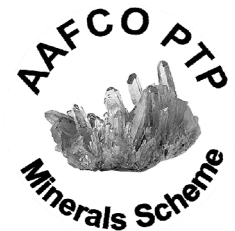
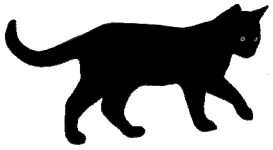
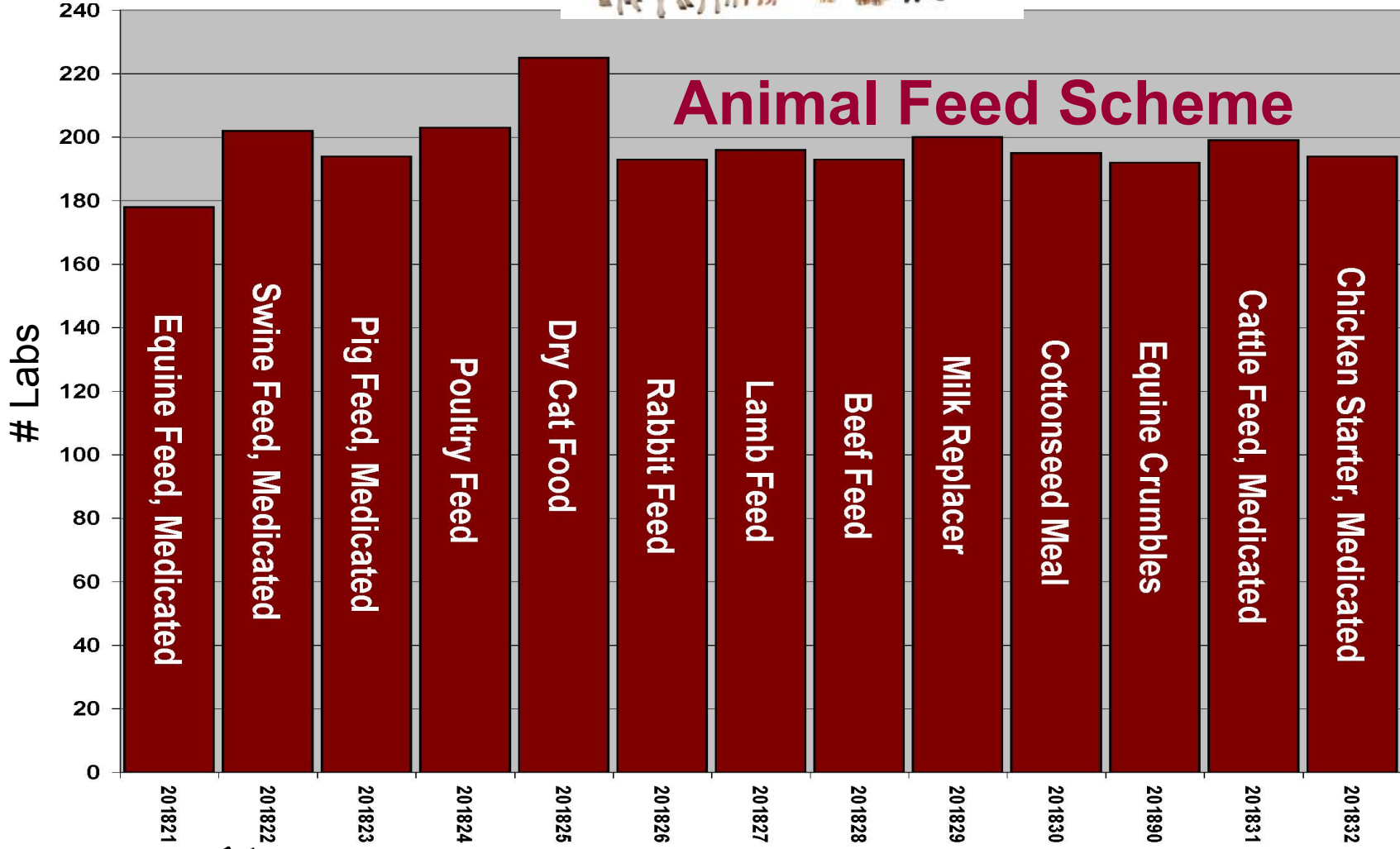


# AAFCO Proficiency Testing Program: 2018 Participation





## Animal Feed Scheme



# Animal Feed Scheme

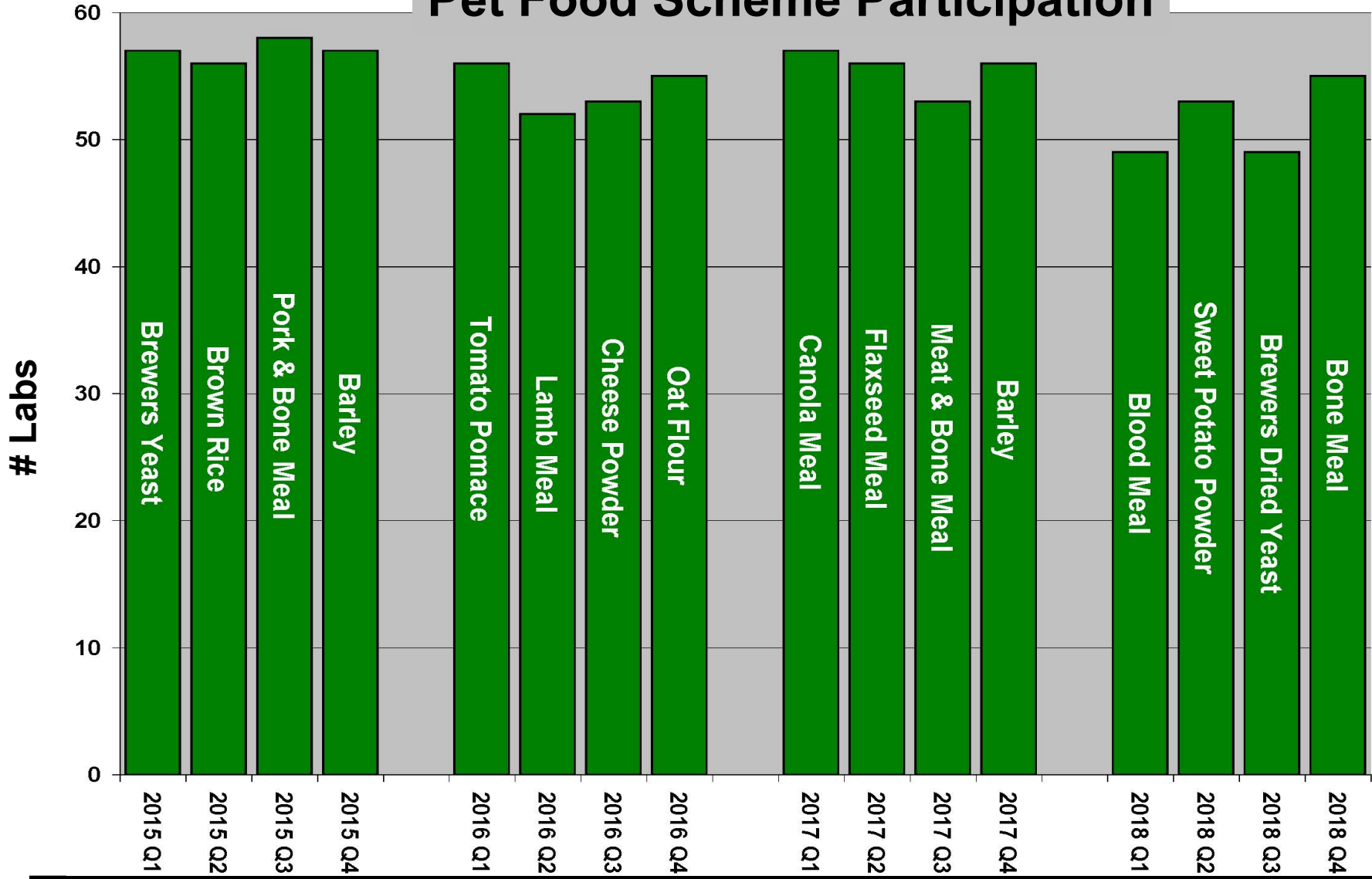
## 2018 Z-Cut Homogeneity Screen



Sample Code	Sample Name	Z-Cut %RSD	% Protein	# in Z-Cut
201821	Equine Feed	1.30%	18.6	80
201822	Swine Feed, Medicated	0.00%	18.6	88
201823	Pig Feed, Medicated	0.00%	8.7	83
201824	Poultry Feed	0.00%	18.4	82
201825	Dry Cat Food	0.00%	35.2	98
201826	Rabbit Feed	0.00%	20.2	86
201827	Lamb Feed	0.00%	19.3	80
201828	Beef feed	1.76%	12.1	80
201829	Milk Replacer	0.00%	24.8	83
201830	Cottonseed Meal	2.23%	40.5	89
201890	Equine Crumbles	1.70%	14.3	82
201831	Cattle Feed, Medicated	0.00%	31.4	89
201832	Chicken Starter, Medicated	0.00%	20.7	85



## Pet Food Scheme Participation



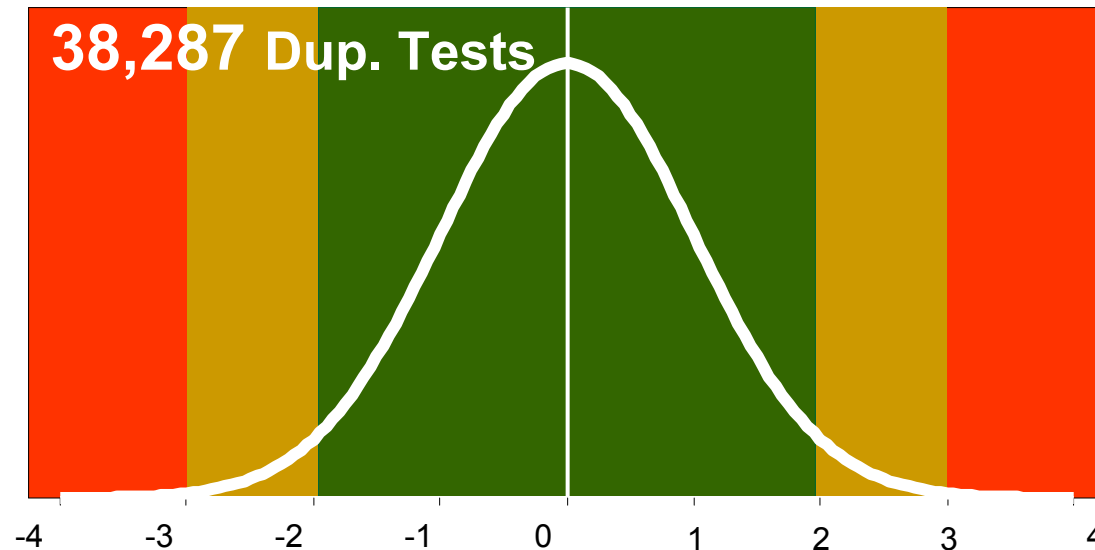


## Pet Food Scheme 2018 Z-Cut Homogeneity Screen

Sample #	Sample Name	Pass Z-Cut %RSD	% Protein	# in Z-Cut
201841	Blood Meal	0.00%	93.6	28
201842	Sweet Potato Powder	0.97%	5.2	25
201843	Brewer's Dried Yeast	0.00%	44.6	27
201844	Bone Meal	0.00%	54.5	31



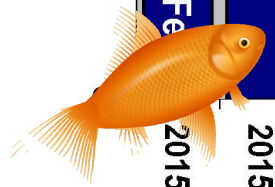
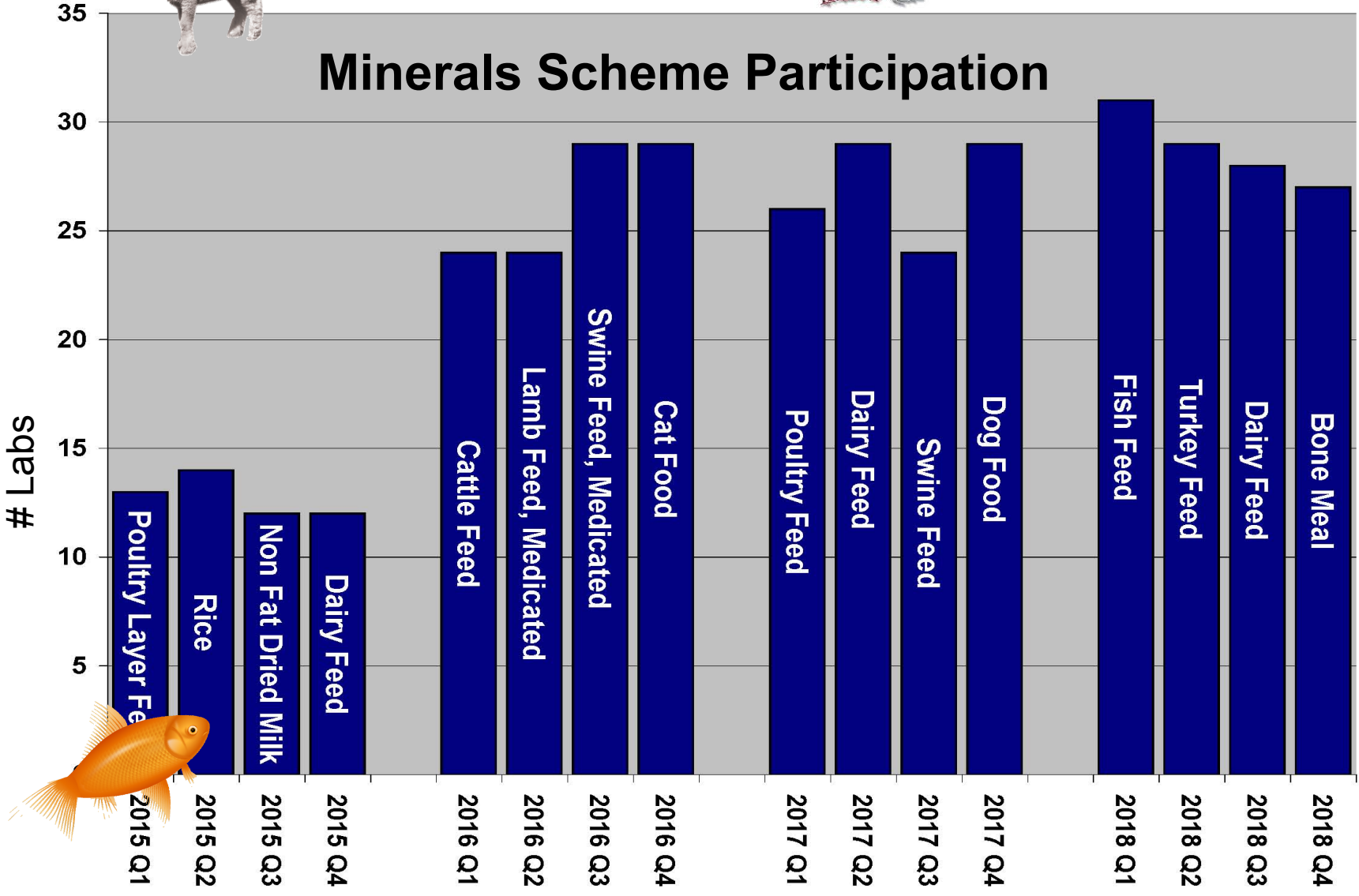
# Z-Score Indications in 2018 Animal Feed and Pet Food Schemes



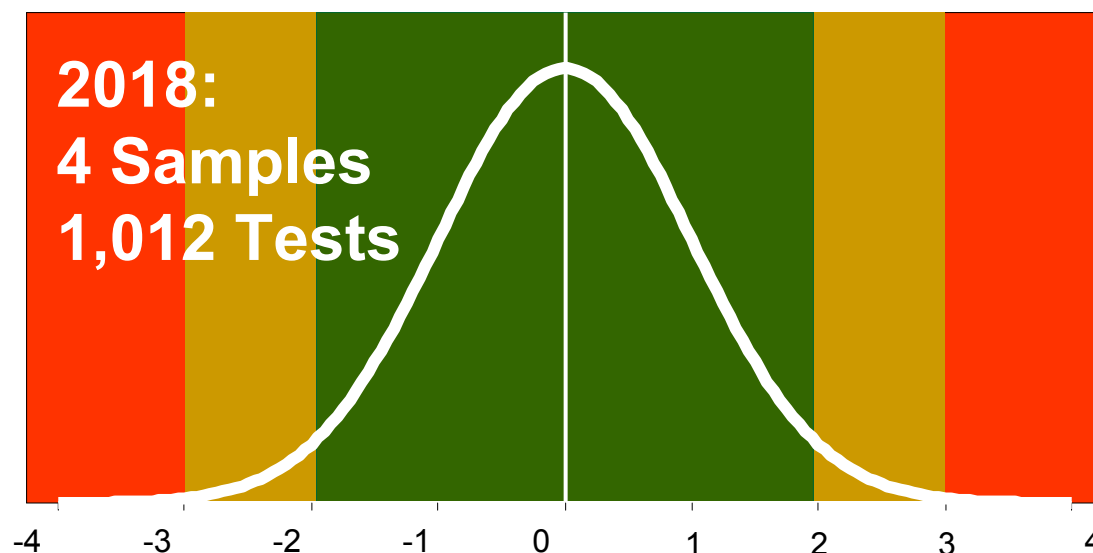
	<b>Compliance</b> $2 > Z > -2$	<b>Warning</b>	<b>Actionable</b> $3 < Z < -3$
<b>AFS</b>	<b>90.1%</b>	<b>5.0%</b>	<b>4.9%</b>
<b>PFS</b>	<b>92.9%</b>	<b>3.0%</b>	<b>4.1%</b>



# Minerals Scheme Participation



## Z-Score Indications in Minerals Scheme (Horwitz ffp SD for PT)

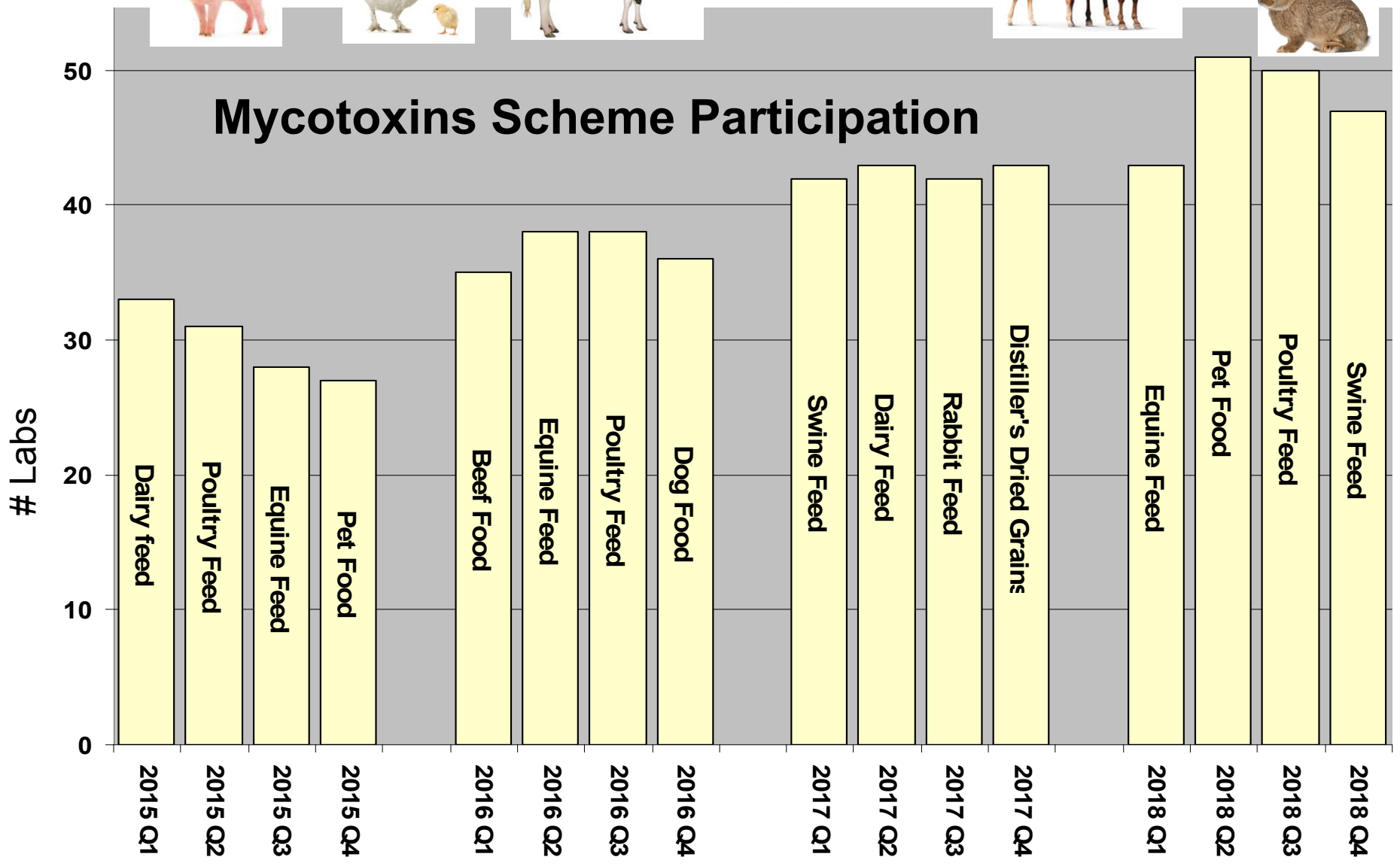


<b>Compliance</b> $2 > Z > -2$	<b>Warning</b>	<b>Actionable</b> $3 < Z < -3$
<b>83.4%</b>	<b>6.3%</b>	<b>10.3%</b>

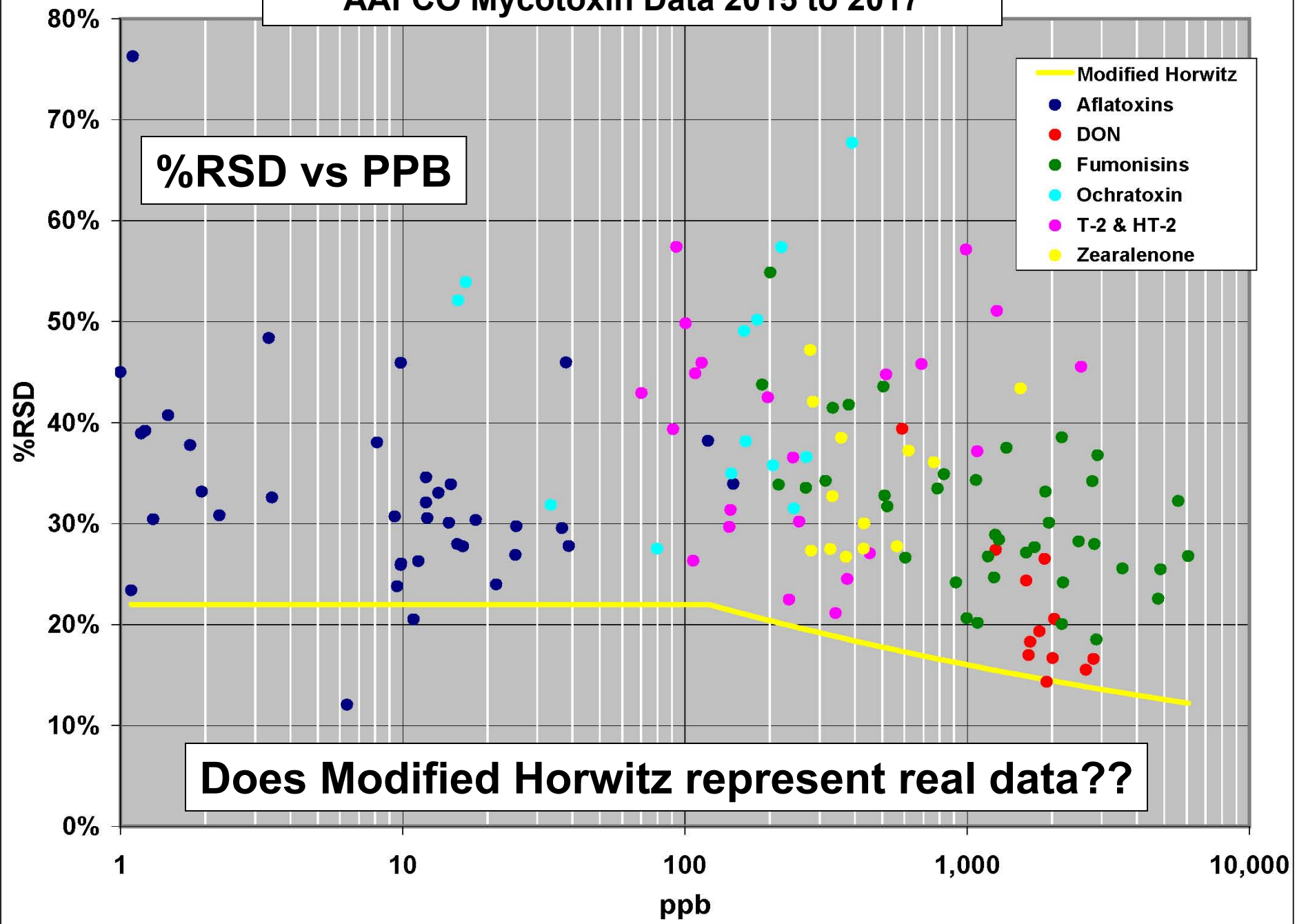




# Mycotoxins Scheme Participation



# AAFCO Mycotoxin Data 2015 to 2017



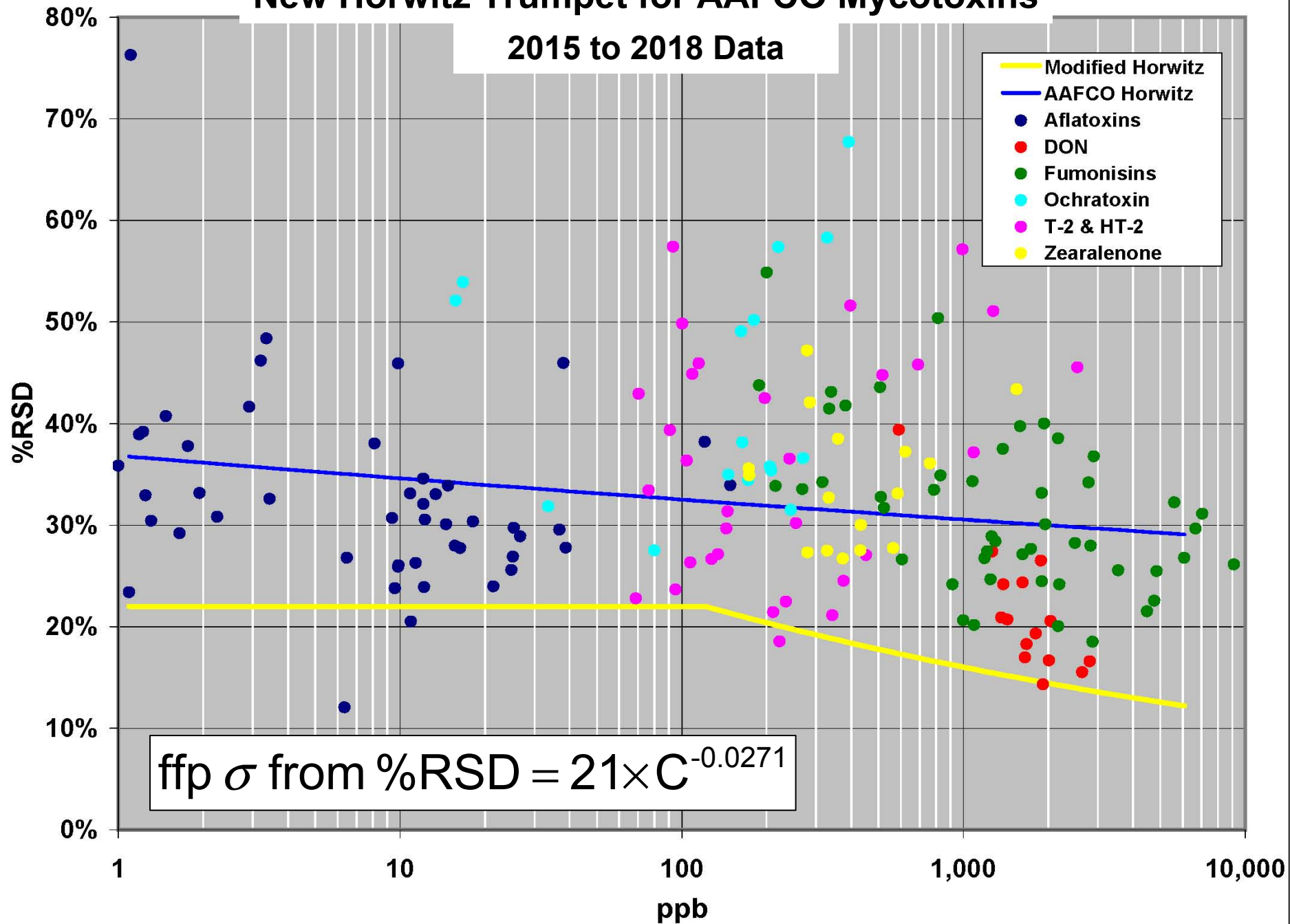
**%RSD vs PPB**

- Modified Horwitz
- Aflatoxins
- DON
- Fumonisin
- Ochratoxin
- T-2 & HT-2
- Zearalenone

**Does Modified Horwitz represent real data??**

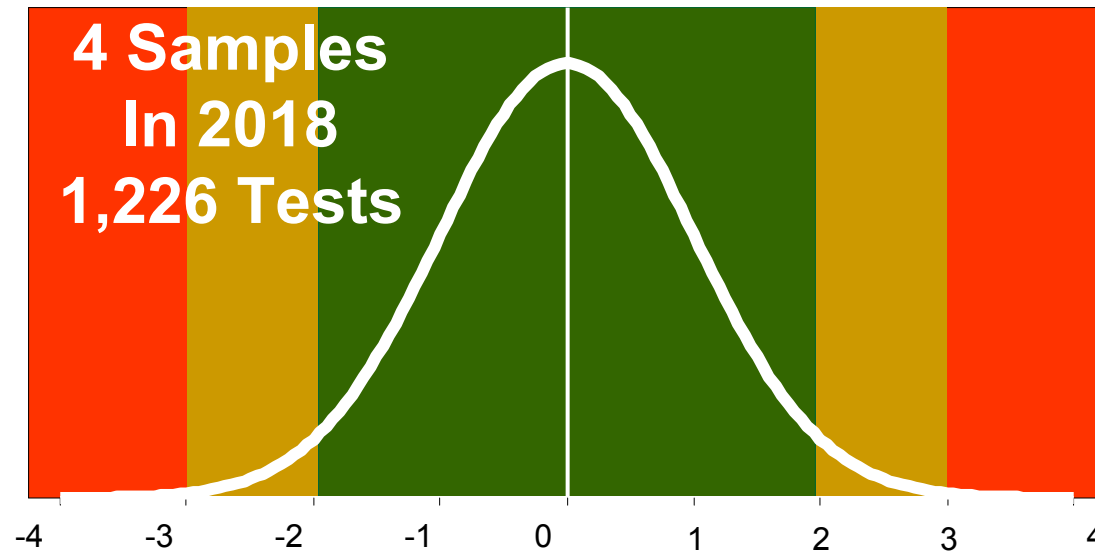
# New Horwitz Trumpet for AAFCO Mycotoxins

2015 to 2018 Data



# Z-Score Indications in Mycotoxin Scheme

## (Modified Horwitz ffp SD for PT)



	<b>Compliance</b> $2 > Z > -2$	<b>Warning</b>	<b>Actionable</b> $3 < Z < -3$
<b>Modified Horwitz</b>	<b>72.2%</b>	<b>13.9%</b>	<b>13.9%</b>
<b>2018 Adjustment</b>	<b>89.7%</b>	<b>6.0%</b>	<b>4.3%</b>

## 2018 Summary

<b>Labs Participating in 2018</b>	
<b>Scheme</b>	<b># Labs</b>
Animal Feed	226
Pet Food	63
Minerals	34
Mycotoxins	62

**“Fit for purpose”  $\sigma$  (as %RSD) revised for Mycotoxin Scheme.**

**Animal Feed Scheme “Duplicate Sample - Stability Test” indicated sufficient analyte stability across the PT testing window (~ 6 weeks). Reported at Fort Lauderdale.**