



Paleo Approved

Program Requirements for Camels

1. PALEO APPROVED

The Paleo Approved Requirements for Grass-fed and Grass-finished, Humanely Treated, Free Range, Antibiotic-free, and Hormone-free Camels are outlined herein along with Paleo Approved Guidelines for Shipping and Management. These standards apply to all farms and ranches certified by The Paleo Foundation for the production of market animals and products in the Paleo Approved Program. Only certified farms and ranches following these standards are explicitly given the rights to use Paleo Approved logos, trademarks, certification marks, or other design marks hereinafter referred to as The Paleo Approved Label.

1.1 APPLICABILITY OF THE PALEO APPROVED LABEL

The Paleo Approved Label was developed and trademarked by The Paleo Foundation to identify food products that meet the standards of the Paleo Diet. The Paleo Approved Label is a certification mark registered with the U.S. Trademark and Patent Office, and its use is only permitted by those who have entered into a contractual agreement with The Paleo Foundation. The Paleo Approved Label was designed to establish an easily identifiable mark indicating that a product has met the strictures of the Paleo Diet and merit use of the Paleo Approved Label. Paleo Approved requirements may be amended periodically based on current research.

1.2 APPLICABILITY OF THE PALEO APPROVED LABEL

1.2.1 The Paleo Approved Label is allowed to be used on packaging, promotional materials, point of purchase materials, websites, sales literature, banners, company stationery, and other advertising materials. Use of The Paleo Approved Label must comply with the guidelines as outlined in this document. If a company wishes to present the logos in a manner other than as described in Statement of Use Guidelines, The Paleo Foundation must approve the request and give permission in writing to the Producer.

1.2.2

Producers may display The Paleo Approved Label only on products that have been certified by Paleo Approved.

1.2.3

Producers must have a contractual agreement with The Paleo Foundation to use the Paleo Approved Label.

1.2.4

Producers may only use the trademark on company stationery if the entire product line has been audited and certified Paleo Approved.

1.2.5

If the entire product line has been audited and certified Paleo Approved, Producers may display The Paleo Approved Label on their entire website.

1.2.6

If the entire product line was not certified, The Paleo Approved Label may appear on a page containing audited and certified Paleo Approved products only.

1.2.7

Products that have not been audited and certified Paleo Approved are not permitted to appear on the same page as The Paleo Approved Label, as this could be misleading to consumers.

1.3 APPLICABILITY OF THE PALEO APPROVED LABEL

1.3.1

To complete the application process, the applicant must sign an affidavit stating that all answers and statements provided in their application were true to the best of their knowledge.

1.3.2

Use of the Paleo Approved Label is only permitted after audit and certification by Paleo Approved of the applicant's farm or ranch.

1.3.3

The Paleo Foundation retains the right to make unannounced visits to applicant's farms or ranches to verify that all Paleo Approved Requirements are continuously being met.

1.3.4

The Paleo Foundation retains the right to inspect the applicant's products to verify that all Requirements are met.

1.3.5

Use of The Paleo Approved Label for any product which does not meet each of the Paleo Approved Requirements, has not been audited, or has not been given explicit permission is strictly prohibited.

1.3.6

Misuse of The Paleo Approved Label will result in immediate suspension of the agreement and/or prosecution.

1.3.7

The Paleo Approved Label must be :



- 1) Upright
- 2) Complete
- 3) Clearly Visible
- 4) Paleo Approved File
- 5) At least 1/2 inch in diameter

2. GRASS FED

Camels are raised on pesticide-free, synthetic fertilizer-free pasture and provided a natural, species-appropriate diet consisting of forbes, browse, and grasses for the duration of its lifetime.

2.1 APPLICABILITY OF THE PALEO APPROVED LABEL

2.1.1

All livestock in the Paleo Approved Program must be forage-fed (post-weaning) for the entirety of its life. Only grasses and forage may be consumed, with the exception of milk consumed prior to weaning, and oat supplementation equating to less than 2% of the diet.

2.1.2

Animals in the program must maintain a diet of forage, which consists of grasses, forbs, browse, or crops still in the vegetative state.

2.2 CONFINEMENT AND SUPPLEMENTATION GUIDELINES

2.2.1

All animals in the Paleo Approved Program must be maintained at all times on pasture, out on the range, or in sub-pasture paddocks.

2.2.2

Animals in the program may not be confined to pens, feedlots, or other areas of confinement. Note: exceptions to sections 2.2.1 and 2.2.2 are limited to emergencies that threaten animal welfare, routine weight and deworming processes, or during milking.

2.2.3

Animals in the program may be fed hay, haylage, baleage, silage crop residue, or roughage while on pasture.

2.2.4

Feeding of non-forage supplements is prohibited after weaning, except as outlined above.

2.2.5

Cereal crops that are harvested after seed production are not permitted for use as feed, except as outlined above.

2.2.6

Allowing a cereal grain crop to go to seed before grazing or harvesting for stored forage is prohibited, except as outlined above..

2.2.7

Animals in the program must be maintained on 98% forage diet after weaning. Feeding of non-forage supplements is strictly prohibited, except as outlined above..

2.2.8

Feeding banned feedstuffs (section 2.3) to animals in the Paleo Approved Program is prohibited and will result in the loss of Paleo Approved Certification Status without refund.

2.3 BANNED FEEDSTUFFS LIST

The following is the list of banned feedstuffs in the Paleo Approved Program. Paleo Approved may revise this list if deemed necessary by results of future research review. Prohibited feedstuffs include:

- 1) Corn, Soy or Soybean oil
- 2) Cereal Grains (Except oats)
- 3) Milk replacers containing antibiotics and growth hormones
- 4) Non-protein sources of nitrogen
- 5) Antibiotics
- 6) Hormones

2.4 DEFINITIONS

Baleage or Round Bale Silage: A practice that involves cutting the forage crop with conventional hay harvesting equipment, allowing the forage to wilt to between 30 and 60 percent dry matter, then baling it into tight bales and wrapping them immediately. Bales are wrapped mechanically using bale-wrapping equipment that tightly stretches several layers of plastic around the hay to exclude oxygen and allow proper ensiling. (1)

Boot Stage: The flag leaf is fully expanded, but the awns and grain head are not visible. The grain head can be felt in the flag leaf sheath. (1)

Brassicas: A Family of very productive annual forage vegetables used as transition crops between pasture renovations or as a supplemental feed source for extending the grazing season when other forages are less productive i.e., turnips, rape, and kale. (1)

Browse: 1. Leaf and twig growth of shrubs, woody vines, trees, cacti, and other nonherbaceous vegetation available for animal consumption. 2. To browse; the consumption of browse in situ by animals. (1)

Caryopsis: A small, one-seeded, dry fruit with a thin pericarp surrounding and adhering to the seed; the seed (grain) or fruit of grasses. (1)

Concentrate: All feed, low in fiber and high in total digestible nutrients, that supplies primary nutrients (protein, carbohydrate, and fat); for example, grains, cottonseed meal, wheat bran. (1)

Crop Residue: Portion of plants remaining after fruit and/or seed harvest, said mainly of grain crops such as corn stover or of small grain straw and stubble. (1)

Diet: The feed regularly offered to/or consumed by an animal. (1)

Dough Stage: The kernel is filled with starch and is well formed. There is no milky fluid, only a rubbery, dough-like substance. (1)

Dormancy: In a state of being dormant when no active growth is occurring. (1)

Ensilage: The same as silage. (1)

Ensiled: Having been subjected to anaerobic fermentation to form silage. (1)

Feedstuff: Noun. any of the constituent nutrients of an animal ration. (1)

Fermentation: Chemical changes brought about by enzymes produced by various microorganisms. (1)

Forage: Any herbaceous plant material that can be grazed or harvested for feeding, with the exception of grain. (1)

Forb: Any herbaceous broadleaf plant that is not a grass and is not grass-like. (1)

Fruit: 1. Noun. The usually edible reproductive body of a seed plant in particular, one having a sweet pulp associated with the seed. 2. Noun. A product of fertilization in a plant with its modified envelopes or appendages, in specific the ripened ovary of a seed plant and its contents. (1)

Grain: 1. Noun. A single small hard seed: a seed or fruit of a cereal grass: caryopsis. 2. Noun. the seeds or fruits of various food plants including the cereal grasses and in commercial and statutory usage other plants (as the soybean): plants producing grain. (1)

Grain by-products: Feedstuff products derived from grains. I.e.- corn gluten pellets, dried distillers grains, wheat shorts, etc. (1)

Grass: Member of the plant Family Poaceae. (1)

Green chop: Forage harvested and fed in the green, chopped form, generally without seed. (1)

Growing Forage: Forage plants that aren't in the dormant (non-growing) state and thus are actively developing stem, leaf, and/or reproductive tissues for growth. (1)

Glucose: A hexose monosaccharide obtained upon the hydrolysis of starch and certain other carbohydrates. Also called dextrose. (1)

Hay: The aerial parts of forage crops stored in the dry form for animal feeding. (1)

Haylage: Haylage is the feed produced by storing in an airtight silo a forage crop which has been dried to a moisture level of about 45-55%. (1)

Herbage: 1. The biomass of herbaceous plants, other than separated grain, generally above ground but including edible roots and tubers. 2. Noun. Green plants especially when used or fit for grazing. (1)

Hydrolysis: The splitting of a substance into the smaller units by its chemical reaction with water. (1)

Inflorescence: 1. Noun. A floral axis with its appendages. 2. Noun. a flower cluster of which there are at least 9 recognized types. (1)

Kernel: A mature ovule of a grass plant that has the ovary wall fused to it. Same as caryopsis. (1)

Legumes: members of the Fabaceae plant family (formerly known as the Leguminosae family). Legumes are dicots (produce two seed leaves), produce seed in a pod, have netted leaf venation, and usually have a taproot type of root system. Most legumes have the ability to interact with bacteria of the genus *Rhizobium* to fix nitrogen in nodules on their roots. Legumes may have one of four different types of seedheads. These seedhead types are the raceme, the spike, the head or umbel. (1)

Meadow: Area covered with grasses and/or legumes, often native to the area, grown primarily for hay but with secondary grazing potential. (1)

Milk Stage: In grain (seed), the stage of development following pollination in which the endosperm appears as whitish liquid that is somewhat like milk. (1)

Mineral: 1. Noun. a solid homogeneous crystalline chemical element or compound that results from the inorganic processes of nature. 2. Noun. Any of the various naturally occurring homogeneous substances obtained usually from the ground. 3) Noun. a synthetic substance having the chemical composition and crystalline form and properties of a naturally occurring mineral. (1)

Native Pasture: Native vegetation (predominantly herbaceous) used for grazing in untilled areas. The term tame or introduced is used instead of native for pastures that include mainly nonnative species. (1)

Paddock: A grazing area that is a subdivision of a grazing management unit and is enclosed and separated from other areas by a fence or barrier. (1)

Pasture: 1. Noun. Forages which are harvested by grazing animals. 2. Noun. An area of land with 75% forage cover or unbroken land on which livestock may graze at will. (1)

Pastureland: Land devoted to the production of indigenous or introduced forage for harvest primarily by grazing. Pastureland generally must be managed to arrest succession processes. (1)

Pericarp: The ripened and variously modified walls of a plant ovary, especially those contributing the outer layer in a cereal caryopsis. (1)

Prairie: Nearly level or rolling grassland that was originally treeless; usually characterized by fertile soil. (1)

Range: Land supporting indigenous vegetation that is grazed or that has the potential to be grazed and is managed as a natural ecosystem. Includes grazeable forestland and rangeland. (1)

Rangeland: land on which the indigenous vegetation (climax or natural potential) is predominantly grasses, grass-like plants, forbs, or shrubs suitable for grazing or browsing use and is managed as a natural ecosystem. If plants are introduced, they are managed as indigenous species. Rangelands include natural grasslands, savannas, shrublands, most deserts, tundra, alpine communities, coastal marshland, and wetland meadows. (1)

Ration: the total amount of feed (diet) allotted to one animal for a 24-hour period. (1)

Residue: that which remains of any particular substance. (1)

Roughage: Any feed high (over about 20%) in crude fiber and low (under about 60%) in total digestible nutrients, on an air-dry basis. Opposite of concentrate. (1)

Seed: 1. Noun. Ripened mature ovule consisting of an embryo, a seedcoat, and a supply of food that, in some species is stored in the endosperm. 2. v. To sow, as to broadcast or drill small-seeded grasses, legumes, or other crops. (1)

Seedhead: See inflorescence. (1)

Separated Grain: Grain that is detached from cereal crop plants. (1)

Silage: "The feed resulting from the storage and fermentation of green or wet crops under anaerobic conditions." "Normally contains only about 25-35% dry matter (DM). Practically any crop may be made into silage, provided it contains an appropriate level of moisture, adequate amounts of readily fermentable carbohydrates, and adequate levels of other nutrients, and provided it can be sufficiently packed." (1)

Starch: A polysaccharide having the formula (C₆H₁₀O₅) Noun. Many plants store energy in the form of starch. Starch is a major component of most livestock rations (especially fattening rations) and is highly digestible. Yields glucose upon complete hydrolysis. (1)

Stockpiled Forage: Forage that has been allowed to accumulate on a pasture or paddock for grazing at a later period. Forage is often stockpiled for autumn and winter grazing after or during dormancy or semi-dormancy, but stockpiling may occur at any time during the year as a part of a forage management plan. Stockpiling can be described in terms of deferment and forage accumulation. (1)

Stover: The matured cured stalks of such crops as corn or sorghum from which the grain has been removed. A type of roughage. (1)

Stubble: The basal portion of the stems of herbaceous plants left standing after harvest. (1)

Supplement: A nutritional additive (salt, protein, phosphorus, etc.) intended to improve the nutritional balance and remedy deficiencies of the diet. (1)

Supplemental Feeding: The practice of supplying feedstuffs to correct nutritional deficiencies in an animal's "natural" diet. (1)

Vegetative: Non-reproductive plant parts, (leaf and stem) in contrast to reproductive plant parts (flower and seed) in developmental stages of plant growth. The non-reproductive stage in plant development. (1)

Vegetative State: Stage prior to the appearance of fruiting structures. (1)

Vitamin: Noun. Any of various organic substances that are essential in minute quantities to the nutrition of most animals and some plants that act especially as coenzymes and precursors of coenzymes in the regulation of metabolic processes. (1)

2.5 CAMEL PURCHASING GUIDELINES

2.5.1

Animals in The Paleo Approved Program must be 100% traceable from birth to harvest. This must include documentation of diet and health of the animal from the Supplier's farm or ranch from which they were purchased.

2.5.2

Each Producer must implement an identification system to allow for a rapid and effective 48-hour trace-back on each animal.

2.5.3

Records must be complete and current on all market animals in the program that are purchased, sold, or harvested.

2.5.4

Records must be complete and current on all purchased market animals brought onto the farm that are entered into the Paleo Approved program.

2.5.5

Records must indicate that the supplier adhered to all Paleo Approved Program Requirements while raising the animal.

2.5.7

All required records must detail compliance with Paleo Approved Requirements.

3. HUMANELY TREATED

Farmers must comply with any local, state, and federal requirements for Camels production. Paleo Approved Program Requirements do not preclude the Veterinary Practices Act of their State.

3.1 FOOD GUIDELINES

3.1.1

Animals must have continuous access to feed and water without undue competition.

3.1.2

Camels must be fed a diet which is:

- 1) Age appropriate
- 3) Sufficient quantity to maintain health
- 4) Formulated to satisfy ruminant needs

3.1.3

Camels must have free access to food each day, aside from when otherwise directed by an attending veterinarian.

3.1.4

Animals in the Paleo Approved Program must not be kept in an environment likely to cause nutrient deficiencies.

3.1.5

Producers must be aware of any mineral deficiencies and excesses on the farm or ranch, and correct deficiencies as necessary.

3.1.6

Producers must be aware of the location of unsuitable feedstuffs, and remedy the environment and/or minimize animal access.

3.2 WATER GUIDELINES

3.2.1

Camels must have access to an adequate supply of clean drinking water at all times unless otherwise directed by a veterinarian.

3.2.1

A supply of clean water must always be available to Camels that are kept at pasture. This includes ensuring that animals have access to a water supply that is devoid of ice.

3.2.2

When automatic water systems are used instead of sources such as creeks, ponds, or streams, they must be checked at least daily to ensure functionality.

Note:

Water troughs should be accessed from concrete platforms whenever possible to keep from causing deep mud, which could negatively affect animal welfare.

3.2.3

All local, state, and federal laws must be adhered to regarding access to running or still water resources.

3.2.6

Producers must have provisions for an emergency supply of clean water.

3.3 ANIMAL THRIFTINESS AND CONDITION

3.3.1

Market animals must be fed an adequate amount to maintain full health throughout the course of their life. Forage must also be accessible at all times, unless otherwise directed by a veterinarian.

3.3.2

The environment in which livestock in the Paleo Approved program are kept must protect them from physical discomfort and distress. Excessive occurrence of the following may be indicative of environmental issues and must be addressed appropriately:

- 1) Calluses
- 2) Swelling
- 3) Injuries
- 4) Bruising
- 5) Infections
- 6) Laminitis
- 7) Hematomas
- 8) Abscesses
- 9) Broken bones and tails
- 10) Scars

3.4 HUMANE ENVIRONMENT

3.4.1

No holding facilities, handling facilities, buildings, or other structures that animals have access to should cause injury or undue distress to the animal. Buildings must be:

- 1) Well designed and constructed to promote animal care
- 2) Well maintained paying particular attention to handling pens
- 3) Regularly inspected

Fences must be:

- 1) Maintained so that they do not cause excessive pain or distress to animals.
- 2) Regularly inspected.

3.4.2

All alleyways, passages and gateways must be maintained in a manner that prevents injury to animals.

3.4.3

Buildings must be adequately ventilated so that livestock do not come into contact with any toxic fumes from chemicals, or aerosolized disinfectants.

3.4.4

Electrical installations, cords, and outlets must be:

- 1) Inaccessible to animals, with the exception of electric fencing.
- 2) Well insulated.
- 3) Properly grounded.
- 4) Regularly tested.

3.5 CALVING GUIDELINES

3.5.1

If a high risk of infectious disease occurs, consideration must be given to quarantining individual calves during rearing. Producers must consult a veterinary professional to determine local or state mandated quarantine lengths.

3.5.2

Producers must ensure that all personnel responsible for animal care and safety are proficient in animal welfare guidelines.

3.6 MANAGEMENT GUIDELINES

3.6.1

Managers must:

- 1) Develop and implement a training program for keepers.
- 2) Demonstrate that all personnel with responsibilities for animal care have the training and knowledge to perform their duties.
- 3) Develop and implement plans and precautions for emergencies that affect the animal welfare such as a fire, flood, and supply gap, and power failure.
- 4) Adhere to an animal health plan and record information appropriately.
- 5) Comply with all local, state and federal regulations.
- 6) Be able to identify and effectively manage animal health problems.
- 7) Understand the implications of calving, injection, castration, and dehorning.
- 8) Be aware of welfare requirements during breeding and selecting suitable bulls.

3.6.2

Personnel must be educated, trained, and competent in:

- 1) Recognizing signs of normal and abnormal behavior.
- 2) Recognizing and preventing disease, and when veterinary assistance is necessary
- 3) State and federal guidelines for proper nutrition.
- 4) Camels scoring systems.
- 5) Care, treatment, and the functional anatomy of the foot.
- 6) Recognizing abnormalities in the teat and udder.

3.6.3

An animal health plan must be drawn up and updated regularly. This plan must include documentation of:

- 1) Details of any vaccinations.
- 2) Causes of morbidity and mortality.
- 3) Disease outbreaks.
- 4) Calving issues.
- 5) Repetitive Physical Injuries.
- 6) Septicemia and Enteritis.
- 7) Infectious Diseases.
- 8) Production Disease.

3.6.4

Causes of sudden deaths, disease outbreaks, and mortality that cannot be readily identified by the manager should be investigated in consultation with a veterinarian.

3.6.5

Urine and feces from sick and injured Camels must be disposed of in a manner that prevents the transmission of infection.

3.6.6

Managers must be proficient in all procedures that could cause pain to the animals.

3.6.7

Sticks and flags must only be used as extensions of the arms and are prohibited to be used mistreat animals.

3.6.8

Electric prods are only a last resort control method and may not be used unless the physical safety of the animal or human is in danger.

3.6.9

Non-Abulatory animals must never be hoisted, dragged, or lifted with ropes or chains without the support of their own body weight. Humane procedures for handling non-ambulatory animals can be found in the "Proper Handling Techniques for Non-Ambulatory Animals" by the National Institute of Animal Agriculture.

3.7 IDENTIFICATION GUIDELINES

3.7.1

All chains and ear tags must be well fitted so it does not cause pain or injury to the animal.

3.7.2

Camels identification systems must be implemented by trained, proficient handlers.

3.8 EQUIPMENT GUIDELINES

3.9.1

Managers must be proficient in:

- 1) Operating equipment according to manufacturer's instructions
- 2) Maintaining the equipment in good operating order
- 3) Recognizing equipment malfunction
- 4) Acting quickly and appropriately during an equipment malfunction

3.9.2

Automatic equipment must be regularly inspected by a manager to ensure that it is in proper working order. If a defect is found in the equipment, it must be rectified promptly.

3.9 DISEASE MANAGEMENT GUIDELINES

3.9.1

All animals with communicable diseases must be isolated from the rest of the herd.

3.9.2

Replacement animals must also be quarantined, treated for diseases, and vaccinated as necessary before integration into the group is permitted.

3.9.3

Camels may need routine worming and vaccinations semiannually. Your local veterinarian should help with specific recommendations for your area. Routine lab results of fecal samples are recommended.

3.9.4

Administration of the CD/T vaccine for the prevention of enterotoxemia (overeating caused by *Clostridium perfringens* types C and D bacteria) and for long-term protection against tetanus is permissible in the Paleo Approved Program, as all animals are at risk for tetanus following infection through wounds, castrations, etc.

3.9.5

For pastures known to be selenium-deficient, it is recommended that hay be tested to contain selenium. Selenium/Vitamin E, Adult female camels receive an injection of Selenium/Vitamin E (by Merck) once a year to ensure sufficient selenium levels.

4. FREE RANGE

4.1

Confinement is only allowed when necessary, such as:

- 1) During a veterinary examination
- 2) During a feeding when necessary
- 3) During tagging, washing, and weighing
- 4) During a facility cleaning
- 5) During holding for transportation

4.2

Camels in the Paleo Approved Program must have continuous access to pasture for 100% of their lifetime, unless otherwise directed by a veterinarian or during hazardous conditions, or during transport.

4.3

Camels must be given adequate space to groom themselves, lie down, and stand up.

5. ANTIBIOTIC FREE

5.1

The producer must maintain a written record of all vaccines or any medicines administered to animals.

5.2

No antibiotics may be used except therapeutically, and as directed by a veterinarian.

5.3

Diagnosis and/or treatment to sick animals must not be delayed.

5.4

If antibiotics must be given to an animal for therapeutic reasons, reintegration into the Paleo Approved program is permitted after the treatment and recovery has been completed and a full 2 month time period has lapsed. However, sick animals must be treated with antibiotics when appropriate.

5.5

Managers must keep records of any antibiotics purchased and administered. Records must be available for The Paleo Foundation when requested.

6. HORMONE FREE

6.1

Hormones must never be administered to Camels in The Paleo Approved Program. There are no exceptions to this rule.

7. SHIPPING, MANAGEMENT, AND PROCESSING GUIDELINES

All Shipping, Management of Slaughter Facilities, and Processing Guidelines must coincide with aforementioned Paleo Approved requirements. Paleo Approved Requirements must not be compromised during transportation, or by slaughterhouse management or employees.

7.1 SHIPPING

7.1.1

All transportation systems must be managed to ensure that Camels are not inflicted with pain.

7.1.2

Handling of animals during transportation must be minimal.

7.1.3

Animals in the Paleo Approved program are not to be subjected to antibiotics, sedatives, or any other drug before, during, or after shipment.

7.1.4

Animals in the Paleo Approved Program are not to be fed any prohibited feedstuffs before, during, or after transit.

7.1.5

Trailer must be cleaned prior to loading Camels and should be washed prior to reloading.

7.1.6

Establishments are required to follow Supplementation Guidelines if animals are fed during holding, ensuring that animals are not fed Banned Feedstuffs as outlined in section 2.3.

8. REGIONAL GUIDELINES

All State, Federal, and Provincial Guidelines must be adhered to during the Paleo Approved certification period.

9. REFERENCES

Definitions Provided by: (1). AGA Grassfed Standards 7-17-09. (n.d.). Retrieved from <http://www.americangrassfed.org/wp-content/uploads/AGA%20Grassfed%20Standards%207-17-09.pdf>