

# AMERICAN & GRASSFED ASSOCIATION

# Grassfed Dairy Standards

June 2015



#### 1 Introduction

The American Grassfed Association Dairy Standards (AGA Dairy) incorporates the attributes of open pasture, animal welfare, no antibiotics, no hormones, the production of nutritious and healthy dairy products and is supportive of American family farms. The standard recognizes that the US is geographically and climatically diverse and that grassfed dairy production without supplementation may not be feasible in some regions of the country.

These standards apply to all farms and ranches approved by the American Grassfed Association (AGA) for the production of dairy products destined for certification by AGA. Only farms and ranches certified as following these standards may use AGA's American Grassfed Association ® logos, Association trademarks, service marks, and/or design marks hereafter called AGA Design Mark.

## 2 Certification

## 2.1 Statement of Purpose; Applicability

The American Grassfed Association (AGA) family of logos and design marks was developed by the American Grassfed Association and trademarked to identify food and agriculture products, which meet the rules in the AGA Grassfed Dairy Standards and are certified through a program approved by the AGA. The logos and design marks have been trademarked by the U.S. Trademark and Patent office and may only be used by those who have an approved signed license agreement with the American Grassfed Association. The American Grassfed Association logos and design marks provide a marketing program that adds value to food and agricultural products that meet the requirements set by the AGA membership and the Board of Directors. The AGA Grassfed Dairy Standards are set by the American Grassfed Association members and its Board of Directors and may be amended from time to time.

## 2.2 Statement of Use

The American Grassfed Association trademark, service mark, and /or design mark may be used on product packaging and promotional materials, including brochures, sales literature, advertising, banners, Web sites, point of purchase material, etc. When used, the logos must comply with the following guidelines. If a company wishes to use the logos in a manner other than described in these guidelines, it must request and receive permission in writing from the American Grassfed Association.

- i. A licensee may display the AGA Design Mark, which is a registered certification mark, on the products licensed.
- ii. Licensee must have an approved signed license agreement with the American Grassfed Association to use the trademark, service mark, and /or design mark on any products.

iii. Licensee may use the trademark, service mark and /or design mark on company stationery, promotional literature and web sites only if AGA certifies licensee's entire livestock product range. Licensee may only use the service/design mark associated with its audited product, grassfed or grass pastured.

## 2.3 Product Requirements

These requirements are for raw, processed, and non-processed ruminant products produced using the production requirements in the AGA Grassfed Dairy Standards and certified by such agency as set by the AGA board of directors.

## 2.4 Use of the American Grassfed Association Design Mark

#### 2.4.1

Applicants must certify on the application that all AGA Grassfed Dairy Standards are met.

#### 2.4.2

Applicants must be current members of the American Grassfed Association with all dues and fees paid while using the AGA design mark.

#### 2.4.3

Applicant's farm or ranch will be audited by the AGA or it's approved certifying agency(s) to determine eligibility to use the AGA design mark.

#### 2.4.4

The AGA will determine which of its standards, grassfed or grass pastured, applies to the applicant's farm/ranch and which AGA design mark the applicant will be licensed to use.

#### 2.4.5

The AGA or its approved certifying agency(s) may make unannounced site visits to applicant farms or ranches to verify that all AGA Grassfed Dairy Standards are met.

#### 2.4.6

Except as otherwise provided in this section, all requirements for membership in the American Grassfed Association shall apply to entities and individuals certified under this section.

## 2.5 American Grassfed Design Mark

#### 2.5.1

The AGA Design Mark must be reproduced from original artwork. Please contact AGA for a copy of the Design Mark.

#### 2.5.2



## AGA Grassfed Dairy Logo

- Complete and upright
- In one color
- Visible
- At least ½ inch in diameter
- Clear and legible over the whole of a background
- On the main face of the label or packaging

#### 2.5.3

Any use of these logos deemed a misrepresentation of the intended use by the American Grassfed Association may cause the suspension of the license agreement and/or prosecution.

## 2.6 Fees

Applicants shall submit an annual fee as set by the American Grassfed Association board of directors. A per head fee will also be assessed by the board for every animal marketed using the AGA design mark and/or every dairy animal in production.

## 3 Grassfed Dairy Standards

## 3.1 Forage Protocol

#### 3.1.1

All livestock production must be pasture/grass/forage based.

#### 3.1.2

Grass and forage, shall be the feed source consumed for the lifetime of the ruminant, except for milk consumed prior to weaning. The diet shall be derived solely from forage comprising grass (annual and perennial), forbs (e.g. legumes, Brassicas), browse, or cereal grain crops in the vegetative (pre-grain) state.

#### 3.1.3

Approved supplements may be fed as outlined in section 3.3.

#### 3.1.4

AGA Dairy animals cannot be fed grain.

#### 3.1.5

AGA Dairy animals must have continuous access to pasture and forage.

## 3.1.6

Forage is defined as any herbaceous plant material that can be grazed or harvested for feeding, except for grain.

## 3.2 Grazing, Confinement and Stock Piled Forages

#### 3.2.1

All AGA grassfed dairy animals must be maintained on range, pasture, or in paddocks with at least 75% forage cover or unbroken ground during the growing season.

#### 3.2.2

AGA dairy animals may only be removed from pasture as defined by 3.2.1 during severe weather or emergencies that may threaten the safety and well-being of the animals.

Note: This does not preclude commonly used practices such as roundups, sorting, weaning, and transportation

#### 3.2.3

AGA dairy animals removed from pasture and/or housed under conditions set in 3.2.2 must have access to an outside lot, trap or corral.

#### 3.2.4

Sacrifice pastures may protect surrounding pastures from overuse during severe weather or times of slow pasture re-growth (drought). Sacrifice pasture is defined as a pasture where animals may move about and express their natural behaviors and where forage can be grown during the growing season.

#### 3.2.5

AGA dairy animals may be fed hay, haylage, balage, silage, forage products, crop residue without grain, and other roughage sources while on pasture.

#### 3.2.6

Approved mineral and vitamin supplements may be provided free choice, or may mixed into supplemental forage feed to adjust the animal's nutrient intake and to correct deficiencies in its total diet.

#### 3.2.7

Incidental consumption of seeds from grain or cereal grain naturally attached to herbage, forage, and browse is only permitted in an un-harvested crop that complies with 3.2.8.

#### 3.2.8

Deliberately waiting until grain or cereal grain crop has set seed before grazing or harvesting for stored forage is prohibited.

## 3.2.9

Grazing vegetative re-growth of harvested grain fields is permitted if 75% of the field is in vegetative re-growth and the average height of the re-growth is 8".

## 3.3 AGA Grassfed Dairy Supplementation

#### 3.3.1

AGA grassfed dairy animals may be fed approved grass pastured supplements at a rate of 0.5% of body weight (20% of daily intake) during the growth stage and 0.75% of body weight (30% of daily intake) during lactation. Supplement levels are calculated on a dry matter basis. **See Appendix B for approved supplements**.

## 3.3.2

Supplements must be approved in advance by AGA's nutritional supplements committee or be listed in the Approved Supplements List: see Appendix B for approved grassfed dairy supplements. Approved supplements or total supplement rations may not exceed 30% Non-Fibrous Carbohydrate (NFC).

Note: Supplements that have an adverse effect on the nutritional quality of the milk produced or have negative health benefits on the animals fed will not be permitted.

## 3.3.3

Receipts, ingredient lists, and/or tear tags must be retained from any supplements provided.

#### 3.3.4

A record of what was given, how much was given, and when it was given must be kept for any supplements whether deliberately provided or to which the AGA grassfed dairy animal is inadvertently exposed. If inadvertent exposure to banned feedstuffs occurs the incident must be recorded, and reported during the next audit.

#### 3.3.5

Non-inadvertent feeding any of the banned feedstuffs listed in Appendix D to AGA grassfed dairy animals is prohibited and can cause the loss of AGA certified status.

## 3.4 Marketing AGA Dairy Animals as AGA Grassfed or Grass Pastured Beef

#### 3.4.1

AGA Grassfed Dairy animals may be marketed as AGA Grassfed beef if the whole herd is raised to the AGA Grassfed Ruminant Standards.

#### 3.4.2

AGA Grassfed Dairy animals may be marketed as AGA Grass Pastured beef if raised to AGA Grassfed Dairy Supplementation standards in 3.3 above.

#### 3.4.3

The feeding of any supplements is not allowed 14 days prior to harvest for AGA Grass Pastured beef program.

#### 3.4.4

Dairy animals treated with antibiotics or fed animal by-products at any point in their lives may not be marketed as AGA Grassfed or Grass Pastured Beef.

## 3.5 Animal Health and Care

#### 3.5.1

The producer must develop and maintain a written record of all vaccines, medications, or other substances used in his/her animal health care program.

#### 3.5.2

AGA Grassfed dairy animals must not be fed or injected with antibiotics.

#### 3.5.3

Sick or injured animals must be treated to assist in curing the illness or injury or to relieve their symptoms.

#### 3.5.4

If prohibited medications are required for treatment, the animal must be permanently identified with an ear tag and leg band to designate their change in status.

Note: Provided the identification and tracking comply with 3.5.6 below the animal may still be kept with other animals that qualify for AGA Grassfed Dairy certification

#### 3.5.5

Treated animals must be tracked and records must be kept to demonstrate that milk from these animals does not enter the AGA Grassfed Dairy system. Milk withholding records including dates should document removal of milk from the AGA Grassfed Dairy program.

Note: Milk from treated animals may be fed to calves, see 3.6.2 below

#### 3.5.6

The producer must keep purchase records for any antibiotics. Antibiotic receipts and injection records must be available on demand to the certifying agency.

#### 3.5.7

No hormones of any type may be administered to AGA grassfed dairy animals.

#### 3.5.8

Livestock produced under these standards must be not be fed animal by-products.

#### 3.5.9

No organophosphates may be used.

#### 3.5.10

All cows must have an overall body condition score (BCS) of 3.25 on a 5 point Dairy BSC System, Elanco Animal Health or equivelant.

## 3.6 Raising Replacement AGA Dairy Animals

#### 3.6.1

Dairy calves must receive colostrum within 6 hours of birth and have access to high quality forage and pasture after 7 days of.

#### 3.6.2

Milk from animals administered antibiotics and removed from the program may be fed to calves 30 days after the legal residue withholding requirements are met. Milk from animals meeting the requirements above may not be the sole source of milk for calves.

#### 3.7 Animal Identification and Trace-Back

#### 3.7.1

AGA grassfed dairy animals must be traceable by written record throughout their entire lives, from birth to harvest, to the farm or ranch from which they originated.

#### 3.7.2

Each producer must develop and maintain an animal identification system to identify each animal or batch of animals.

#### 3.7.3

Complete and up to date records must be maintained and specifically identify all animals raised and purchased that are sold, harvested, or used for milk production as part of the AGA Grassfed Dairy program.

#### 3.7.4

Complete and up to date records must be maintained to show the source of all purchased dairy animals brought onto the farm or ranch.

## 3.7.5

Dairy animals one year of age or younger may be brought into the AGA Certified Grassfed Dairy program from farms/ranches of AGA members in good standing by affidavit with documentation that they were raised under AGA Grassfed Dairy Standards. AGA Grassfed Supplier Affidavit (Appendix A) must be used for all purchased animals.

#### 3.7.6

Dairy animals over one year of age, brought in from other farms/ranches must come from AGA Certified Grassfed Dairy members in good standing or from Certified Organic herds if conditions in 3.7.10 are met.

#### 3.7.7

Complete and up to date records must be maintained for all AGA dairy animals used for milk production.

#### 3.7.8

All records are to be maintained for a minimum of 24 months after the animal is sold or harvested.

#### 3.7.9

All required records must be in sufficient detail as to demonstrate compliance with AGA standards to the certifying agency.

#### 3.7.10

Milk from animals brought in under 3.7.6 from Certified Organic herds must be withheld from the AGA Grassfed dairy program for 60 days. Milk withholding records including dates should document removal of milk from the AGA Grassfed Dairy program.

## 3.8 Program Requirements

#### 3.8.1

The annual licensing cost for AGA Certified Grassfed Dairy Members will be set by the AGA Board of Directors at regularly scheduled board meetings and will be set to cover the administrative cost to AGA. On-farm inspection cost will be borne by the individual member.

#### Standards Amendment Procedure

#### 4.1 Amendment Procedure

#### 4.1.1

The AGA recognizes that as new research becomes available on grassfed meat and milk products, changes may be required to the AGA certification program standards and definitions. The following procedure will be followed for reviewing and amending standards and definitions.

#### 4.1.2

The review and amendment procedure shall be accomplished by a Standards/Certification Committee appointed by the AGA board president. Amendments will require a 2/3 majority vote of the entire Standards Committee.

#### 4.1.3.

The Standards/Certification Committee will meet at least once per year to review and discuss new grassfed information and research. At this meeting the Committee will vote to send any recommended amendments to the full board for approval.

#### 4.1.4

Amending the AGA certification program standards and definitions shall require a majority vote of the entire Board of Directors.

#### 4.1.5

The Board of Directors will set, case by case, the time period that members have to implement any adopted changes to the AGA certification standards and definitions.

#### **5** Reference Documents

## 5.1 AGA Grassfed Supplier Affidavit

See Appendix A.

## 5.2 AGA Grassfed Dairy Approved Supplements List

See Appendix B

## 5.3 AGA Grassfed Dairy Banned Feed Stuffs List

See Appendix C

## 6 AGA Grassfed Dairy Standards Definitions

**Balage 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. (5)

**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. (4)

**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, examples include turnips, rape, and kale.

**Browse:** 1) Leaf and twig growth of shrubs, woody vines, trees, cacti, and other non-herbaceous vegetation available for animal consumption. 2) To browse: the consumption of browse in situ by animals. (6)

**Concentrate**: All feed, low in fiber and high in total digestible nutrients that supplies primary nutrients (protein, carbohydrate, and fat); grains, wheat bran. (6)

**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. (6)

Diet: The feed regularly offered to or consumed by an animal, see ration. (6)

**Dough Stage**: The kernel is filled with starch and is well formed. There is no milky fluid, only a rubbery, dough-like substance. (4)

Dormancy: In a state of being dormant when no active growth is occurring. (7)

Ensilage: The same as silage. (2)

**Ensiled**: Having been subjected to anaerobic fermentation to form silage. (2)

Feedstuff: any of the constituent forages or feeds of an animal ration. (7)

Fermentation: Chemical changes brought about by enzymes produced by various microorganisms. (2)

Forb: Any herbaceous broadleaf plant that is not a grass and is not grass-like. (6)

**Fruit:** 1) n. The usually edible reproductive body of a seed plant, one having a sweet pulp associated with the seed. 2) n. A product of fertilization in a plant with its modified envelopes or appendages, specifically the ripened ovary of a seed plant and its contents. (7)

**Grain:** Seed from cereal plants, caryopsis. Corn, wheat, rye, oats, rice, millet, sorghum, barley, triticale.

Grass: Member of the plant family Poaceae. (6)

Green chop: Forage harvested and fed in the fresh green, chopped form without seed. (2)

**Growing Forage:** Forage plants that aren't in the dormant (non-growing) state and 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. (2)

Hay: The aerial parts of forage crops stored in the dry form for animal feeding. (2)

**Haylage:** Haylage is the feed produced by storing a forage crop, dried to a moisture level of about 45-55% in an airtight silo.(2)

**Herbage**: 1.) The biomass of herbaceous plants, other than separated grain\_above ground but including edible roots and tubers. (6) 2.) n. Green plants especially when used or fit for grazing. (7)

**Hydrolysis**: The splitting of a substance into the smaller units by its chemical reaction with water. (2)

**Inflorescence**: 1) n. A floral axis with its appendages. 2) n. a flower cluster of which there are at least 9 recognized types. (7)

Kernel: A mature ovule of a grass plant that has the ovary wall fused to it. Same as caryopsis.(6)

**Legumes**: Members or the *Fabaceae* plant family (formerly known as the *Leguminoseae* 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 can interact with bacteria of the genus *Rhizobium* to fix nitrogen in nodules on their roots. Legumes may have one of four types of seedheads. These seedhead types are the raceme, the spike, the head or umbel. (5)

**Meadow**: Area covered with grasses and/or legumes, often native to the area, grown primarily for hay but with secondary grazing potential. (6)

**Mineral:** 1) n. a solid homogeneous crystalline chemical element or compound that results from the inorganic processes of nature. 2) n. Any of the various naturally occurring homogeneous substances obtained usually from the ground. 3) n. a synthetic substance having the chemical composition and crystalline from and properties of a naturally occurring mineral. (7)

**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. (6)

Non-fibrous carbohydrate (NFC): The fraction of a feedstuff made of sugars and starch. (8)

**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. (6)

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

American Grassfed Association Grassfed and Grass Pastured Ruminant Standards • August 2013

**Pastureland:** Land devoted to the production of indigenous or introduced forage for harvest primarily by grazing. Pastureland must be managed to arrest succession processes. (6)

**Pericarp:** The ripened and variously modified walls of a plant ovary, especially those contributing the outer layer in a cereal caryopsis. (6)

Prairie: Nearly level or rolling grassland originally treeless; usually characterized by fertile soil. (6)

Range: Land supporting indigenous vegetation grazed or that has the potential to be grazed and is managed as a natural ecosystem. Includes grazeable forestland and rangeland. (6)

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. (6)

Ration: the total feedstuffs (diet) allotted to one animal for a 24-hour period. (6)

**Residue:** that which remains of any substance. (2)

**Roughage**: Any feed  $\geq$  18% in crude fiber and  $\leq$  70% in total digestible nutrients (TDN), on an airdry basis and are less than 5.5% crude fat.

**Seed:** 1) n. Ripened mature ovule comprising an embryo, a seedcoat, and a supply of food that, in some species is stored in the endosperm. 2) v. To sow, broadcast or drill small-seeded grasses, legumes, or other crops. (6)

Seedhead: See inflorescence.

Separated Grain: Grain detached from cereal crop plants.

**Silage:** Silage as defined by AGA is forage harvested containing no grain and is cut no later than the early reproductive stage (i.e. flowering in grasses/cereal grains, tasseling in corn (R1 stage), and stage 6 for sorghum).

**Starch:** A polysaccharide having the formula (C6H10O5). Many plants store energy in starch. Starch is a major component of most livestock rations (especially fattening rations) and is highly digestible. Yields glucose upon complete hydrolysis. (2)

**Stockpiled Forage:** Forage 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 during the year as a part of a forage management plan. Stockpiling can be described as forage accumulation. (6)

**Stover:** The matured cured stalks of such crops as corn or sorghum from which the grain has been removed. A roughage. (6)

Stubble: The basal portion of the stems of herbaceous plants left standing after harvest. (6)

**Supplement**: A nutritional additive (salt, protein, phosphorus, etc.) intended to improve the nutritional balance and remedy deficiencies of the diet. (6)

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

**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. (6)

Vegetative State: Stage prior to the appearance of fruiting structures. (6)

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

#### 6.1 REFERENCES

- (1). AGA Certified Ruminant Standards Livestock Program, 2006
- (2). Feeds and Feeding; Arthur E. Cullison, 1979
- (3). Cow-Calf Management Guide, Cattle Producer's Library; Ag Communications Center, University of Idaho,

The Fermentation Process and Silage Troubleshooting, Small Grain Silage for Beef Cattle, Haylage, Corn Silage

- (4). A Guide to Cereal Forage for Profitable Dairy Management; RSI, Resource Seeds, Inc. 1998
- (5). Ball, D.M., C.S. Hoveland, and G.D. Lacefield. 2002. P. 1-321. Southern Forages, Modern Concepts for Forage Crop Management 3rd. ed. Potash & Phosphate Institute (PPI) Norcross, GA
- (6). Barnes, R.F., D.A. Miller, and C.J. Nelson. 1995. Glossary. P.487-501. In R. F. Barnes, D.A. Miller, and C. J. Nelson (ed.) Forages, Vol. I, An Introduction to Grassland Agriculture, 5th. ed. Iowa State University Press, Ames, IA.
- (7). Merriam Webster's Collegiate Dictionary. Tenth Edition is an excellent source for important words, including but not limited to: Browse, cereal, crop, dicot, forage, forb, grain, grass, graze, grassland, herb, herbage, herbaceous, monocot, pasture, range, rangeland, seed, silage, etc.
- (8). VanSoest, P.J., 1994. Nutritional Ecology of the Ruminant. Cornell University press. Ithaca, New York. 476 pp.

## Appendix A

American Grassfed Association AGA Grassfed Dairy Supplier Affidavit	
Supplier N a m e :	
AGA Membership.#:	-
Farm / Ranch name:	
Mailing address:	
City:	; State:; Zip Code:
Phone:	
E-mail:	_; Fax:
AGA Producer Name:	
AGA Membership #	
Farm / Ranch name:	
Mailing address:	
City:	; State:; Zip Code:
Phone:	_; Mobile: E-
mail:	Fax:
Animal Delivery or Transfer Date:	
Number of Animals Delivered or Transferre	
provided to the above AGA producer have	er, this letter serves as documentation that all animals been raised under AGA Grassfed Dairy Standards I fed Dairy Standards and these animals listed below
Signature:	; Date:

## American Grassfed Association

Livestock Species	

1	No.	Ear Tag #	Date of Birth	Sex	Breed	Color Description
3						·
3	2					
4     5     6     6     7     8     9	3					
6	4					
6	5					
8   9     10   10     11   11     12   13     13   14     15   16     16   17     18   19     20   21     21   22     23   24     24   25     26   27     28   10     30   31     32   33     34   35     36   37     38   39	6					
9						
10   11     11   12     13   14     15   16     17   18     19   20     21   22     23   24     25   26     27   28     29   30     31   31     32   33     34   35     36   37     38   39						
11   12     13   14     15   16     17   18     19   19     21   22     23   24     25   26     27   28     29   30     31   32     33   34     35   36     37   38     39   39						
12   13     14   15     15   16     17   18     19   20     21   22     23   24     25   26     27   28     29   30     31   32     33   34     35   36     36   37     38   39						
13   14     15   16     16   17     18   19     20   21     21   22     23   24     25   26     27   28     29   30     30   31     31   32     33   34     34   35     36   37     38   39						
14   15     16   17     18   19     20   21     21   22     23   24     25   26     27   28     29   30     31   32     33   34     35   36     36   37     38   39						
15   16     17   18     19   20     21   22     23   24     25   26     27   28     29   30     31   32     33   34     35   36     37   38     39   9						
16   17     18   19     20   21     21   22     23   24     25   26     27   28     29   30     31   32     33   34     35   35     36   37     38   39						
16   17     18   19     20   21     21   22     23   24     25   26     27   28     29   30     31   32     33   34     35   35     36   37     38   39						
18   19     20   21     21   22     23   24     25   26     27   28     29   30     31   31     32   33     34   35     36   37     38   39	16					
19     20     21     22     23     24     25     26     27     28     29     30     31     32     33     34     35     36     37     38     39	17					
20     21     22     23     24     25     26     27     28     29     30     31     32     33     34     35     36     37     38     39	18					
21   22     23   24     25   26     27   28     29   30     31   31     32   33     34   35     36   37     38   39	19					
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23   24     25   26     26   27     28   29     30   31     31   32     33   33     34   35     36   37     38   39						
23   24     25   26     26   27     28   29     30   31     31   32     33   33     34   35     36   37     38   39	22					
25     26     27     28     29     30     31     32     33     34     35     36     37     38     39	23					
25     26     27     28     29     30     31     32     33     34     35     36     37     38     39	24					
27   28     29   30     31   31     32   33     33   34     35   36     37   38     39   39	25					
27   28     29   30     31   31     32   33     33   34     35   36     37   38     39   39	26					
29   30   31   32   33   34   35   36   37   38   39	27					
29   30   31   32   33   34   35   36   37   38   39	28					
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39				1		
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## Appendix B - AGA Approved Grassfed Supplements

## **AGA Supplement Guidelines:**

<u>Note:</u> AGA Supplement Guidelines only apply to AGA Dairy production animals and do not apply to breeding animals. Calves at side are incidental but may not be exposed to banned feed products, see Appendix C.

Consumption of hay, haylage, balage, silage, forage products, crop residue without grain and roughage while on pasture is not restricted by standard, 3.3.2 or 3.3.3 which limits the daily and total intake of approved supplements. Common roughage and forage products are listed below:

## Roughage Products:

AGA defines roughage products as feeds that are  $\geq$  18% crude fiber (CF) and  $\leq$  70% total digestible nutrients (TDN) and are less than 5.5% crude fat.

Corn Cobs

Cottonseed Hulls or Cottonseed Hull pellets or cubes

Cotton Gin Trash

Peanut Hulls or Peanut Hull pellets or cubes

## Forage Products:

AGA defines forage products as those products derived exclusively from forage, see 3.1.2.

Alfalfa cubes and pellets

Forage cubes

Grass cubes or pellets

Hay from any forage

Silage from any forage without grain

Forage produced in a fodder system (producer must insure a 98% germination rate)

## AGA Grassfed Dairy Approved Supplements:

When supplements are used it seems logical these supplements should be looked upon as substitutes or replacements for the pasture that is not available. The supplements should be nutritionally comparable in the major nutrient content of the forage being replaced. The nutrients considered should be uniformly available (nutritionally speaking) and include; energy, fiber, starch and protein. Since most pasture grasses, legumes and mixtures contain 20% to 30% starch and sugars, it seems axiomatic that supplements should contain levels of starch and sugar along with a high level of highly digestible fiber. This rational is that the ratio of starch/sugar: fiber content is an acceptable criterion for judging of supplemental feedstuffs. The goal of any supplementation would be to not change the nutrient profile of the product produced (e.g. beef, milk cheese). The following list of approved supplements is not an exclusive list but lists supplements that have been approved by the AGA to date. The AGA Certification Committee may review and amend this list periodically. Supplements not listed below must be approved in advance by AGA's supplements committee. Supplements that have an adverse effect on the nutritional quality or have negative health benefits on the animals fed will not be allowed.

## AGA Approved Grassfed Dairy Supplements

Almond Hulls or Almond Hull pellets or cubes

Beet Pulp, Dry

Canola Seed, Canola Meal or Canola Meal pellets or cubes

Coconut Meal or Coconut Meal pellets or cubes

Cottonseed Meal or cottonseed pellets or cubes or Cottonseed whole

Flax Seed, Flax Seed Meal or Flax Seed pellets or cubes

Linseed Meal or Linseed Meal pellets or cubes

Malt Sprouts

Oat Hulls or Oat Hull Pellets

Peanut meal or Peanut Meal pellets or cubes

Rice Hulls Rice Hull Pellets

Soybean Hulls or Soybean Hull pellets or cubes

Soybean Meal or Soybean Meal pellets or cubes

Soybeans Extruded or Extruded Soybean pellets or cubes

Sunflower Seed, Sunflower Meal or Sunflower Meal pellets or cubes

Brewer's Grain\*

Brewer's Condensed Sol\*

\*NOTE: It is up to the producer to verify there are no trace antibiotics in brewer's grain products which are routinely used to control bacteria in the fermentation process.

## Molasses Products

Molasses may be a carrier in mineral or vitamin blocks and tubs. It may be a binder or ingredient in pellets or cubes.

Any tub or block that lists a protein % first on its guaranteed analysis tag is a protein tub. A mineral block or tub must have two of the first three ingredients on the product label listed as a mineral or source of a mineral and may not be plant protein or other sources of protein, grain, or processed grain by-products.

AGA Grassfed Dairy animals can be supplemented with molasses-based protein blocks or tubs with a targeted daily intake of 1-3 pounds (chemically hardened or cooked blocks/tubs). Such blocks/tubs are used to supplement low quality forages and maintain nutrient balance in the finishing diet. Producers must read the ingredient listing to ensure that banned feedstuffs such as condensed fermented corn extractives, corn distillers grains with solubles, corn condensed distillers solubles, maize syrup, animal by-products or other prohibited ingredients are not contained in the block or tub (please refer to Appendix D for a complete list of banned feedstuffs).

Breeding animals can be supplemented with molasses-based protein tubs if they contain no prohibited ingredients which include the examples listed previously under the finishing animal guidelines.

AGA Grassfed Dairy animals may NOT be fed molasses blocks or tubs with a target intake of over 3 pounds (pressed blocks/tubs).

AGA Grassfed Dairy animals may NOT be fed grain byproduct-based protein tubs.

## Manufactured Feeds without Complete Ingredients Lists

Many manufactured feeds list "Forage Products, Roughage Products, Plant Protein Products, Grain Products and Processed Grain By-Products as ingredients instead of the actual ingredient used. Manufactured feeds listing Grain products are prohibited in AGA grassfed dairy animals. Manufactured feed that lists Forage Products, Roughage Products or Plant Protein Products as an ingredient are allowed. Processed grain by-products may not be listed as the first ingredient and it is up to the producer to verify that the molasses products and processed grain by- products do not exceed 25% of the total ration.

## Appendix C – AGA Grassfed Dairy Banned Feedstuffs List

#### AGA Banned Feedstuffs List

The following list of banned feedstuffs is not an exclusive list. The AGA Certification Committee may review and amend this list periodically.

Grain Products in any form such as whole, ground, cracked, flaked or toasted. Grain products are defined as "Seed from cereal grain, caryopsis, see Grain:

\* Barley

Corn

- \* Oats
- \* Rye
- \* Rice

Triticale

\* Wheat

Millet

Sorghum

\* Distilled or fermented Brewers grains are allowed. Distilled corn grains are not allowed.

Milk replacer containing antibiotics, growth promoters and/or any animal by-products aside from whey and other dairy products.

Animal by-products, aside from whey and other dairy products.

Antibiotics

Hormones