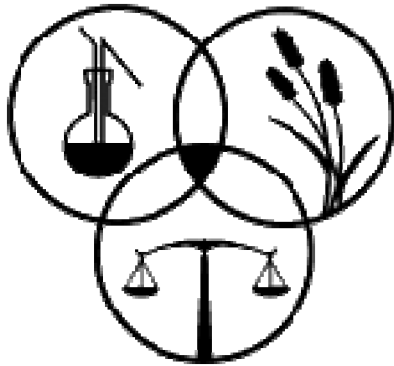
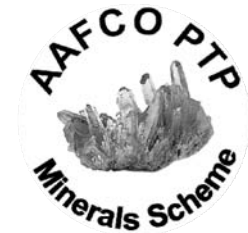
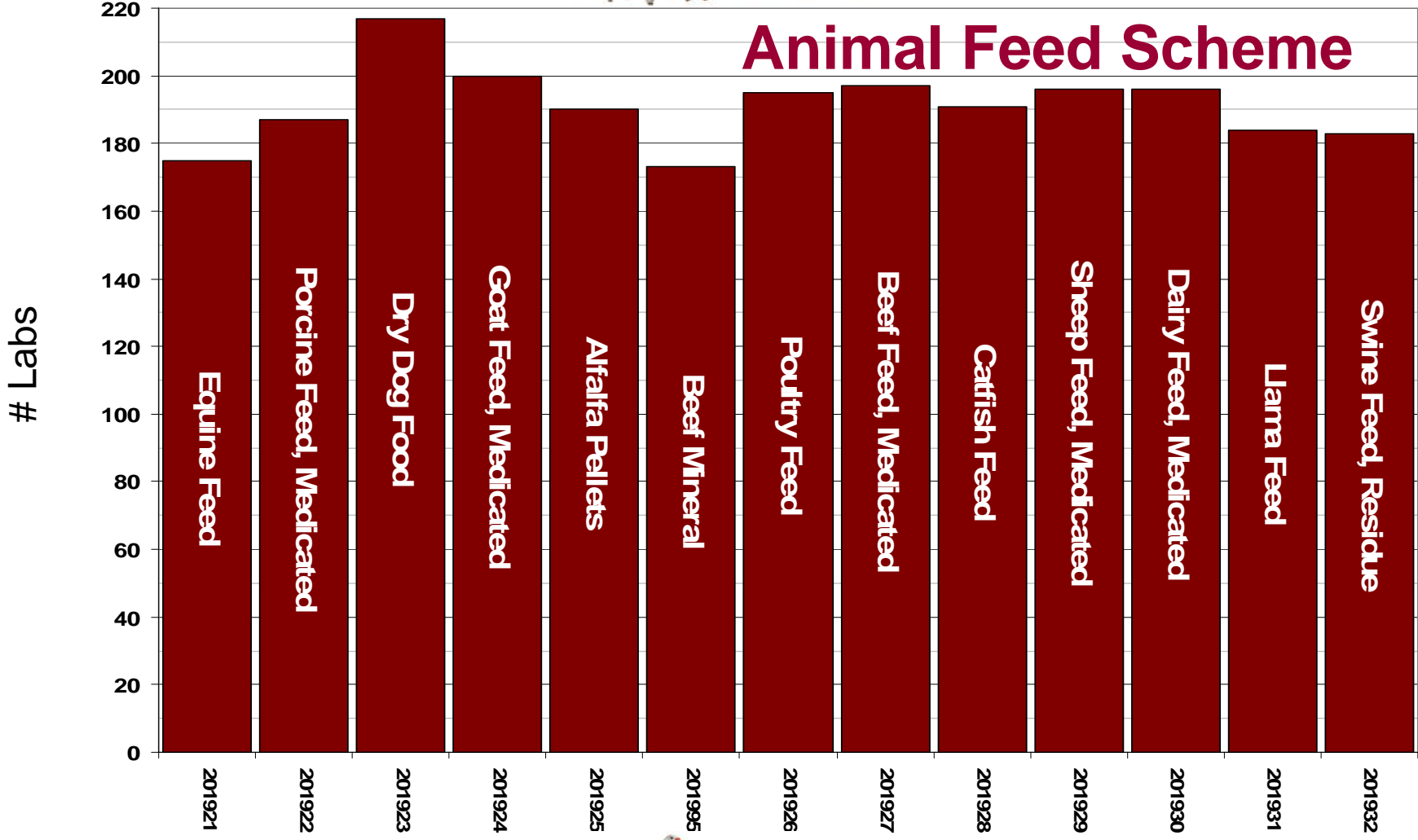


Albuquerque Mid Year Meeting, 2020



AAFCO Proficiency Testing Program: 2019 Participation





Animal Feed Scheme

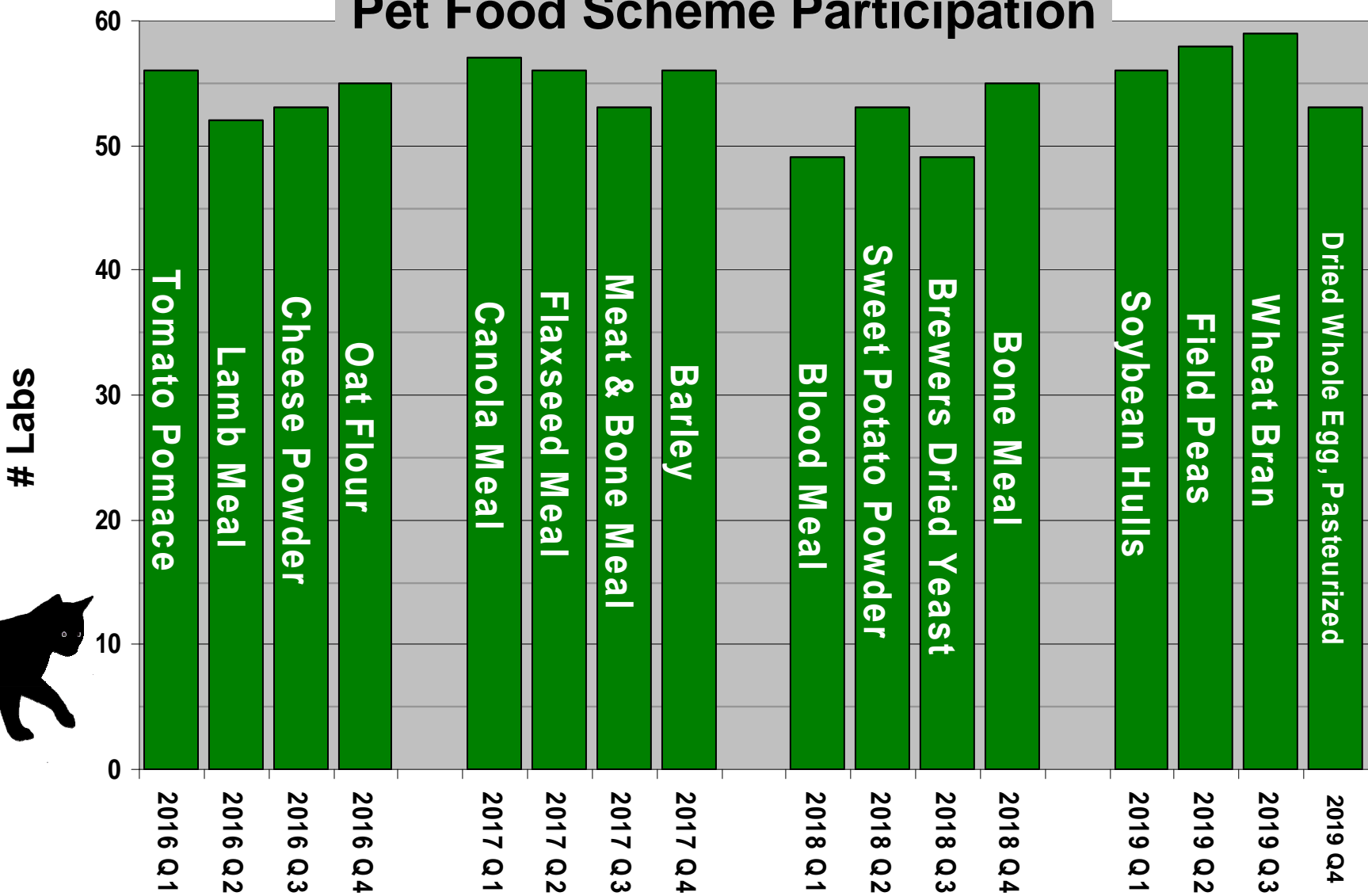
2019 Z-Cut Homogeneity Screen



Sample Code	Sample Name	Z-Cut %RSD	% Protein	# in Z-Cut
201921	Equine Feed	1.56%	15.3	75
201922	Porcine Feed, Medicated	0.00%	18.5	86
201923	Dry Dog Food	0.00%	24.5	101
201924	Goat Feed, Medicated	1.14%	16.9	92
201925	Alfalfa Pellets	1.78%	17.8	82
201995	Beef Mineral	0.00%	4.4	36
201926	Poultry Feed	0.00%	22.0	89
201927	Beef Feed, Medicated	1.04%	18.0	92
201928	Catfish Feed	0.00%	33.0	84
201929	Sheep Feed, Medicated	0.00%	13.5	85
201930	Dairy Feed, Medicated	0.00%	19.1	85
201931	Llama Feed	0.78%	24.0	86
201932	Swine Feed, Residue	0.00%	15.8	83



Pet Food Scheme Participation



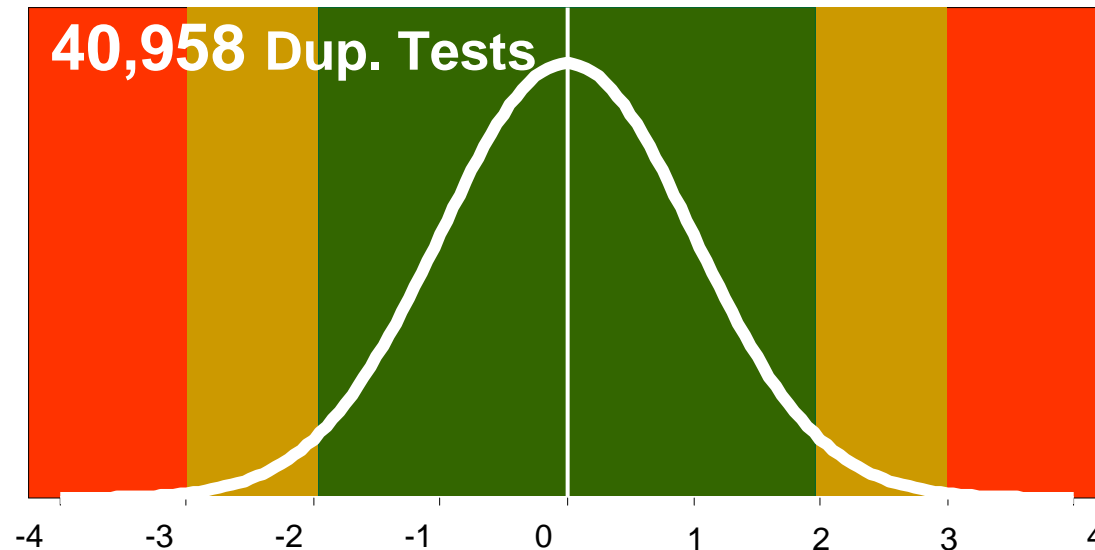


Pet Food Scheme 2019 Z-Cut Homogeneity Screen

Sample #	Sample Name	Pass Z-Cut %RSD	% Protein	# in Z-Cut
201941	Soybean Hulls	0.00%	10.3	31
201942	Field Peas	0.00%	21.6	31
201943	Wheat Bran	1.96%	18.9	31
201944	Dried Whole Egg	0.59%	50.8	27

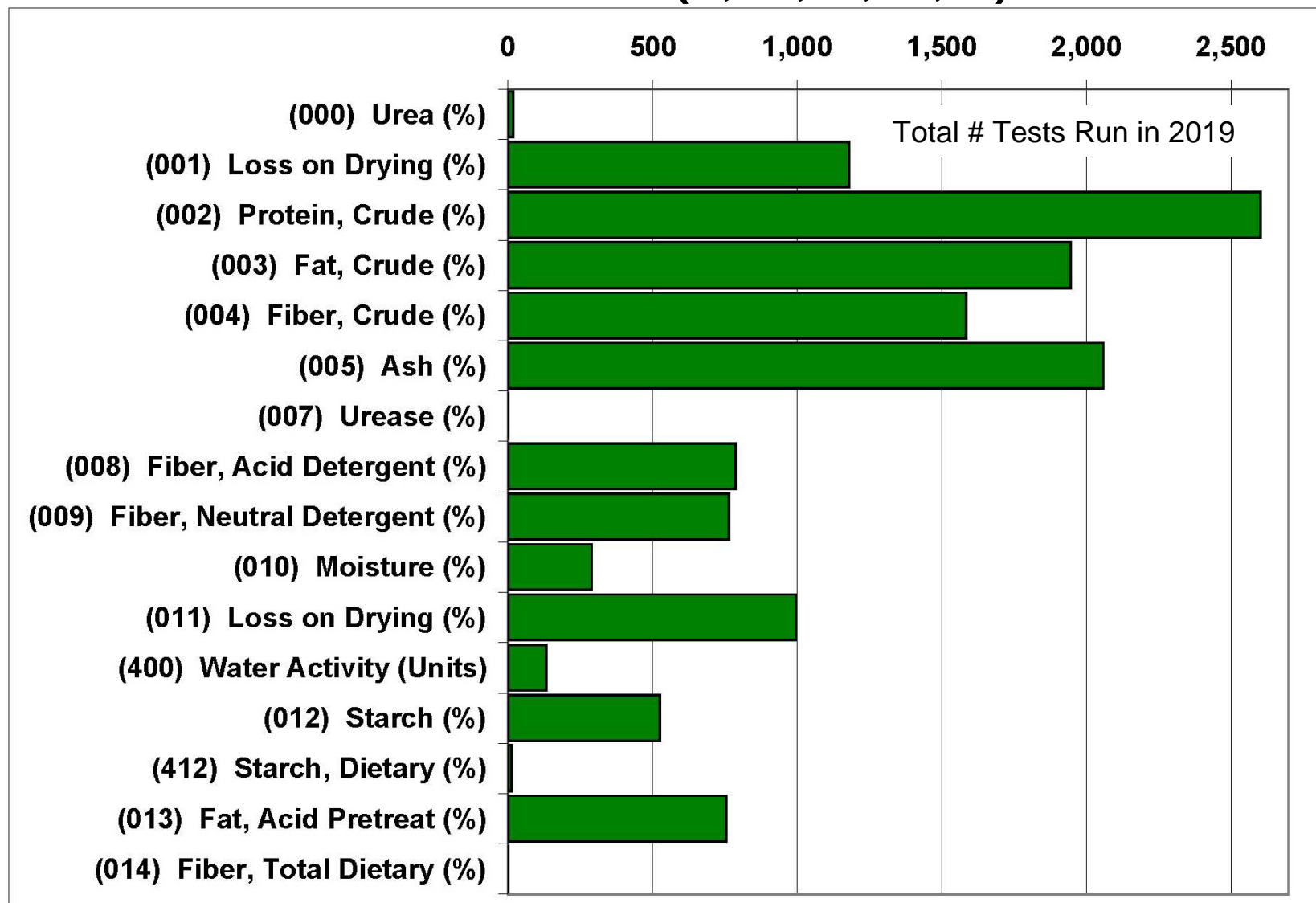


Z-Score Indications in 2019 Animal Feed and Pet Food Schemes

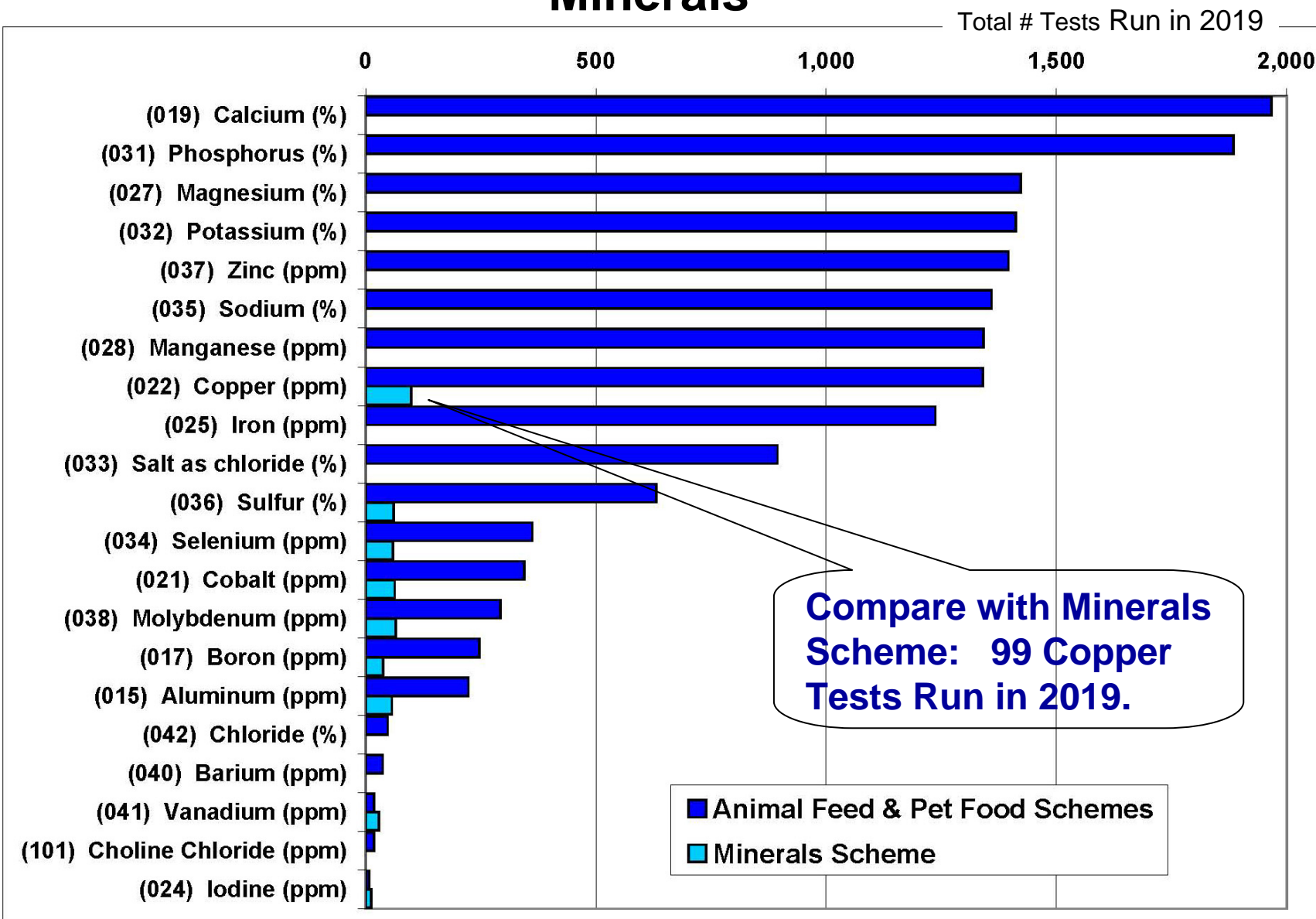


	Compliance $2 > Z > -2$	Warning	Actionable $3 < Z < -3$
AFS	90.0%	4.9%	5.1%
PFS	90.9%	4.2%	4.9%

“Proximates” (F, Fi, A, M, P)

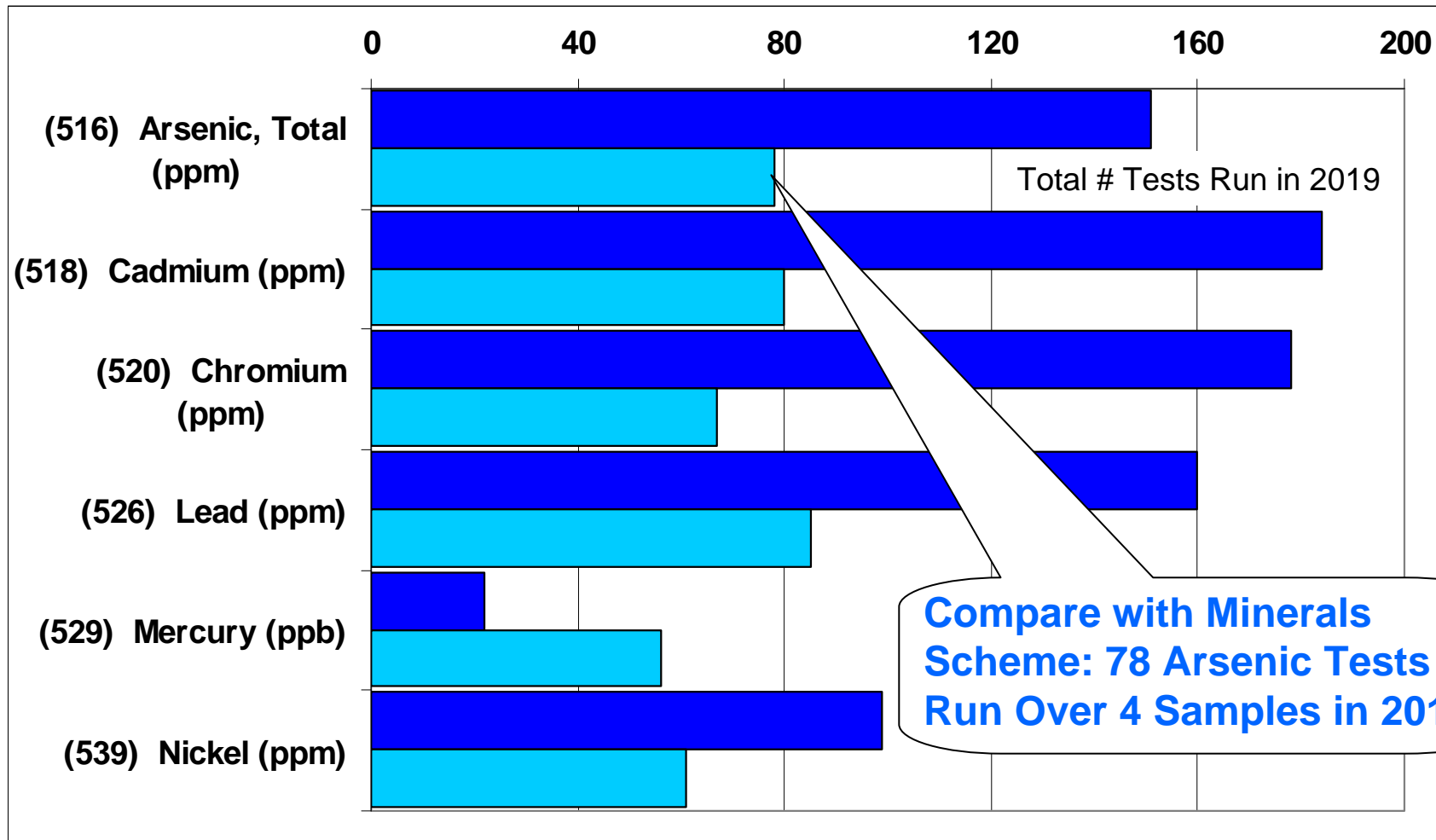


2019 Analyte Participation “Minerals”

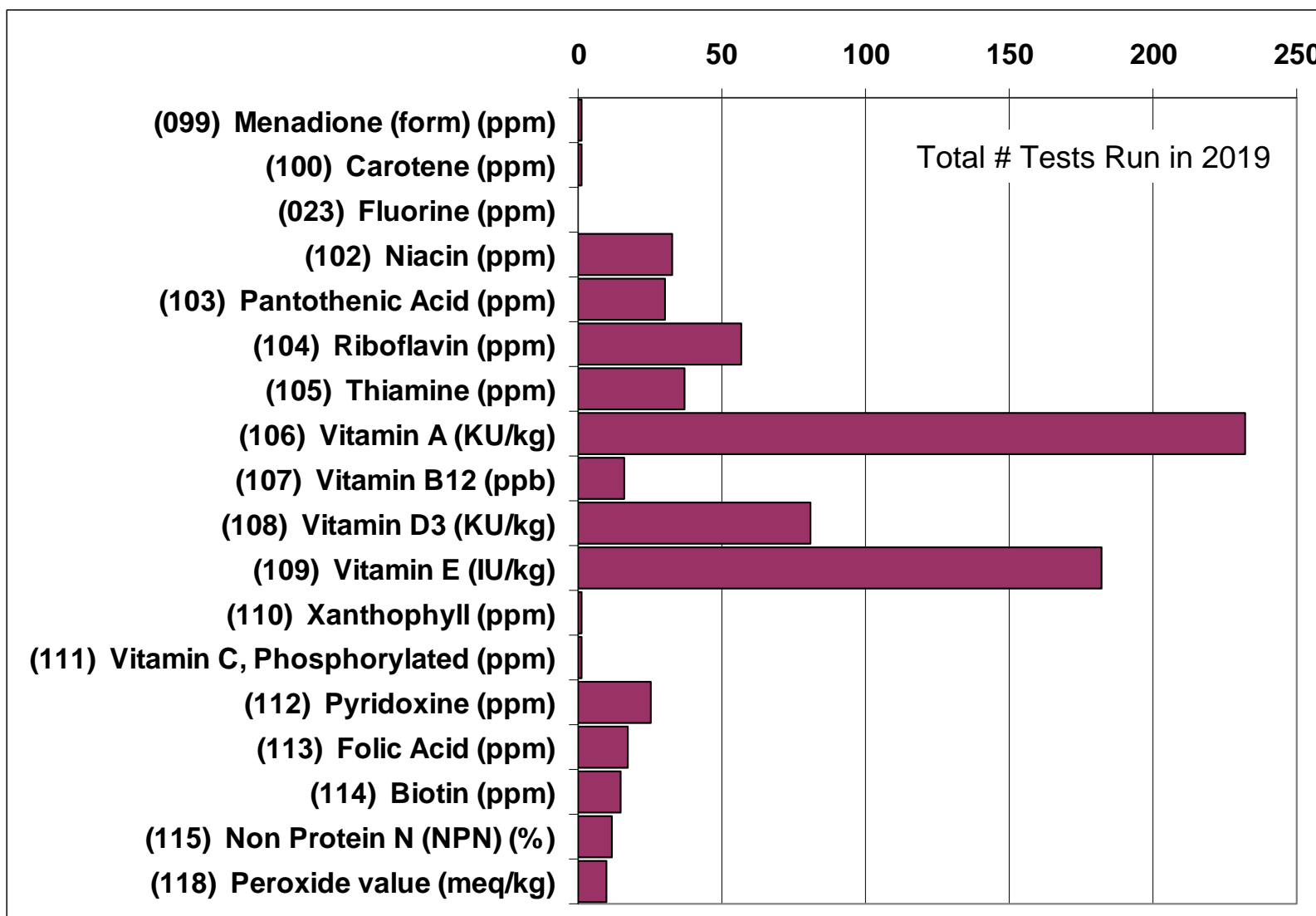


2019 Analyte Participation

“Heavy Metals” (10 Duplicate Labs) Feed & Pet Food (42 Labs) vs Minerals Scheme (28 Labs)

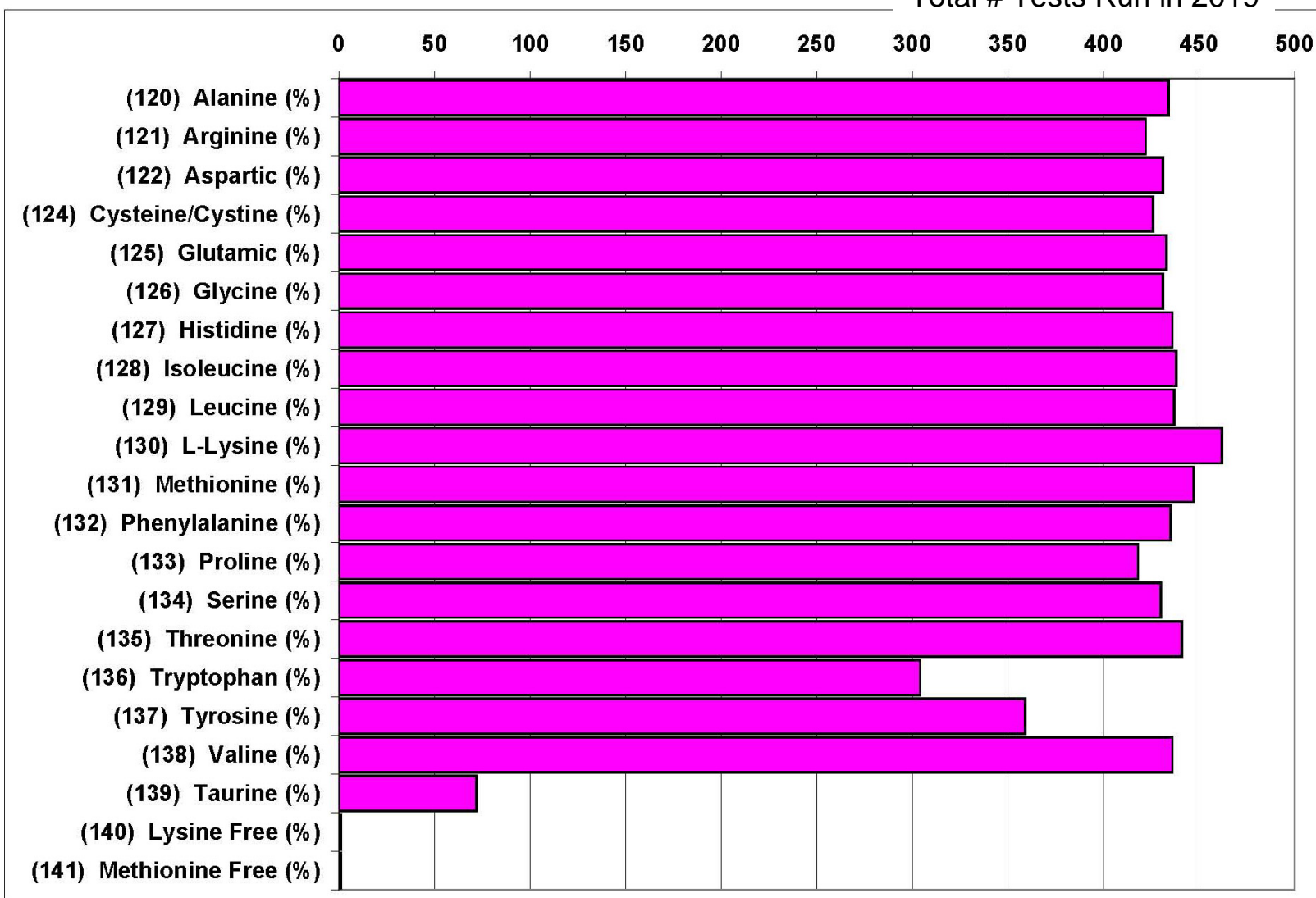


“Vitamins Etc...”

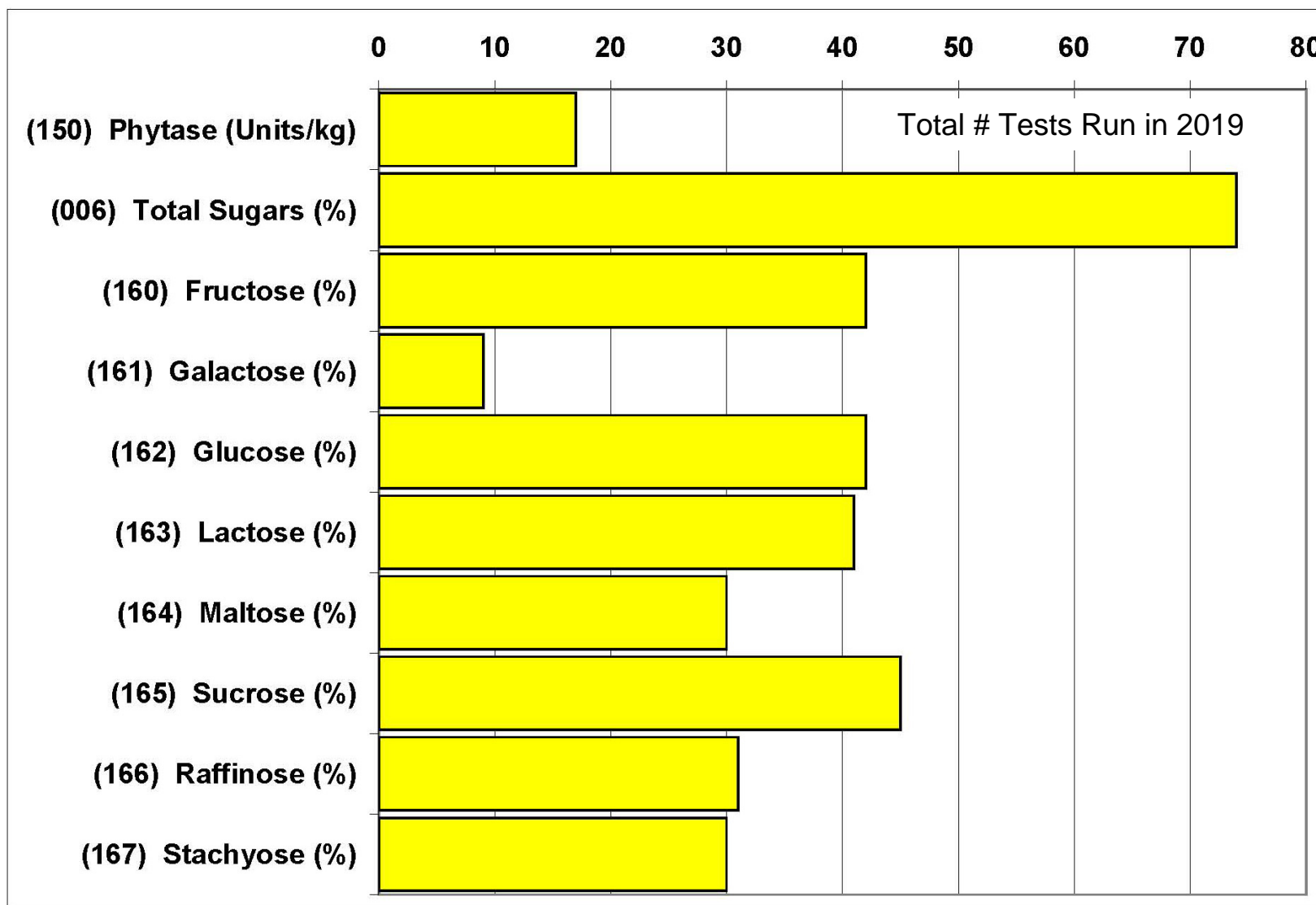


“Amino Acids”

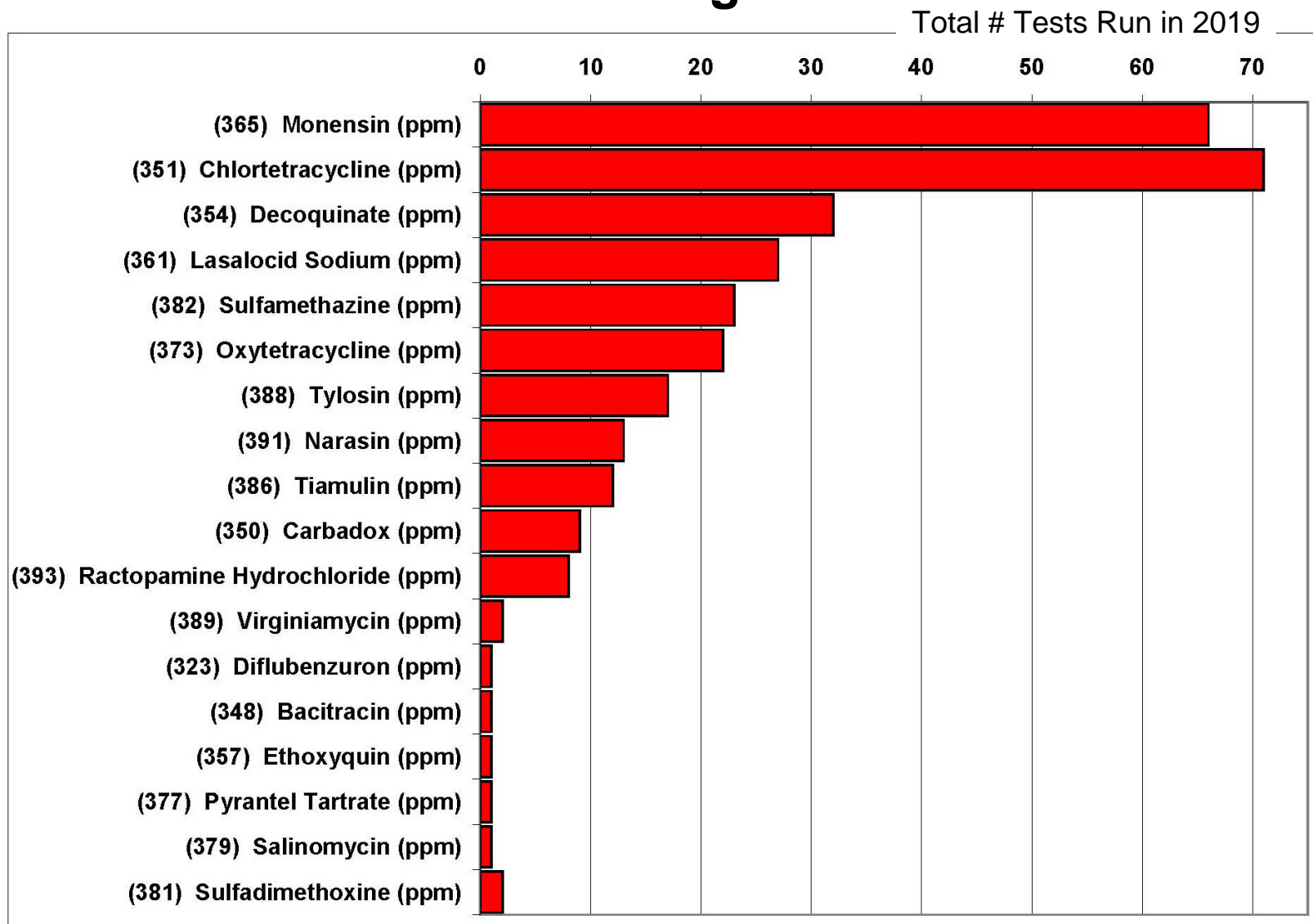
Total # Tests Run in 2019

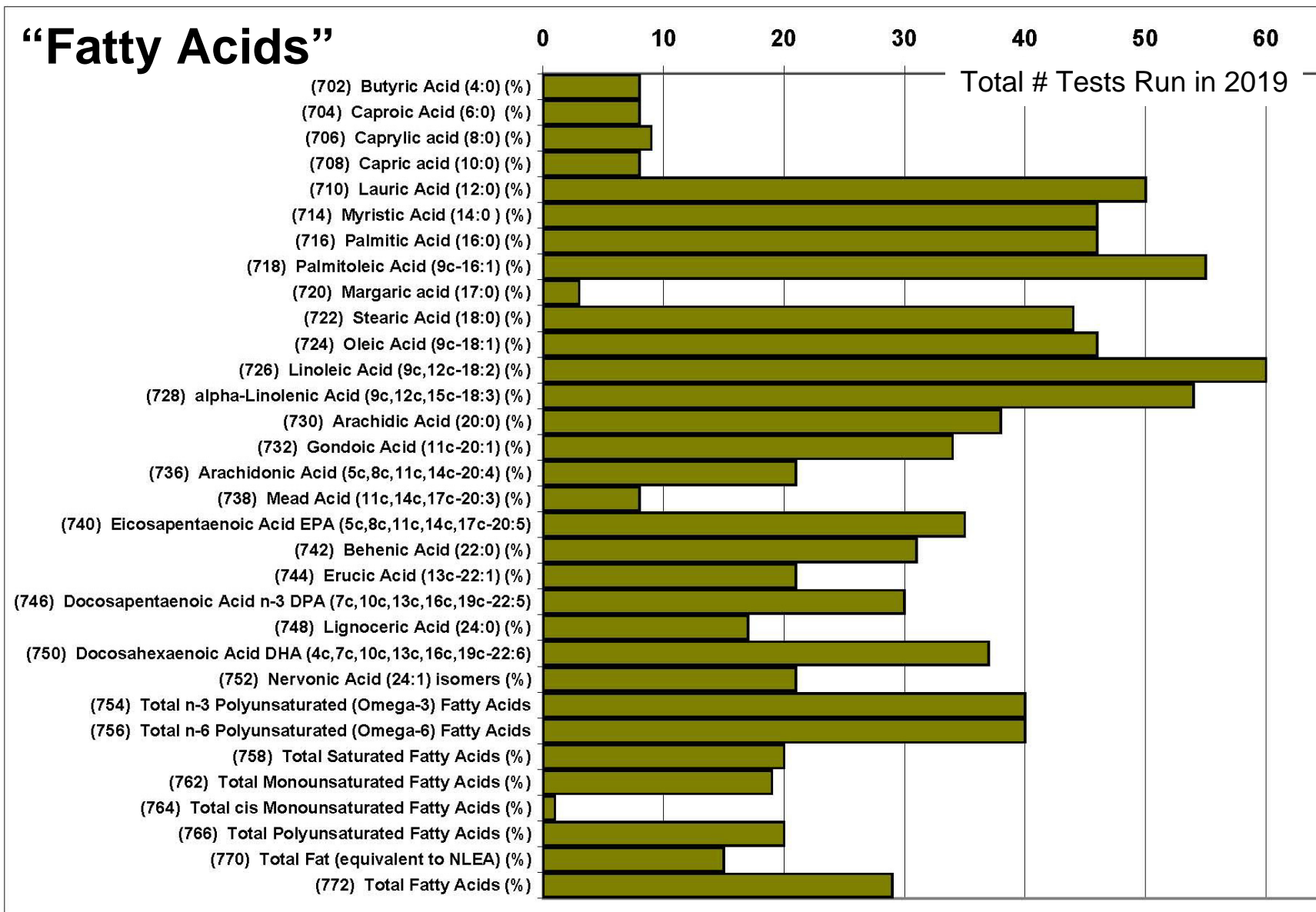


“Sugars”



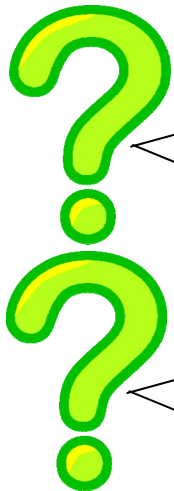
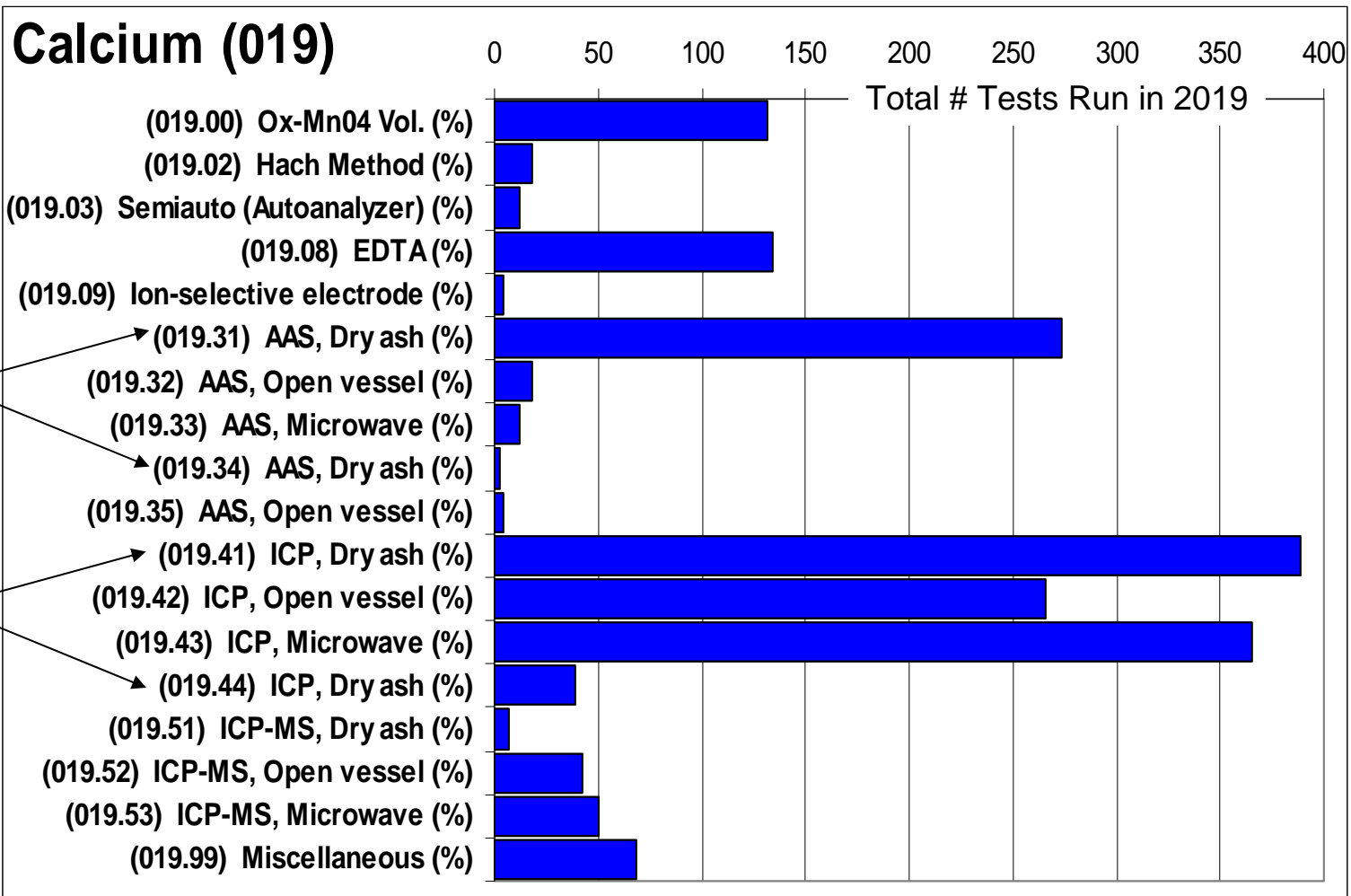
“Drugs”





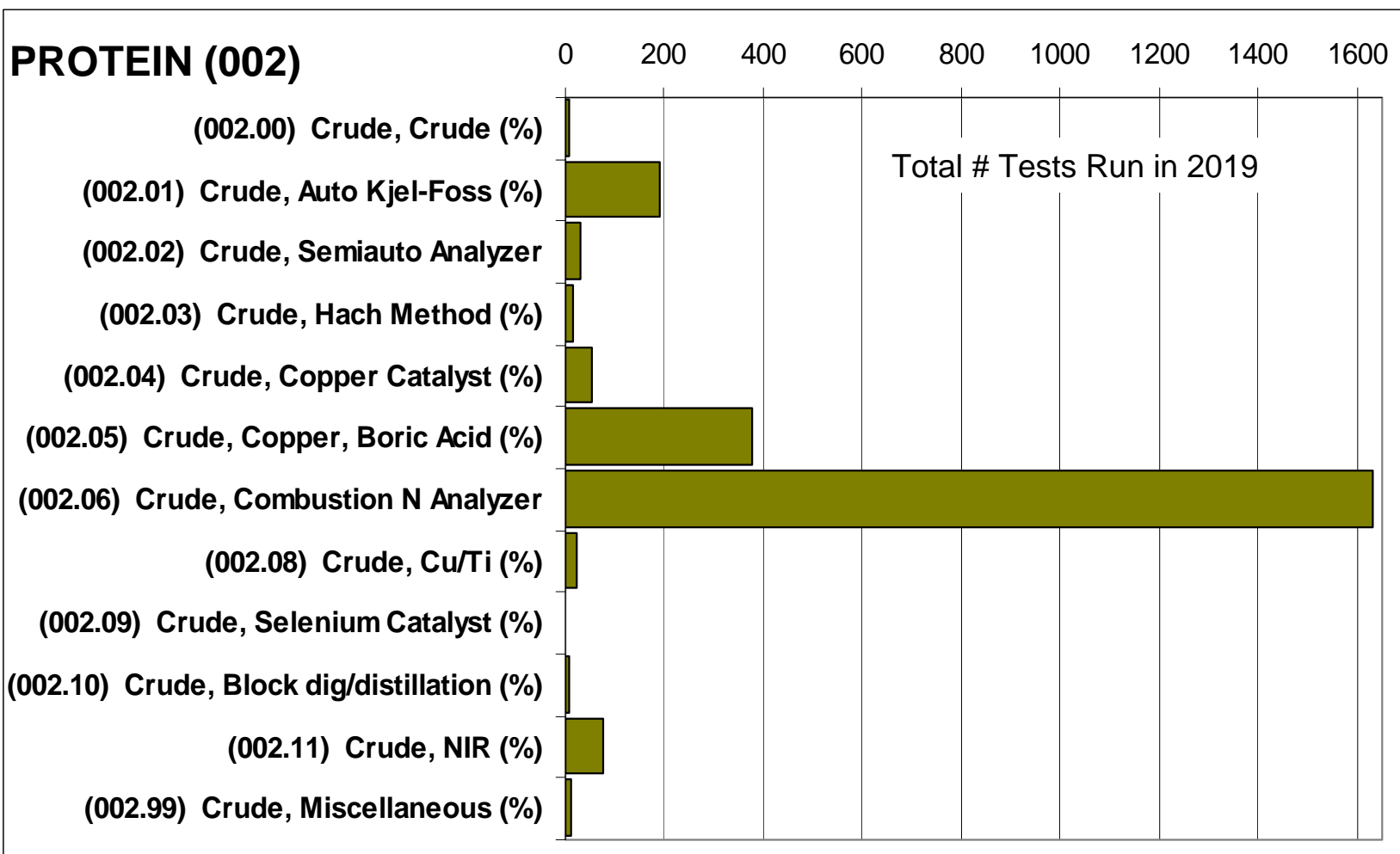
2019 Method Participation

18 Methods



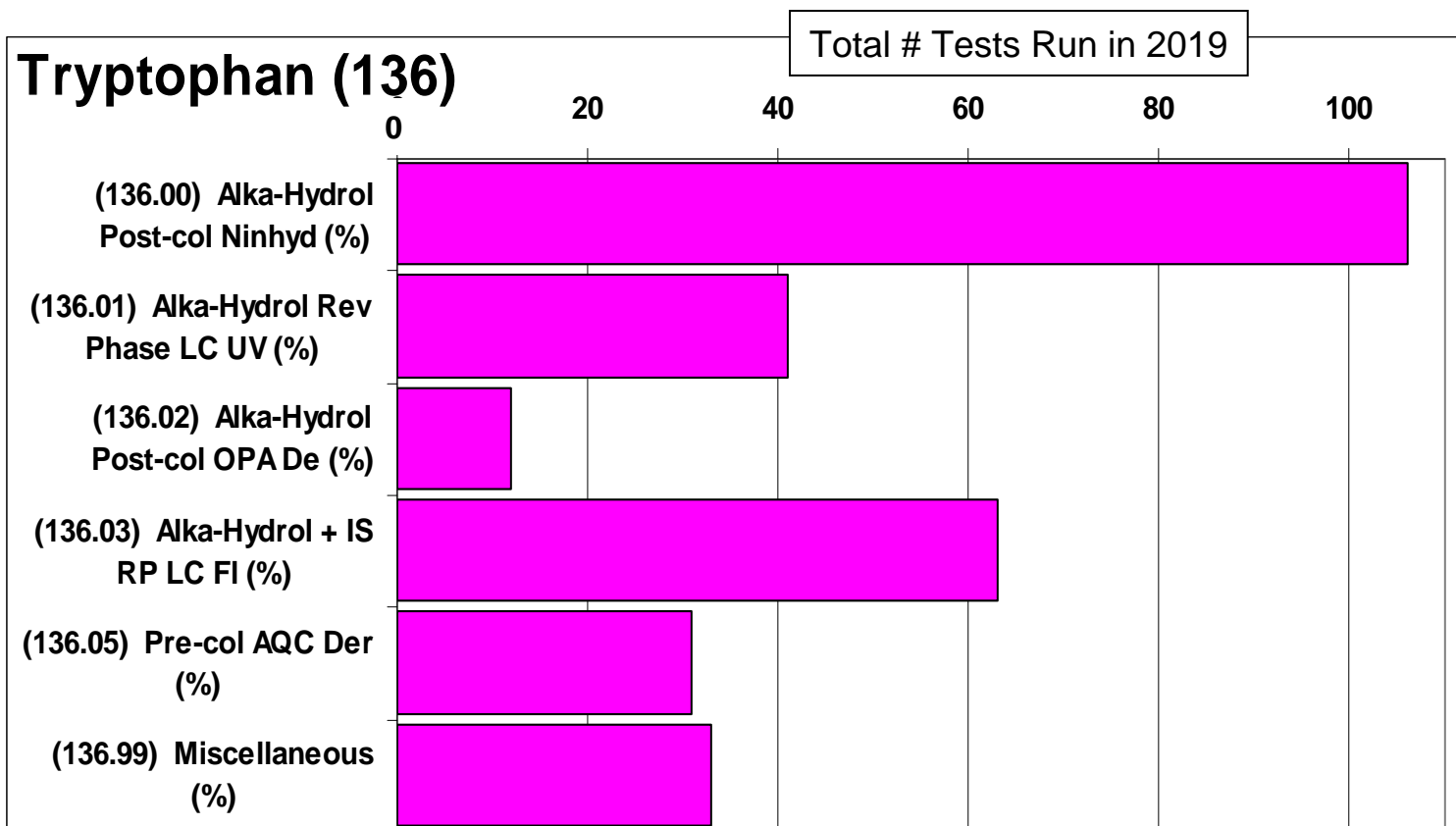
2019 Method Participation

12 Methods



2019 Method Participation

6 Methods



2019 Animal Feed & Pet Food Schemes

of Unique Labs Participating in Analyte Group Analysis



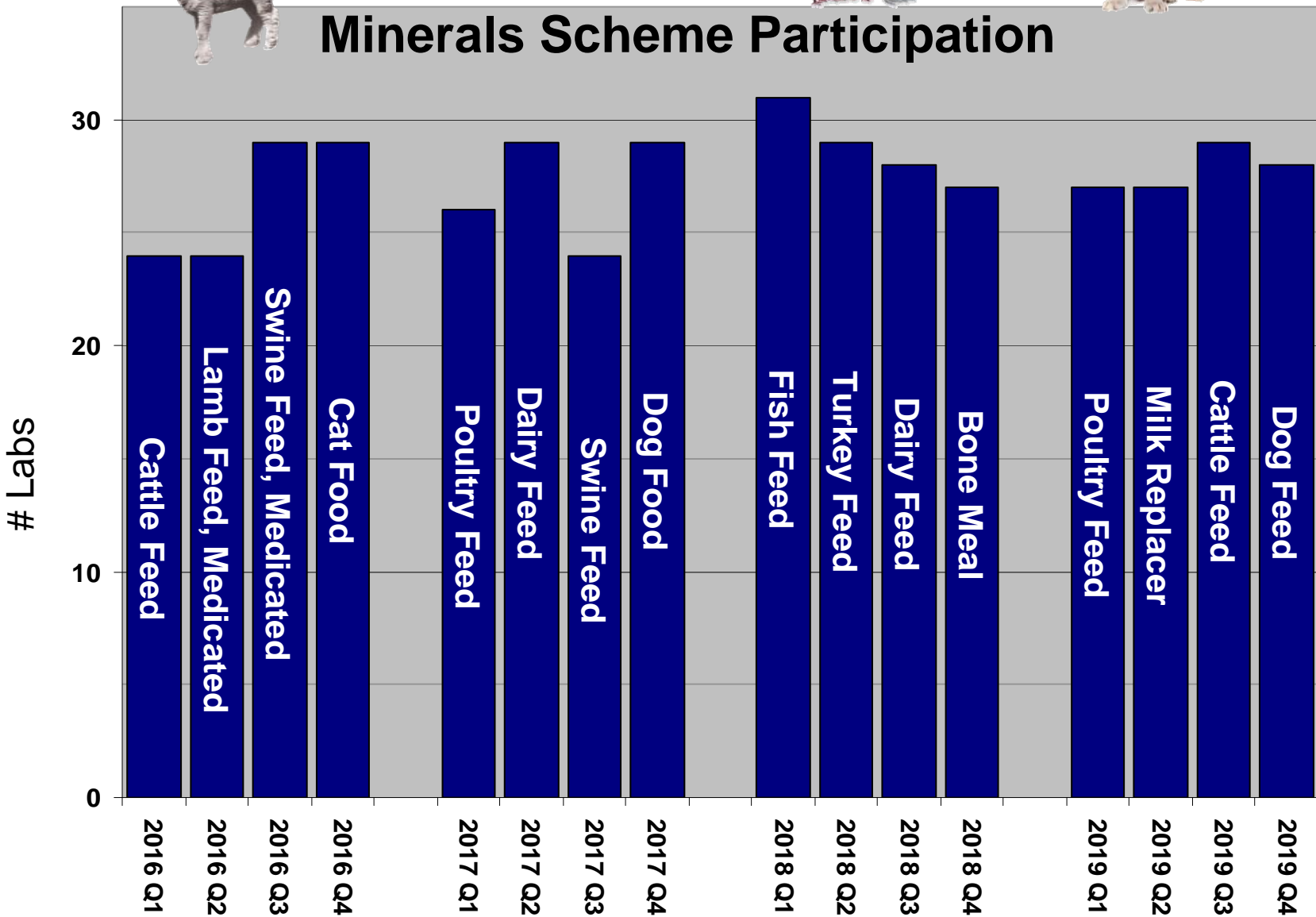
Proximates (F, Fi, A, M, P)	264
Minerals	219
Heavy Metals (As, Cd, Cr, Pb, Hg, Ni)	42
Vitamins Etc...	56
Amino Acids	58
Sugars & Total Sugars	21
Drugs	48
Fatty Acids	12



**Compare with
Minerals Scheme:
33 Labs in 2019**

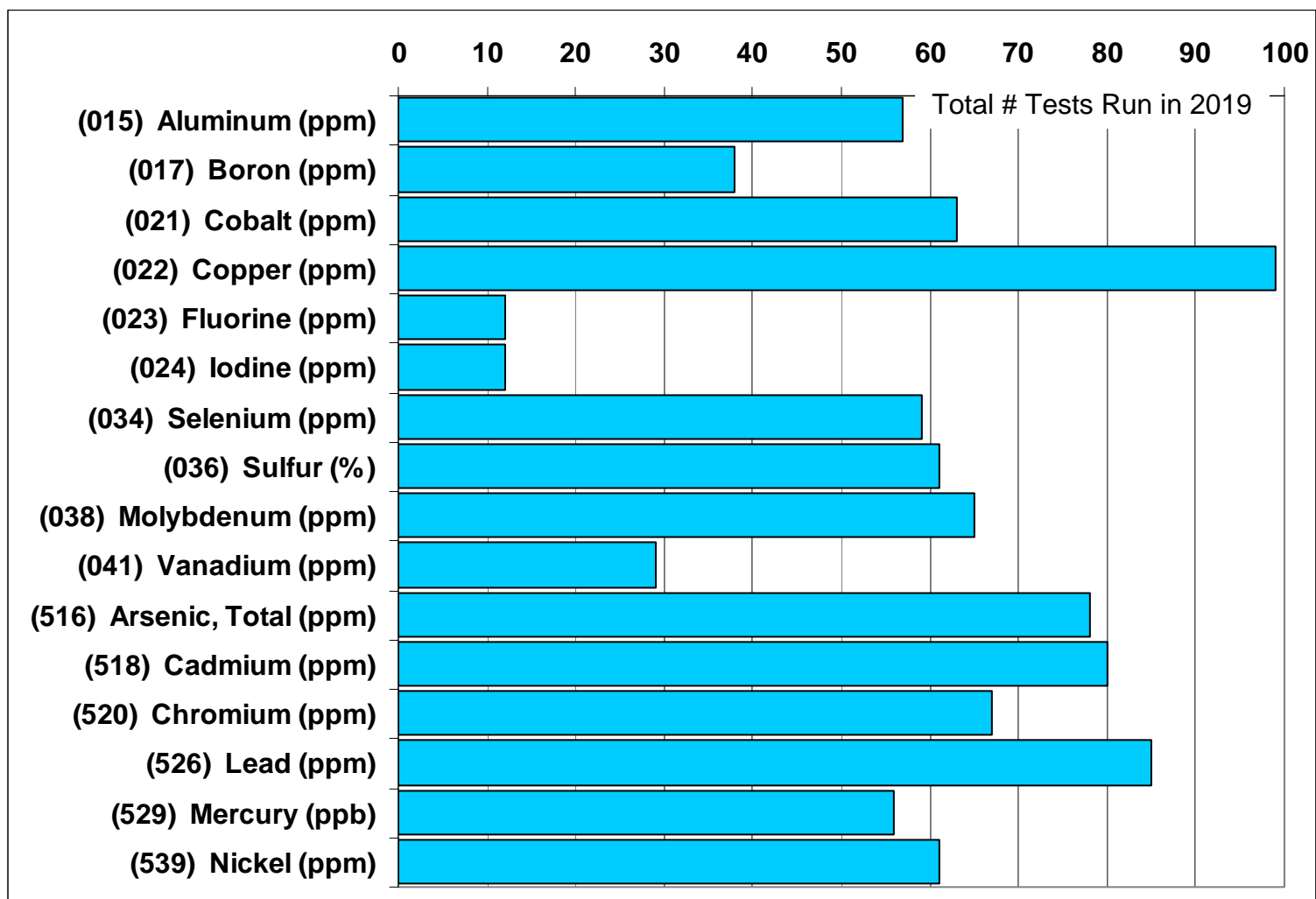


Minerals Scheme Participation

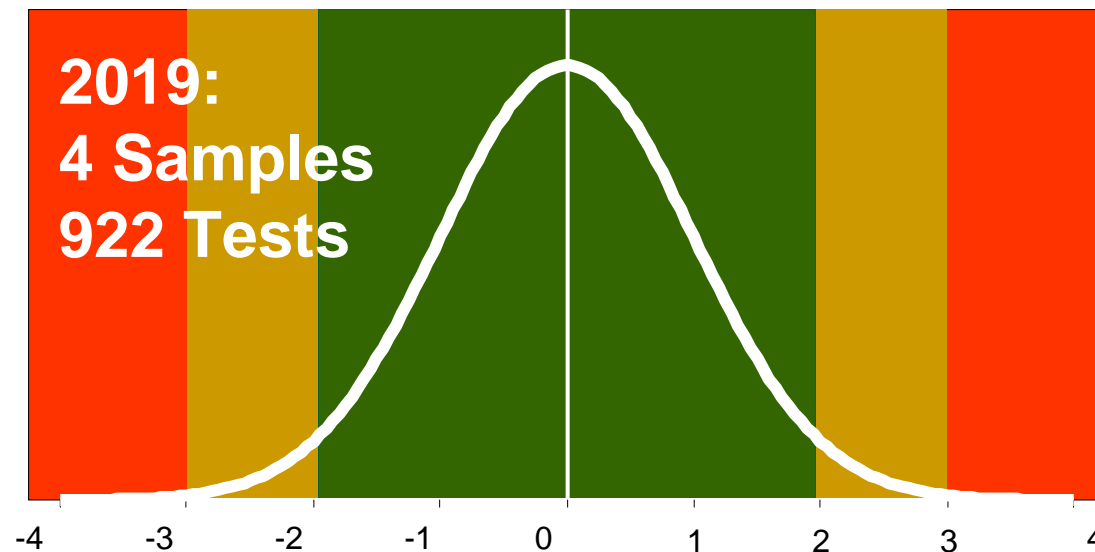


2019 Analyte Participation

Minerals Scheme



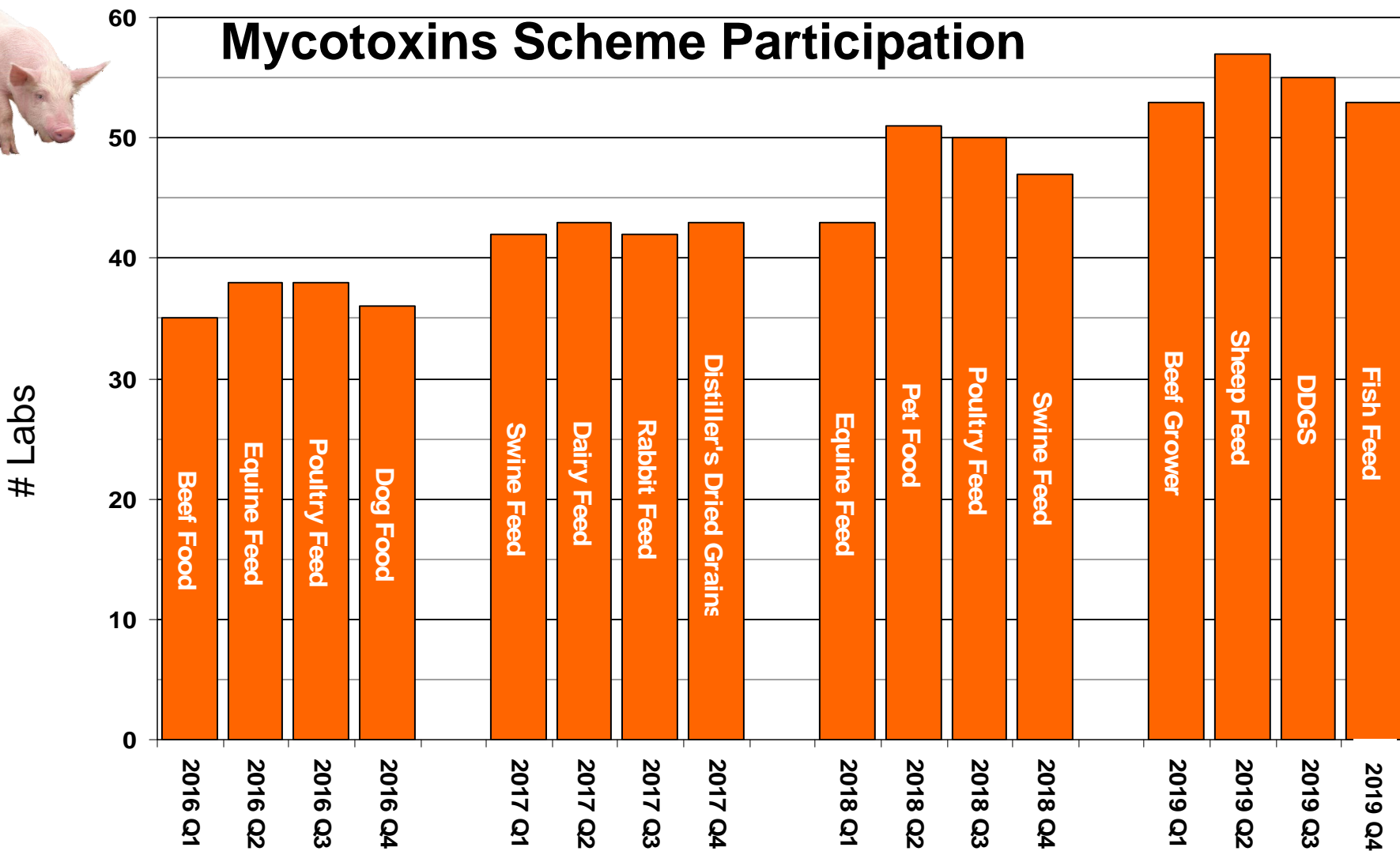
Z-Score Indications in Minerals Scheme (Horwitz ffp SD for PT)



<p>Compliance</p> <p>$2 > Z > -2$</p>	<p>Warning</p>	<p>Actionable</p> <p>$3 < Z < -3$</p>
<p>82.4%</p>	<p>8.0%</p>	<p>9.6%</p>

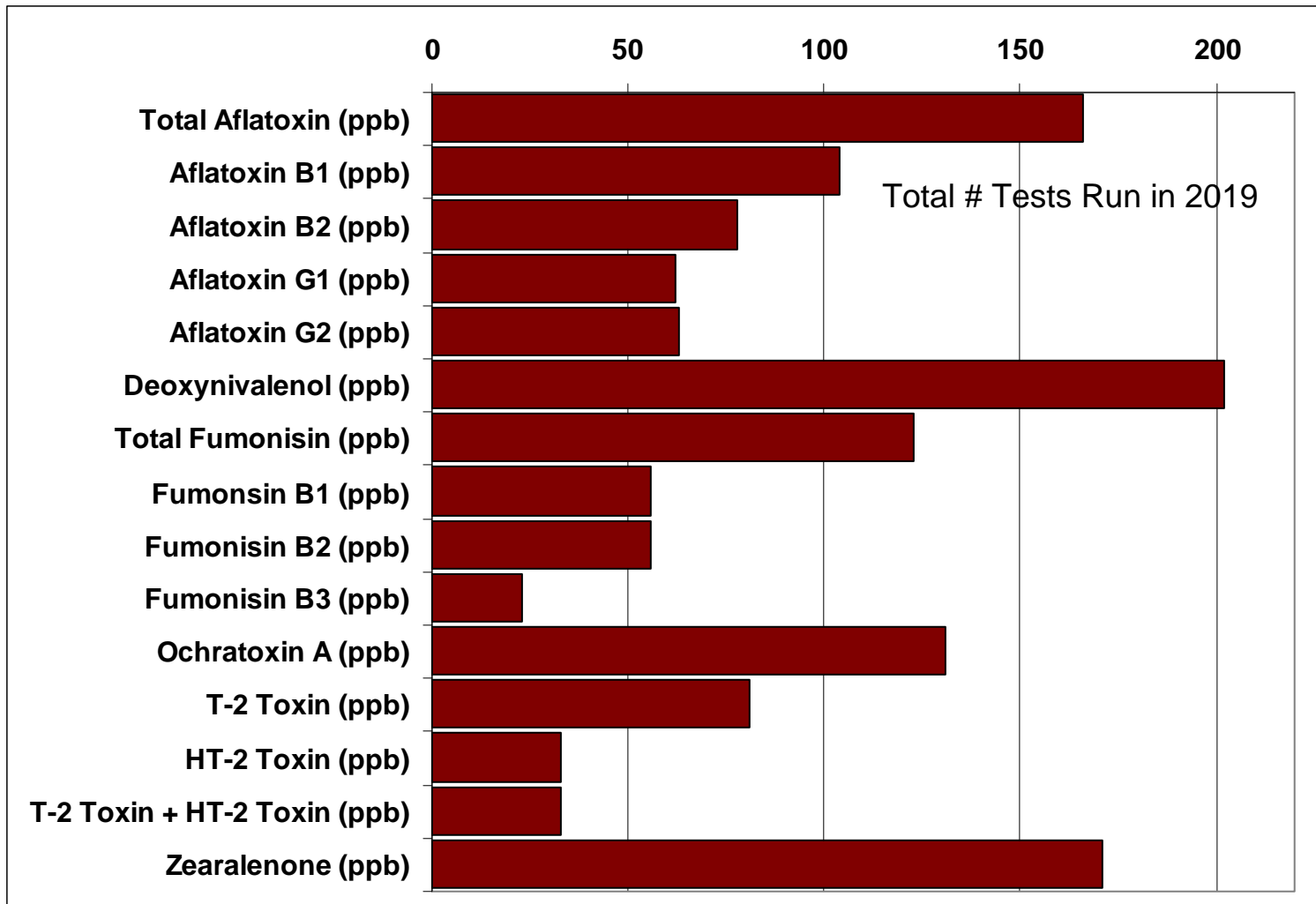


Mycotoxins Scheme Participation



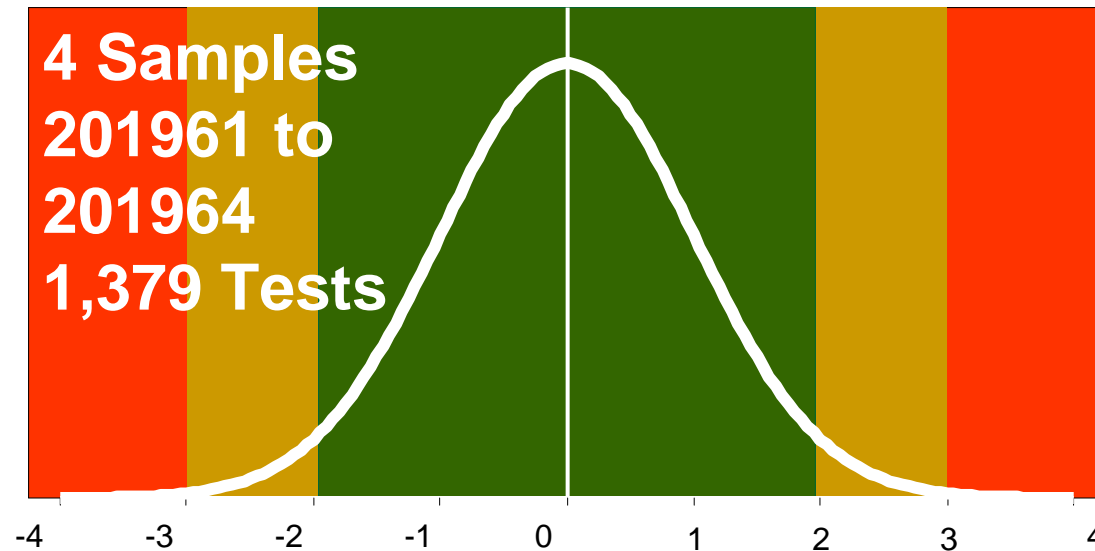
2019 Analyte Participation

Mycotoxin Scheme

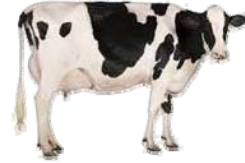


Z-Score Indications in Mycotoxin Scheme

(Modified Horwitz ffp SD for PT)



Modified Horwitz 2018 Adjustment	Compliance $2 > Z > -2$	Warning	Actionable $3 < Z < -3$
	89.0%	5.7%	5.3%



2019 Scheme Participation Ordering Numbers



Scheme	# Labs Placing Order	# Samples Ordered
Pet Food Ingredient Scheme	74	90
Minerals Scheme	42	42
Mycotoxin Contaminants Scheme	74	80
Animal Feed Scheme	261	280

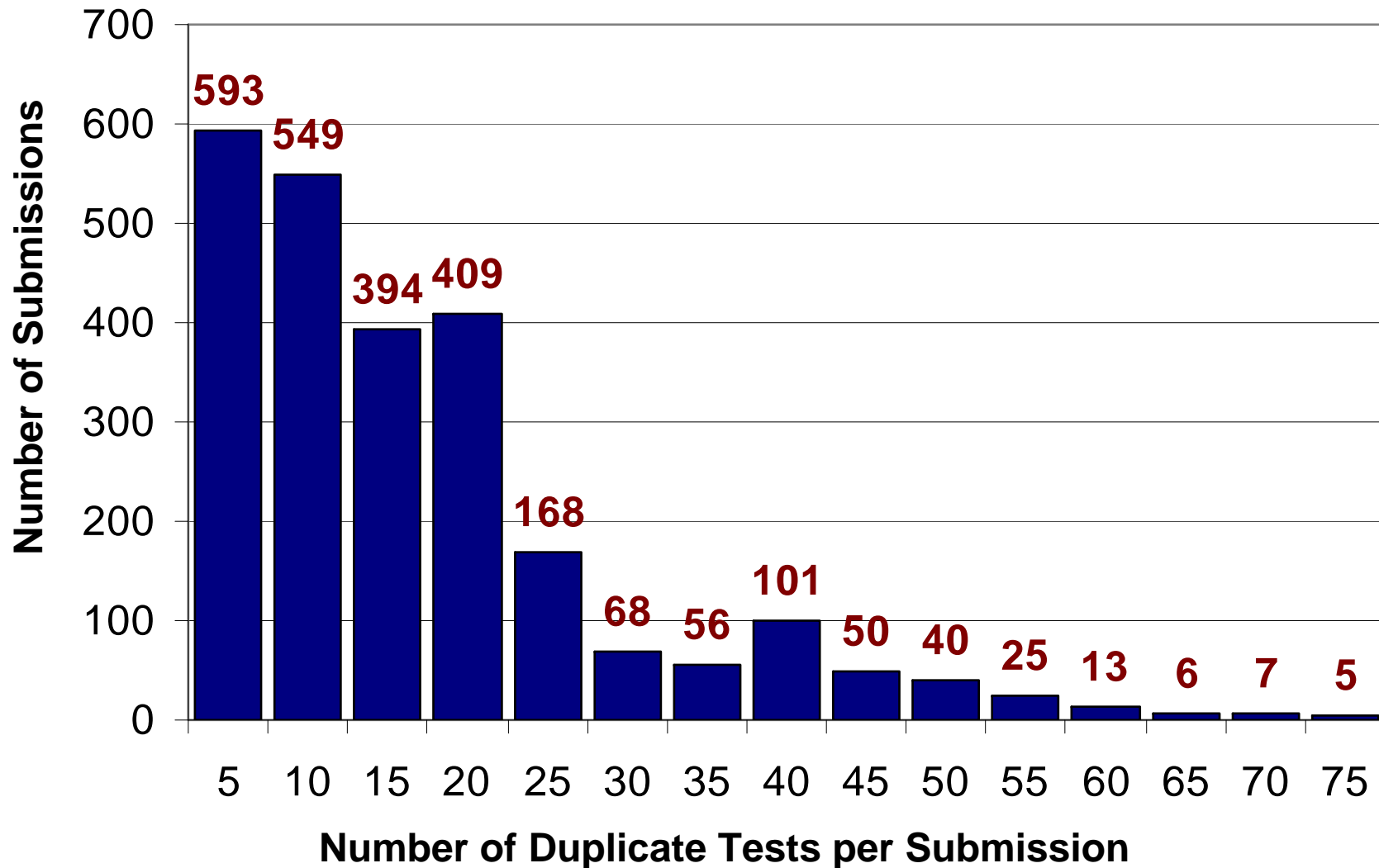


Talking About Participation:

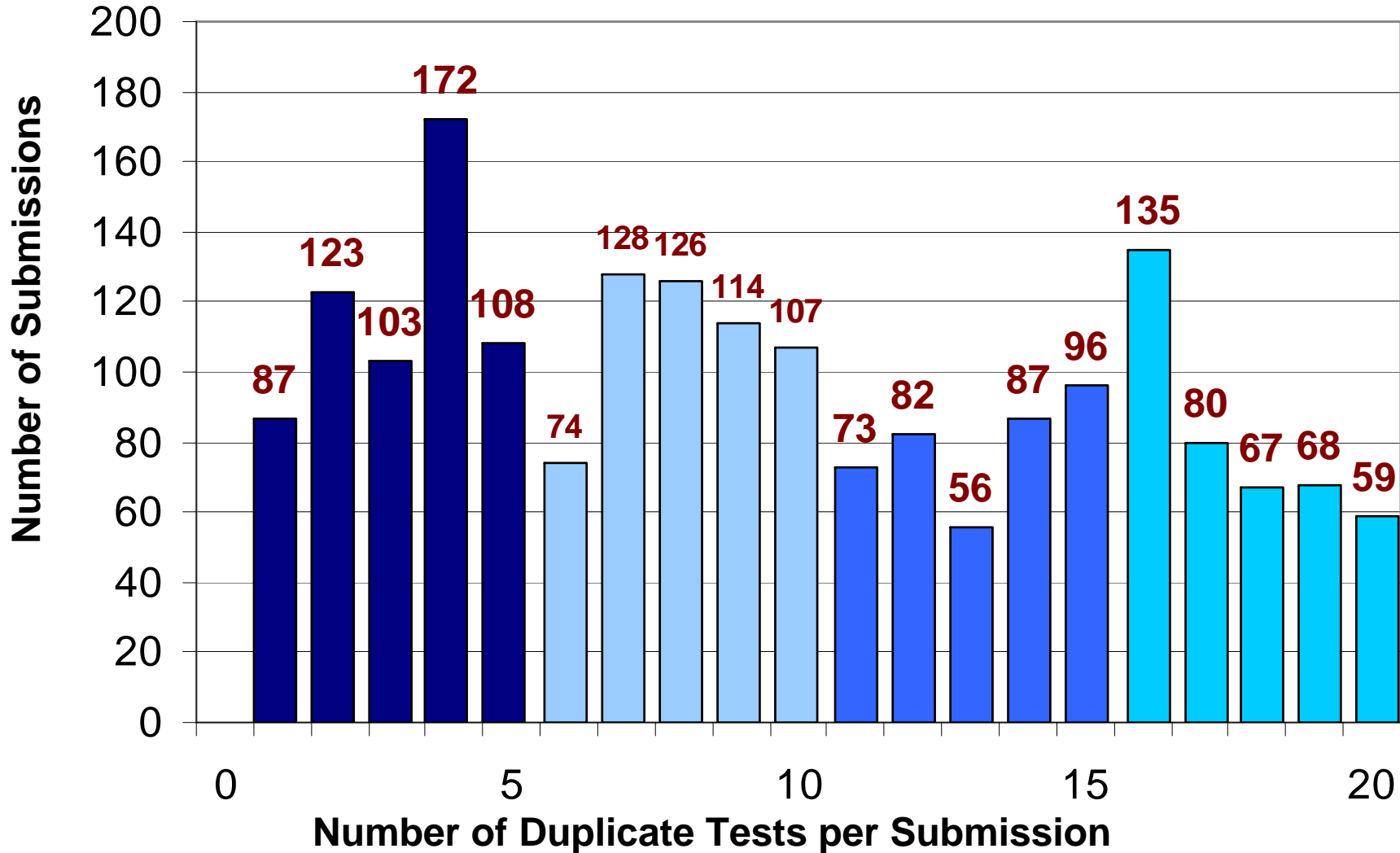
**How many Duplicate Analytical
Tests are submitted by Labs for
the 2019 Samples?**

**Test Case: AAFCO Animal Feed Scheme
271 Participating Labs in 2019**

2019 # Duplicate Tests per 2,484 Lab Submissions



**2019 # Tests per Lab Submission
1st Four Bins Expanded**



Some Takeaways:

- 271 Labs submitted 37,445 Duplicate Analyses in 2019.
- That's a Mean 138 Duplicate Analyses /Lab/Year.
- 271 Labs submitted data 2,484 times in 2019.
- That's approximately 9 Samples/Lab/Year. **NOT 13!**
- 1,062 Tests offered in DRW.

Number of Duplicate Tests per Lab Submission		
# Duplicate Tests/Sample/Lab	# Lab Submissions	
Median = 12	82	3.3%
Mode = 4	172	6.9%
1 Duplicate Test	87	3.5%
>= 30 Duplicate Tests	321	12.9%
>= 70 Duplicate Tests	6	0.2%

HAPPY NEW YEAR, 2020

**Comments,
Queries?**

