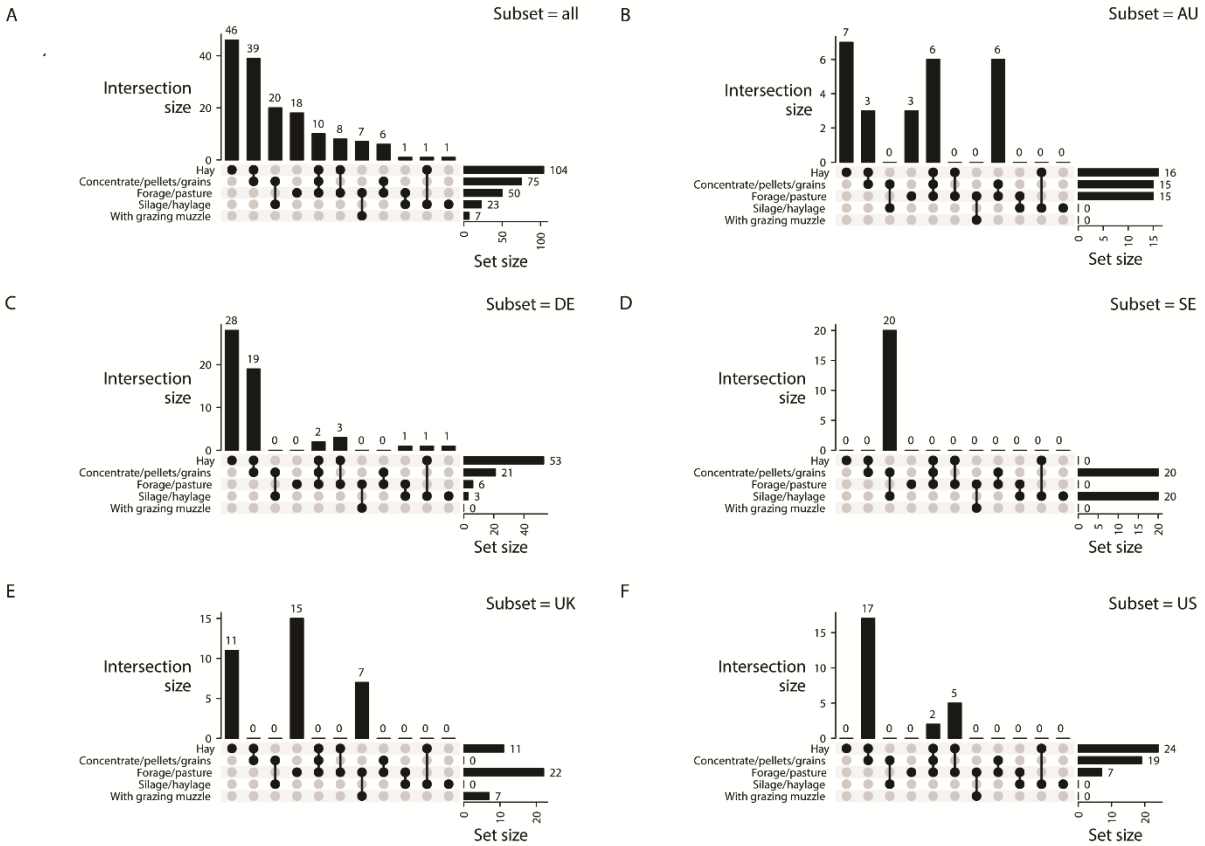


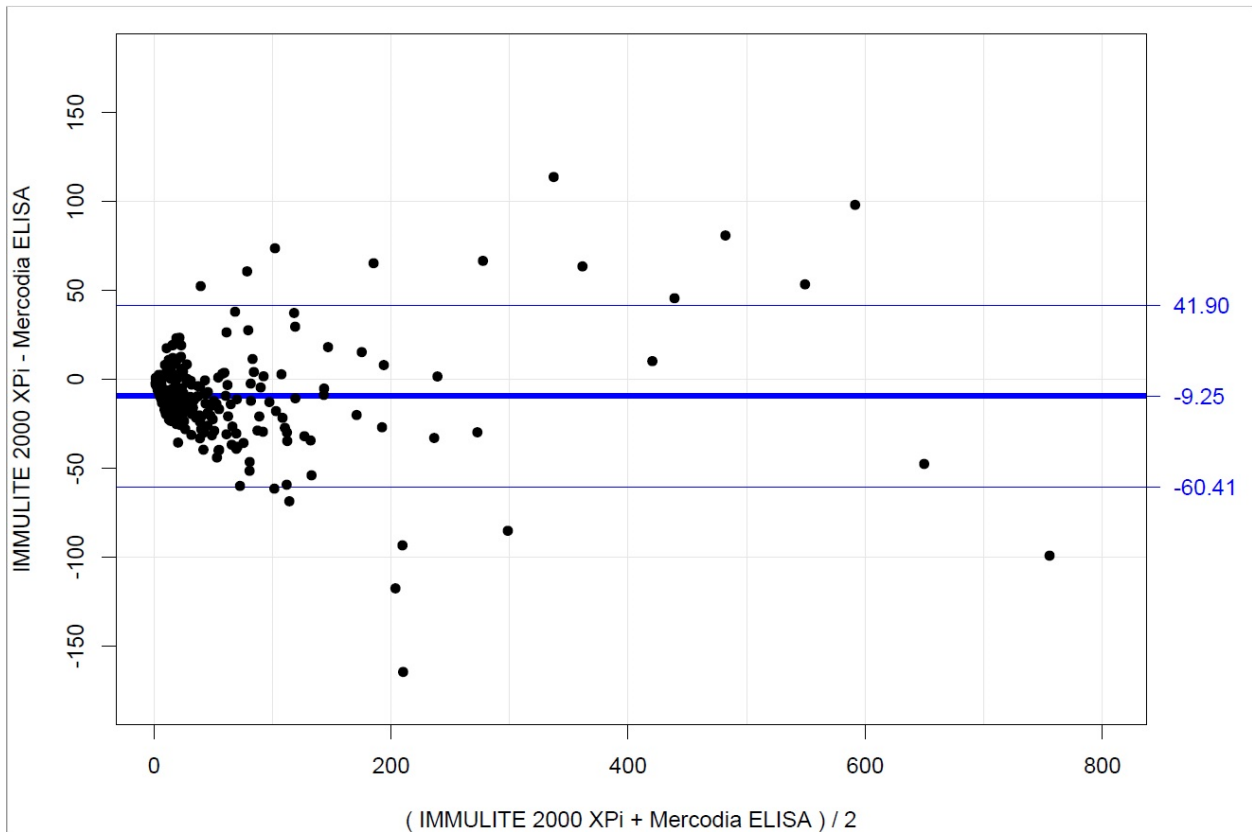
**Supporting Information Item 1:** Horses and ponies ( $n = 157$ ) used to test a glycemic pellet comprised 31 different breeds that were classified as prone to Equine Metabolic Syndrome (EMS) or not.

<b>Breed</b>	<b>Number</b>	<b>EMS prone?</b>	<b>Breed (con't)</b>	<b>Number</b>	<b>EMS prone?</b>
<b>Appaloosa</b>	4	Y	<b>Icelandic Horse</b>	13	Y
<b>Arabian</b>	2	N	<b>Irish Draft</b>	1	Y
<b>Australian Stock Horse</b>	2	N	<b>Mecklenburger</b>	1	N
<b>Australian Riding Pony</b>	5	Y	<b>Miniature Horse</b>	2	Y
<b>Belgian Draft</b>	1	N	<b>Morgan</b>	6	N
<b>British SH</b>	1	N	<b>Oldenburger</b>	2	N
<b>Clydesdale</b>	2	N	<b>Percheron</b>	2	N
<b>Cob</b>	8	Y	<b>Przewalski</b>	1	Y
<b>Connemara Pony</b>	2	Y	<b>Quarter Horse</b>	8	Y
<b>Danish Warmblood</b>	1	N	<b>Shetland pony</b>	16	Y
<b>Fjord</b>	2	Y	<b>Standardbred</b>	24	N
<b>Friesian</b>	2	Y	<b>Thoroughbred</b>	6	N
<b>German Riding Pony</b>	6	Y	<b>Warmblood</b>	1	Y
<b>Haflinger</b>	1	N	<b>Welsh</b>	14	Y
<b>Hanoverian</b>	16	N	<b>Westphalian</b>	1	N
<b>Holsteiner</b>	1	Y	<b>Other</b>	3	

**Key:** Y, yes; N, no



**Supporting Information Item 2.** Horses and ponies (A;  $n = 157$ ) undergoing and oral glycemc challenge in 5 locations (Australia (B), Germany (C), Sweden (D), United Kingdom (E), USA (F)) had been receiving a diet that differed between locations but contained some form of forage (hay > forage/pasture > silage/haylage) as the principal dietary component, and possibly also concentrated feed. Access to pasture was with grazing muzzle in some individuals.



**Supporting Information Item 3.** A Bland-Altman plot showing the limits of agreement between the IMMULITE 200XPi and Mercodia Equine Insulin Assay for the analysis of serum insulin concentration in horses and ponies ( $n = 300$ ).