

## Definitions for the Geriatric Horse Owner

**ACTH test (adrenocorticotrophic hormone test):** ACTH is the major hormone produced by the abnormal pituitary gland; elevated levels indicate PPID; very sensitive test which requires careful handling of samples for accurate results

**Beet Pulp:** the fibrous material left over after the sugar is extracted from sugar beets; good source of digestible fiber but low nutritional value

**Complete Feeds:** roughage included with grain; hay or pasture is optional when feeding this diet

**C3 plants:** these plants tend to grow best in northern climates; their peak growing season is when it is cool, i.e. spring and fall; examples include Kentucky Bluegrass, brome, timothy, canary, orchard, and fescue

**C4 plants:** these plants grow best in warmer climates; their peak growing season is in summer; examples include Bermuda, bluestem, and native prairie grass

**Cushing's Disease:** also known as pituitary adenoma, pituitary hyperplasia, pituitary tumor, and pituitary pars intermedia dysfunction (PPID); an overactivity of the pituitary gland, which may or may not be tumor related; clinical signs include long, curly hair coat, lethargy, weight redistribution, chronic laminitis, increased drinking, increased urination, increased susceptibility to secondary disease and parasitism; usually occurs in horses in late teens to early 20s

**Cyproheptadine:** treatment used in the past for PPID; however, many developed resistance to this drug; still used in combination with pergolide for horses uncontrolled on pergolide alone

**Caudal Hooks:** sharp point, usually of the last lower molar, resulting in excessive wear of the opposing tooth and/or soft tissue trauma

**Dental abnormalities:** often occur in the geriatric patient due to normal wear of the teeth; clinical signs indicating a problem include difficulty eating, slow eaters, quidding, foul odor from nose or mouth, and weight loss

**Dexamethasone Suppression test:** test of choice to confirm PPID; involves administering steroid in the early evening hours and drawing a blood sample the next morning to test cortisol levels; normal horses will suppress their cortisol levels, while those with PPID will have a reduced/ lack of response; not ideal test for horses acutely laminitic

**Diastema:** abnormal space which occurs between two adjoining teeth

**Dry Matter:** represents everything in a feed sample except water: if a feed is high in water content, an animal will need to consume more to get the nutrients needed. For example, if an animal eats 10 lbs of hay at 90% dry matter, it ate 9 lbs of dry matter. The same animal eating grass which was 20% dry matter would need to eat 45 lbs to get the same nutrient amount.

**Equine Metabolic Syndrome (EMS):** affects horses between generally 8-18 years of age; some breed prevalence (gaited horses, all pony breeds, and mustangs); clinical signs include fat accumulations in crest of neck, over shoulder and rump, tailhead, and the sheath of geldings, infertility, and chronic laminitis or founder; best treated with diet alteration and exercise

**Ethanol Soluble Carbohydrates (ESC):** carbohydrates solubilized and extracted in 80% ethanol; primarily includes simple sugars like glucose, fructose, sucrose, lactose, and fructo-oligosaccharides

**Founder:** when laminitis has become severe enough to allow tearing of the connective tissue between the coffin bone and hoof wall, allowing rotation of the coffin bone; these changes are not reversible and can negatively affect the amount/type of work to which the horse can return; rotation can be severe enough to result in euthanasia

**Hay stretcher:** hay which has been processed into a pellet for easier chewing and digestion; NOT the same as hay cubes

**Insulin Resistance:** surface receptors on cells become insensitive to circulating insulin leaving high levels of glucose circulating in the bloodstream; believed to be a contributing factor in obesity associated laminitis

**Laminitis:** inflammation and minor damage to the soft connective tissue between the coffin bone and the hoof wall; with proper care these horses can return to previous work levels

**Non Structural Carbohydrates (NSC):** the fractions of water soluble carbohydrates and starch added together; not widely used as its definition can vary from analysis to analysis

**Pelleted feed:** concentrated blend of grain blended into a pellet form; hay and/or pasture necessary with this type of feed

**Pergolide:** the treatment of choice for PPID; currently only available in compounded forms

**Periodontal Pockets:** gum disease around the root of the tooth allowing a pocket to form; feed often packs into these areas and can result in root abscesses

**Quidding:** dropping of poorly chewed feed boluses from the mouth; often a sign of missing or severely worn teeth in the geriatric horse

**Ramp:** gradual sloping incline of lower premolars

**Rostral Hooks:** upper front premolars overhang lower premolars, causing sharp points; often results in worn lower premolar, trouble with the bit, and chewing problems

**Starch:** a polysaccharide found mainly in the grain or seed and/or root portions of plants and a good source of energy

**“Sinkers”:** some foundering horses will have little or no rotation, but the connective tissue holding the coffin bone in place may tear/degenerate enough to cause the coffin bone to drop vertically

**Textured sweet feeds:** blend of grains, generally with molasses base; hay and/or pasture necessary with this type of feed

**Water Soluble Carbohydrates (WSC):** carbohydrates that are soluble in water; includes simple sugars and fructans

**Wave complexes:** molar arcade develops an uneven “wavelike” appearance; may involve premolars or molars of either upper or lower teeth; causes premature wear of teeth, difficulty chewing feed, and improper grinding of feed