# Common Products and Treatments for Organic and Alternative Livestock





THE LIVESTOCK PROJECT SUPPORTING ORGANIC/ALTERNATIVE ANIMAL HEALTH

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# Common organic and alternative products

# Antioxidants

Vitamin C

- Adult cow 250 to 500 cc IV one time, or 5cc per 100 lbs.
- IM once daily for three days (no more than 30cc per site).
- It can be given to smaller animals IM but reduce volume according to their size.

# Biologics

#### Amplimune (formerly known as Imunoboost)

- Injectable mycobacterium cell wall fraction immunostimulant for sick/challenged livestock. Do not administer within 21 days of slaughter for calves up to 200 pounds, 1cc IV. In case of anaphylaxis, administer epinephrine. NovaVive
- (Dr. Karreman: I often use this extra label. For example, in adult cows with high SCC or at dry-off, I give 5cc SQ one time. Additionally, I'll mix 2cc cc of it with 2 ccs of autogenous vaccine and give SQ).

# Bovi-sera, also sold as Multi-serum

(Can also be used in goats and sheep).

- A serum antibody product that aids in preventing and treating enteric and respiratory conditions. Use entire contents when first opened. Do not use it within 21 days of slaughter.
- In case of anaphylaxis, administer epinephrine. Inject SQ or IM and repeat according to the judgment of the user. Administer at 12-24-hour intervals until improvement is noted. Limit injections to no more than 10 ml per injection site. Provides immediate and shortterm protection lasting 7-21 days.
- (Dr. Karreman This has antibodies to E. coli, Pasteurella, and Salmonella (gramnegatives). It works well for hot coliform mastitis if 250 ml is given within 12 hours of the first signs. I often add 5 ml Amplimune to the bottle and run it in IV. Have epinephrine on hand in case of anaphylaxis especially if giving a second dose).
- Prevention:
  - Calves 20-40 ml as soon as possible after birth; Cattle 50-75 ml;
  - Sheep 10-15 ml.
- Treatment:
  - Calves 40-100 ml;
  - o Cattle 75-150 ml;
  - Sheep 20-40 ml;
  - Administer at 12-24 hour intervals until improvement is noted. Administer IM or SQ. Limit injections to 10 ml per injection site. 21-day slaughter withdrawal.

# Botanicals

# <u>GetWell</u>

- A liquid-based tincture of garlic, ginseng, goldenseal, wild indigo, and barberry with antibacterial and healing properties.
- It's most often used as an oral treatment but can also be used IV as a loading but needs to be diluted into a carrier such as a dextrose or physiologic saline.
- The oral dose is 5-10 cc per calf, sheep, goat, or pig and 20 cc per cow or horse, given

2-3 times daily.

• When given with other IV fluids, a 60-90 cc dose one time is a good adjunct treatment and or follow-up for animals that have received Bovi-Sera/Amplimune and Inforce 3 intranasal vaccine.

# **BreatheWell**

- A balanced botanical blend for coughing animals that promotes the clearing of phlegm from the lungs and soothes irritated airways.
- Use at the first sign of a cough.
- BreatheWell pairs well with GetWell (can mix both in a dosing syringe) for better effect than either alone for early coughing issues. Use it twice daily and give access to fresh air.

# EatWell

- A liquid tincture of plants known to stimulate appetite and gut motility.
- Indications would be sluggish digestion, mild bloat, and constipation (if no fever) in cows, horses, sheep, goats, and pigs.

#### Ecto-Phyte

- A safe and effective alternative to traditional insecticides, used to control flies and external parasites such as lice, fleas, and mange. The formulation is based on aromatic compounds found in essential oils. These oils are rich in terpenes, aldehydes, cineoles, esters, and alcohols and are very antagonistic to both adult and larval stages of insects. Parasites, such as lice, which live their entire life cycle on the animals' hide are immobilized by these compounds, thereby eradicating the problem.
- The formulation is both oil and water soluble. External parasites, such as lice, can be easily controlled by spraying livestock thoroughly with a mild to strong dilution with oil, depending on the level of infestation.

# Heat Seek

- A botanical blend of herbs that enhances the visually observable signs of estrus.
- For animals in normal body condition, have a CL on the ovary and have not shown visible heat for long periods. Give two tablets daily for six days or until heat, whichever is first.
- Also, for cystic ovaries: two tablets daily for 12 days or until heat, whichever is first. Many times, estrus will be seen before the final dose. If so, stop tablets and breed. Sometimes animals will show heat a few days after the final dose. Occasionally a cow will show a heat after the final administration and be bred but then show a flaming heat three weeks later. If that occurs, breed again.
- This product is not for cows in a negative energy balance.

# PhytoMast<sup>®</sup>

- Used to support udder health at dry-off. It is a teat protective lubricant and liquid film barrier mixture of botanical oils and vitamins A, D, and E that can be infused into a quarter to soothe irritated epithelial lining of the teat canal and gland cistern. Available in white 15 cc plastic intramammary infusion tubes 12 to a box with alcohol pads.
- If used during lactation, a veterinarian with a VCPR will need to apply their Rx label with directions for use (2 tubes 12 hours apart for one day to soothe irritated teat and cistern lining if abnormal appearing milk and one tube every 12 hours for two days for high SCC). If used during lactation, withhold milk during treatment and 24 hours afterward and withhold from slaughter for 13 days (as shown by USDA-funded studies using FDA

pharmacokinetic analysis methods).

Van Beek Royal Uterine Capsules

- For use during the post-partum period. Essential oils help maintain a normal uterine environment for cow reproductive performance post calving. Fast acting.
- Has a foaming agent to encourage adequate coverage of the reproductive tract. Also have beef, poultry, pet, and Swine products.

#### Minerals

#### **BoviKalc**

• This supplement is a calcium bolus for cows that provides fast and long-lasting serum calcium levels in freshening cows to prevent hypocalcemia or those with the slightest early signs (cold ears and some muscle fasciculations) (milk fever).

#### Cal D-Cap (organic)

• One feeding of four Cal D caps has 30 grams of calcium for immediate and sustained delivery. Rapid and slow-release calcium in one product. Has 20,000 IU of vitamin D3 for proper calcium utilization.

#### Ketonic

- An energy supplement for cows and calves when nutrients associated with ketosis, poor appetite, lethargy, dysentery, and diarrhea/scours.
- Give 1 fl. Oz. (28ml) per 100 lbs., 1-2 times daily or as needed.

#### MultiMin 90

- An RX-only injectable trace mineral supplement for cattle (dairy and beef). Source of zinc, copper, selenium, and manganese, minerals important for reproduction, immunity, and immune response to vaccines.
- Calves up to 1 year, 1/ml per 100 pounds, Cattle from 1-2 years, 1 ml per 150 pounds, Cattle over two years, 1 ml per 200 pounds body weight. It can be bought at veterinary supply stores.

#### <u>MuSe</u>

• An RX-only source of injectable vitamin E and Selenium. Needed for geographic areas low in soil selenium. Helps to prevent retained placenta. Also used as an antioxidant. It can be bought at veterinary supply stores.

#### **Probiotics**

# Generator Elite (organic)

• A microbial supplement for ruminants. It provides high levels of microorganisms, including rumen/intestinal bacteria, live yeast, digestive enzyme units, and yeast cell walls.

# **Combined products**

#### **Biocel CBT**

• Ultra-filtered whey to boost immunity.

 A sterile, ultra-filtered permeate of whey derived from first and second milking colostrum of older immunologically experienced cows. The fats and heavy proteins are removed, leaving a milk-derived serum rich in immune-modulating substances naturally found in colostrum, such as antibodies, (immunoglobulins) lymphokines, cytokines, lactoferrins, proline-rich polypeptides, lysozymes and many other substances that may orchestrate the immune cascade in animals. It is not intended as an adequate source of passive antibodies. It has a minimum of 5% crude protein.

#### Pecti-Cap (organic)

A fiber electrolyte/vitamin supplement for cattle. Includes dietary pectin fiber, yeast cell
walls, electrolytes, and vitamins to replenish those lost due to dehydration and disrupted
gut microflora.

#### Pyck-me-Up

• A gluconeogenic fresh cow supplement that provides propionate, selenium, yeast, rapidly available calcium, potassium, magnesium, electrolytes, and protienated trace minerals. Mix with water. An ideal drench to add to your fresh cow protocol.

#### RumenAider Paste (organic)

• A microbial and vitamin supplement designed especially for cattle, sheep, and goats. It has over 60 billion CFUs of live microbials per 15 ml feeding. Use when the listed nutrients and microbials are desired.

#### Utrecept-Uterine Aid

• This is an intrauterine flush made from natural ingredients. It has a prolonged residual effect, requires no rinsing, and unlike many conventional antiseptics, its effectiveness is not reduced by contact with organic material. Microbial power is due to a synergistic reaction between natural organic acids and natural sugars. When introduced into the uterus, these combine with those naturally present in the animal to create a powerful and lasting effect. This gives Utresept its unique physical, chemical, and biological properties.

# Treatments for commonly encountered conditions

Using antibiotic alternatives is less about finding a silver bullet than using a variety of approaches together and starting treatment early. The following is not an exhaustive list of treatments. It contains treatments for sheep, goats, poultry, swine, equine, and companion animals but is highly skewed towards dairy cows. Diseases/conditions are listed alphabetically.

For dairy cattle with systemic infections, the following is a general approach to using antibiotic alternatives.

The general approach:

- 1. Biologics to stimulate the immune system (e.g., Bovi-Sera, Amplimune)
- 2. Botanicals with strong antibacterial properties (e.g., GetWell)
- 3. Antioxidants (e.g., Vitamins C and E)
- 4. Fluid Therapy for rehydration is critical to restore circulatory function (e.g., electrolytes)
- 5. Antiseptics to cleanse wounds, for wraps, and internally (uterus, udder) as needed (e.g., hydrogen peroxide, povidone iodine scrub (Betadine), VedaDine iodine boluses)

Anestrus	Cow hasn't shown heat since 40 days in milk. On rectal palpation a CL on one ovary and a small follicle on the other. Uterus feels normal. Normal body condition (not for cows in peak milk and negative body condition)	
Species	Dairy cow, horse, sheep, goat, pig (cut by half the dose for the smaller species)	
Initial Treatment	Give 2 heaping tablespoons Heat Seek powder daily for six days in a row or until heat, whichever is first. In correctly selected animals, Heat Seek will bring on behavioral signs of estrus in the vast majority of cases.	IT II
Follow-up	Watch for signs of heat, no matter how minor (holds milk up, doesn't quite finish her feed since she has other things on her mind, simply looks back at you an extra while).	
Resources	Karreman, The Barn Guide, 2011	1 K

Candidiasis		
Species	Poultry	
Initial	Mild or early cases treated with apple cider vinegar added to	
Treatment	water. Add 1 tablespoon of apple cider vinegar to each gallon	
	of water. Use as drinking water for 3 to 4 days.	
Follow-up	Isolate the bird from the flock and place in a safe, comfortable, warm location with easy access to water and food. Limit stress.	Ý
Resources	D McCluggage Candida in Birds and Holistic Therapies to Treat the Condition. Wellvet.com (2011). See more at: <u>Poultry</u> <u>DVM</u>	

Coccidiosis		
Species	Poultry	
Initial	3-4Tablespoons apple cider vinegar, per gallon of drinking	
Treatment	water 3 times a week.	
Follow-up		L
Resources	(Hayajneh, 2018)	

Cystic ovary	Cystic ovary on palpation that can't be gently ruptured.	
Species	Dairy cow	
Initial Treatment	Try to rupture cyst which is often possible if it is a follicular cyst. A luteal cyst is more difficult to rupture. If the cyst cannot be ruptured or the veterinarian doesn't want to rupture it for fear of hemorrhage, use Heat and Seek. Two heaping tablespoons twice a day on the feed for 12 days. Acupuncture: inject 5cc B-12 at each of the acupuncture points along the bladder meridian BL22 through BL26 on the side of the cyst. Homeopathy: Apis for right-sided cyst daily for 5 days followed by Nat mur daily for 3 days and if left-sided cyst use Lachesis daily for 5 days followed by Nat mur daily for 3 days.	
Follow-up	If no heat within 21 days, re-check.	
Resources	Karreman, The Barn Guide, 2011	

Fever	It is very important to rule-out early pneumonia.	
Species	Adult dairy cow, calves, sheep, goats, pigs	
Initial Treatment	<ol> <li>250 cc Bovi-sera, IV with 5cc Amplimune poured in.</li> <li>90 cc GetWell poured into 500 cc dextrose and give IV; addition of flunixin (1ml/100 lbs.) if desired. There will be a withholding due to the flunixin (twice the label).</li> <li>250 to 500 cc Vitamin C, IV.</li> </ol>	
Follow-up	Follow up with 15-20cc GetWell orally, two to three times daily for three to four days. Calves, sheep, goats, pigs: administer orally 5-10 cc twice daily for 3-4 days.	J.
Resources	Karreman, The Barn Guide, 2011	

Fever/ infection	General immune system boost. Used whenever there is a fever of unknown origin or infection.	
Species	Cattle, sheep, goats	
Initial Treatment	Aloe vera liquid or pellets. Give 1 oz per 100 lbs., by mouth, twice a day.	

Follow-up		
Resources	Dr. Paul Detloff's Complete Guide to Raising Animals Organically, Acres, USA, Greeley, Colorado 2019	<b>K</b>

Foot Rot Species	Cattle, sheep, goats	
Initial Treatment	Cut away necrotic area between digits. Cleanse with $H_2O_2$ ; mix thick paste of 20ml betadine, or generic 1% Povidone iodine and $\frac{1}{4}$ cup sugar. Place a tablespoon of mixture on cotton and wrap, with digits spread apart Leave wrap on for 2 days max. Can use honey instead of povidone and sugar.	
Follow-up Resources	Re-wrap at least one time. Will see a caseous core that drops out upon cleansing (shows successful treatment). Problem due to wet, dirty environment. Consider nutrition, adding trace elements and soil/mineral balance. Guy Jodarski MVMA talk 2023	

Immune support		
Poultry	Many different herbs are used with poultry and oregano oil in particularly has been found to have anti-inflammatory, antioxidant, antiviral, antiparasitic and immune modulary effects. (Johnson, 2022). Oregano and thyme are used by <u>Perdue</u> (one of the largest poultry producers in the US) to keep their poultry healthy.	V
Initial Treatment	1-2 drops of Oregano oil in a gallon of water, daily. Can also be given on a rotating basis with apple cider vinegar, 1 TBSP in a gallon of water daily). Oregano and thyme can also be grown in poultry areas and allowed free choice.	L
Follow-up		
Resources	(Johnson 2022)	

Insect bites/fly repellent		
Species	Cattle, sheep, goats, equine	
Initial Treatment	In a 1-qt spray bottle, add 2 cups water, 2 cups white vinegar, then add the following essential oils: 25-30 drops lavender, 15-20 drops peppermint, 10 drops Melaleuca (Tea Tree Oil), or Eucalyptus radiata. Shake well before each application. <b>Avoid eyes.</b>	
Follow-up		

Resources	Karlene Stange, DVM	18 St

Ketosis		
Species	Dairy cow	
Initial	IV dextrose with B vitamins.	
Treatment		
Follow-up	The industry standard is propylene glycol, a petrochemical derivative and something cows do not like to be dosed with. Glycerin is nearly the same in its action in the rumen and cows really like it. Give 8 oz orally twice daily as needed. Supplements such as Ketonic are particularly useful. Pyck-Me-UP could be beneficial.	
Resources	Considerations: Primary ketosis can be due to not enough "groceries"; it can also be due secondarily to a displaced abomasum. Correcting these are important for a positive outcome. Karreman, The Barn Guide, 2011	

Mastitis	Flakes and clots in milk, one slightly swollen quarter of recent onset.	
Species	Dairy cow, goat, sheep.	
Initial	Culture the milk to identify which bug is associated with	
Treatment	mastitis. PhytoMast (as an Rx from the herd veterinarian) in affected quarter, 2 tubes for 2 milking's in a row.	
Follow-up	Depends on culture results. Consider culling if other problems exist with the cow. If staph aureus, milk cow last to not pass on the infection to other cows or make or make the cow a nurse cow.	
Resources	Karreman, The Barn Guide, 2011	

Mastitis, Sub- clinical, chronic	Milk looks normal but very high SCC, (e.g., 2,000,000) on CMT. Paddle identifies the LH quarter to have high in SCC, with the RF and RH and LF quarters normal.	
Species	Dairy cow, goat, sheep (reduce dose for small ruminants)	
Initial	5cc Amplimune SQ one time or 35cc Biocel-CBT SQ, daily for	
Treatment	3 days. Then 3 days later infuse PhytoMast tube in quarter for	
	4 milkings in a row. Use quarter milker to keep out bad quarter out the tank during treatment and until the CMT paddle shows negative or makes a significant decrease. Consider making autogenous vaccine from selected animals in herd. Mix 2 cc vaccine and 2cc Amplimune and give SQ at dry-off and again 3 weeks prior to birth. Can also give during lactation, for herd- wide use/prevention, autogenous vaccine (on its own) SQ at 6 months of age, again at 12 months of age, and again 1 month before freshening and then yearly thereafter.	

Follow-up	Depends on the milk culture, likely Strep Ag. If very high SCC and normal looking milk. Milk last or separately or turn into a nurse cow. For cows with high SCC at dry-off, use PhytoMast tubes.	
Resources	Karreman, The Barn Guide, 2011	••••

Mastitis, sub-clinical	Cow at the end of lactation, SCC slowly rising, a flake or two recently seen in two quarters.	
Species	Dairy cow, goat, sheep	
Initial Treatment	CMT to identify problem quarters. Culture before drying off. This will help see help management decisions. If no flakes and high SCC use: 5 cc Amplimune SQ. If flakes seen, then infuse 1 tube PhytoMast for four to six milking's in a row (Rx if used during lactation)	
Follow-up	Don't milk the cow for five days (to stop milk production) then check the quarters. If there are no flakes and no udder inflammation, use a tube of PhytoMast in each quarter for final dry-off to soothe irritated teat and gland lining. Monitor the cow for 5-7 days as the natural plug forms in the teat end.	
Resources	Karreman, The Barn Guide, 2011	

Mastitis (coliform)		
Species	Dairy cow, goat, sheep	
Initial Treatment	Dextrose with 90 cc GetWell tincture + flunixin (1ml/100 lbs), 250 cc Bovi-sera with 5 cc Amplimune, 250-500 CC vitamin C, (+/- 1liter hypertonic saline IV to stimulate drinking). Peppermint essential oil products rubbed into quarter topically for one or two days.	
Follow-up	Strip out quarter often, reapply peppermint lotion after each stripping. Give 20 ml GetWell orally twice daily as needed. Can repeat the IV in 24 hours. The initial treatment can work well if given with in the first 12 hours of clinical signs of watery mastitis.	
Resources	Karreman, The Barn Guide, 2011	

Milk let down		
Species	Cattle, sheep, goats	
Initial	Massage the hole at the point where the big mammary vein	
Treatment	ahead of the udder, on each side of the bottom line, will	<b>KT</b>
	usually get an oxytocin let-down for milk.	
Follow-up	Bring calf, kid, or ewe to the dam during milking time and	
	mother and offspring rub against each other.	

Resources	Dr. Paul Detloff's Complete Guide to Raising Animals Organically, Acres, USA, Greeley, Colorado 2019	
		IT I

Myco- toxicosis		
Species	Poultry	
Initial	Turmeric (curcuma longa) at 5 mg/kg in feed has been shown	
Treatment	to provide protection against toxic effects of aflatoxins on the	
	liver and kidney in chickens.	
Follow-up	Isolate the bird from the flock and place in a safe, comfortable, warm location with easy access to water and food. Limit stress.	
Resources	(Gholami-Ahangaran 2016), Poultry DVM	

Parasites- external		
Species	Poultry	
Initial Treatment	Elemental sulfur which may be mixed with fine dirt, sand, and diatomaceous earth. Presented in a way (a box for chicken to sit in) that lets chickens sit in the dust and fluff it through their feathers to remove parasites.	Ý
Follow-up	This works best on small operations. Bags of the above mixture hung from cages that chickens rub against might work better for larger operations.	
Resources	Entomological Society of America. Poultry DVM	

Parasites- internal		
Species	Calves, sheep, and goats	
Initial Treatment	If indoors, move animals into fresh air. give Amplimune 1 cc per 200 pounds SQ or IM.	
	Use a proven, effective commercial dewormer to kill the internal parasites drawing down the animals' immune systems and making them anemic, e.g., including moxidectin or fenbendazole. Any treatment should be used immediately for just one time to re-set the equilibrium, no need to repeat unless really needed. Tannin containing products and high tannin forages are to be sought.	
	This condition be fatal if not treated promptly upon examination, especially when farmers rely on natural products alone and do not practice good pasture management to prevent parasites. The secondary pneumonia needs to be treated as shown in the shipping fever/pneumonia entry.	

Follow-up	Close monitoring of calves, any that worsen with coughing will need further treatment. Review parasite treatment and pasture management plan with farmer.	
Resources	Karreman, The Barn Guide, 2011	

Pink eye	Vaccine effective, but only if given very early.	
Species	Cattle, sheep	
Initial Treatment	Keep animals out of direct sunlight, graze at night or if on pasture, use an eye patch. 1-2cc Bovi-Sera or raw milk (depending on animal size) injected under the first layer of the cornea. Works better on calves than cows. This may not cure but stops progression. Another method is to spritz the eye with Bovi-Sera, twice a day for a few days. Another option is surgical closure of the third eyelid across the eye. This is no more intensive than an eyeball injection and should be considered depending on ability to follow up. If no follow up is possible, surgical closure or eyeball injection makes sense. Labor intensive but gentle treatment is spraying the eye 2-4 times a day with water based or highly diluted alcohol-based calendula. 3% boric acid solutions were commonly used prior to the antibiotic era. Keep inside during the day and let out at night.	
Follow-up	Pinkeye runs its course over 3-4 weeks, resulting almost always in a permanent small white dash of a scar on the eye globe that doesn't hinder sight.	
Resources	If no follow up is possible, surgical closure or eyeball injection makes sense. Karreman, The Barn Guide, 2011	KK

Pyometra Species	Dairy cow	
Initial Treatment	Ten parts 50% dextrose with 1 part 7% iodine. Palpate the size of the uterus and infuse I ml per "day pregnancy" size. For example, a 60-day "pregnancy" size gets 60 ml of solution made up of 55 ml dextrose and 5 ml iodine. Infuse weekly for 3 weeks. If greater than a 90-day "pregnancy", use no more than 90 cc of the mixture but give twice weekly for 2 weeks and assess the uterine size and determine the next step.	
Follow-up	Re-check at 1-month post-treatment for prognosis	
Resources	Karreman – "This is the best treatment I've found in 20 years".	

Retained placenta with metritis	Often the result of a difficult calving, early calving and/or twins. Appropriate nutrition and body condition in dry period is important. Special considerations for Ca, Mg and dry matter intake.	ļ
Species	Dairy cow	
Initial Treatment	Iodine pills intrauterine, 1 gram daily, or other antiseptic (e.g., Van Beek Royal Uterine capsules), UtreSept infusion daily. Homeopathic pyrogeneum 1-2 times daily starting at day 3 post-partum.	ΠΛ

Follow-up	No earlier than the 5 <sup>th</sup> day post-partum, the placenta should be checked to see if it will gently tease out. It often is ready by the 5 <sup>th</sup> day unless it is difficult calving, twins or very early parturition relative to due date i.e., abortion in late pregnancy. Sometimes the placenta will not be removable until the 7 <sup>th</sup> -8 <sup>th</sup> day. After removal, the cervix starts closing. Continue with iodine pills or infusions until a pipette can no longer be easily	
	iodine pills or infusions until a pipette can no longer be easily passed through the cervix.	
Resources	Karreman, The Barn Guide, 2011	

Shipping Fever/ Pneumonia prevention	This condition is to be avoided at all costs (see case scenario about shipping fever/pneumonia) as it can lead to a train wreck if not properly treated and promptly. Prevention: intranasal vaccine prior to moving/adding an animal and if a couple animals are coughing.	
Species	Ruminants	
Initial Treatment	Aloe pellets or liquid 1 oz per 100 pounds per day, split into 2 feedings for 12-14 days and 3 days prior to shipment.	
	IV 250 ml Bovi-Sera + 250. Vitamin C. Put animals outside for fresh air if the weather is cooperative. Vaccinate whole herd with intranasal vaccine immediately upon the first case detected, especially if history indicates new animal arrival (even freshening first-calf heifers into a tie stall barn after having been raised outside for the previous year). Homeopathic aconite in the first day or two. One-time MultiMin and vitamin A, D & E injection SQ.	
Follow-up	GetWell oral follow-up for 4 days	ð
Resources	Dr. Paul Detloff's Complete Guide to Raising Animals Organically, Acres, USA, Greeley, Colorado 2019. Hubert J. Karreman, VMD	Yrk

Warts (papilloma virus induced) Species	Bovine	
Initial Treatment	Pull one small wart off the animal, which will alert the animal's immune system to fight the condition. A large wart may cause bleeding and may need to be clamped off or stitched shut. Amplimune 1cc/200 lbs. SQ has worked quite well. Repeat biweekly. 3 treatments have given excellent success in severe	
	cases. Commercial wart vaccine is available. Follow label directions.	
Follow-up		
Resource	Karreman, The Barn Guide, 2011	

Wounds/ abrasions, swollen tendons		
Species	Livestock, equine, companion animal	
Initial Treatment	Jing Tang Golden Yellow Powder - has antibacterial and anti- inflammatory properties apply daily, as needed. requires veterinary prescription. only use topically. Calendula ointment/gel is excellent to help quickly heal uninfected cuts.	
Follow-up	Can discolor things it comes into contact with, use caution around clothing.	
Resources	Karlene Stange, DVM	1 Kr

# Appendix of species-specific treatments

# Dairy

- Anestrus
- Cystic ovary
- Fever
- Fever of unknown origin
- Foot rot
- Insect/fly bites
- Ketosis
- Mastitis
- Mastitis, subclinical, chronic
- Mastitis, subclinical
- Mastitis, coliform
- Milk let down
- Parasites, internal
- Pink eye
- Pyometra
- Retained placenta
- Shipping fever
- Warts (papilloma virus)
- Wounds, abrasions, swollen tendons

# Beef

- Fever
- Fever of unknown origin
- Foot rot
- Insect/fly bites
- Mastitis
- Parasites, internal
- Pink eye
- Shipping fever
- Warts (papilloma virus)
- Wounds, abrasions, swollen tendons

# Sheep/goats

- Fever
- Fever of unknown origin
- Footrot
- Fly bites
- Mastitis
- Milk let down
- Parasites, internal
- Pink eye
- Shipping fever

# Poultry

- Candidiasis
- Coccidiosis
- Mycotoxicosis
- Parasites, external

# Swine

- Fly bites
- Wounds, abrasions, swollen tendons
- Fever

# Equine

• Wounds, abrasions, swollen tendons