Email sent by the Executive Director, NDDB to Cooperative Dairies

Dear Sir,

As you are aware, our country is passing through an unprecedented crisis due to COVID-19 and currently lockdown has been declared to fight against the spread of the disease so as to overcome this scourge at the earliest.

During this period the dairy farmers are undergoing through the greatest trouble due to non-availability of timely veterinary services, especially in remote areas where the veterinary delivery system is limited.

The National Dairy Development Board (NDDB) in collaboration with the Trans-disciplinary University (TDU), Bengaluru, has developed ethno-veterinary medicine (EVM) brochure that would greatly help the dairy farmers to effectively manage the most common ailments that occur in dairy animals at minimal cost since most of the ingredients are available at household level. The brochure contains home formulations to manage 14 most common ailments that cause maximum economic losses.

We would request you to kindly provide concentrated popularity to this EVM brochure and the practices so that all the dairy farmers in your milk shed are benefited during these trying times. We sincerely hope that livestock farmers would also adopt it for future use also so that their treatment costs are significantly reduced. This will also help in stalling the emergence of Anti-microbial resistance (AMR) by rationalizing the usage of antibiotic.

A soft copy of the brochure is attached herewith for needful.

With regards,

Meenesh Shah
Executive Director
ETHNOVETERINARY FORMULATIONS
FOR IMPORTANT AILMENTS IN BOVINES
Ingredients:
a) Aloe vera – 250 g; b) Turmeric- 50 g (rhizome or powder); c) Calcium Hydroxide (lime)-15 g; d) Lemon – 2 nos.

Preparation:
(i) Blend ingredients (a to c only) to form a reddish paste. (ii) Cut both lemons into half.

Application:
(i) Make a handful of paste watery by adding 150-200 ml of water. (ii) Wash and clean the udder and apply the mixture throughout. (iii) Repeat application 10 times a day for 5 days. (iv) Feed 2 lemons twice daily for 3 days.

Note: For blood in milk, in addition to the above, make a paste of curry leaves (2 handfuls) and jaggery and feed orally twice daily till condition resolves.
Ingredients:
Freshly plucked & clean neem leafstalk—1; Turmeric powder; Butter or Ghee

Preparation:
(i) Nip the neem leafstalk at the required length based on teat length. (ii) Coat the turmeric powder & butter/ghee mixture thoroughly on the neem leafstalk.

Application:
(i) Insert the coated neem leafstalk into the affected teat in an anti-clockwise direction. (ii) Replace with fresh neem stalk after each milking.
Udder Oedema

Ingredients:
Sesame or mustard oil – 200 ml; Turmeric powder-1 handful; Garlic-2 pearls.

Preparation:
(i) Heat oil, add turmeric powder and sliced garlic. (ii) Mix well and remove from flame just as the flavour develops (no need to boil). (iii) Allow to cool.

Application:
(i) Apply in a circular manner with force over the entire oedematous region and udder. (ii) Apply 4 times a day for 3 days.

Note: Rule out mastitis before using the formulation.

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Ingredients:
White radish – 1 full tuber; Lady’s finger - 1.5 kg; Jaggery- as required; Salt- as required

Preparation:
(i) Cut each lady’s finger into 2 pieces.

Application:
(i) Feed one full tuber radish within two hours of calving. (ii) Feed 1.5 Kg of fresh lady’s finger with jaggery and salt if ROP persists after 8 hours of calving. (iii) In case ROP persists even after 12 hours of calving, tie a knot very close to the base and cut 2 inches below the knot and leave it. The knot will go in. (iv) Do not try to remove the retained placenta by hand. (v) Feed one full tuber of radish once a week for four weeks.
Application:
(i) Start treatment on 1st or 2nd day of heat. (ii) Feed orally in fresh form in the following order once a day along with jaggery and salt:
(a) 1 white radish daily for 5 days (b) 1 Aloe vera leaf daily for 4 days. (c) 4 handfuls of moringa leaves for 4 days. (d) 4 handfuls of cissus stem for 4 days. (e) 4 handfuls of curry leaves with turmeric for 4 days. (f) Repeat the treatment once again if the animal has not conceived.
**Prolapse**

**Ingredients:**
Aloe vera gel- from one full leaf; Turmeric powder-one pinch; Mimosa pudica leaves- 2 handfuls.

**Preparation:**
(i) Remove the gel from a whole leaf. (ii) Wash it multiple times till the sliminess is reduced. (iii) Add a pinch of turmeric powder and boil to half the original volume and allow to cool (iv) Prepare a paste of M. pudica leaves.

**Application:**
(i) Clean the prolapsed mass (ii) Sprinkle the gel on the prolapsed mass. (iii) Apply M.pudica paste after the gel dries. (iv) Repeat till the condition improves.

[Scan this QR code to view the video on YouTube]
**Ingredients:**
Cumin seeds-10 g; Fenugreek seeds- 10 g; Black pepper- 10 g Turmeric powder – 10 g; Garlic- 4 pearls; Coconut- 1; Jaggery- 120 g.

**Preparation:**
(i) Soak cumin, fenugreek and black pepper seeds in water for 20-30 mts. (ii) Blend all ingredients to a fine paste. (iii) Add 1 full grated coconut to the paste and mix by hand only. (iv) Prepare dose freshly for each application.

**Application:**
(i) Apply inside the mouth, tongue and palate. (ii) Give the preparation thrice a day for 3 to 5 days.
Ingredients:
Acalypha indica leaves- 1 handful; Garlic-10 pearls; Neem leaves- 1 handful; Coconut or Sesame oil-250ml; Turmeric powder – 20 g; Mehndi leaves- 1 handful; Tulsi leaves – 1 handful.

Preparation:
(i) Blend all the ingredients thoroughly. (ii) Mix with 250 ml coconut or sesame oil and boil and bring to cool.

Application:
(i) Clean the wound and apply directly or bandage with a medicated cloth. (ii) Apply Anona leaf paste or camphorated coconut oil for the first day only if maggots are present.
Ingredients:
Garlic– 2 pearls; Coriander- 10 g; Cumin-10 g; Tulsi-1 handful; Dry cinnamon leaves-10 g; Black pepper-10 g; Betel leaves- 5 no.s; Shallots- 2 bulbs; Turmeric powder- 10 g; Chirata leaf powder-20 g; Sweet basil- 1 handful; Neem leaves- 1 handful; Jaggery-100 g.

Preparation:
(i) Soak cumin, pepper and coriander seeds in water for 15 mts. (ii) Blend and mix all ingredients to form a paste.

Application:
(i) Administer orally in small portions in the morning and evening.

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**Diarrhoea**

**Ingredients:**
- Garlic – 2 pearls
- Coriander – 10 g
- Cumin – 10 g
- Tulsi – 1 handful
- Dry cinnamon leaves – 10 g
- Black pepper – 10 g
- Betel leaves – 5 nos.
- Shallots – 2 bulbs
- Turmeric powder – 10 g
- Chirata leaf powder – 20 g
- Sweet basil – 1 handful
- Neem leaves – 1 handful
- Jaggery – 100 g

**Preparation:**
(i) Soak cumin, pepper and coriander seeds in water for 15 mts.
(ii) Blend and mix all ingredients to form a paste.

**Application:**
(i) Administer orally in small portions in the morning and evening.

**Ingredients:**
- Fenugreek seeds – 10 g
- Onion – 1 no.
- Garlic – 1 pearl
- Cumin seeds – 10 g
- Turmeric – 10 g
- Curry leaves – 1 handful
- Poppy seeds – 5 g
- Pepper – 10 g
- Jaggery – 100 g
- Asafoetida – 5 g

**Preparation:**
(i) Dry fry cumin seeds, asafoetida, poppy seeds and fenugreek seeds till smoke emanates.
(ii) Cool and powder the fried seeds.
(iii) Blend it with rest of the ingredients to form a paste.

**Application:**
(i) Roll the paste into small balls.
(ii) Administer orally in small portions once daily for 1-3 days till condition cures.

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Bloat and Indigestion

Ingredients:
Onion- 100 g; Garlic-10 pearls; Dry Chilly- 2; Cumin seeds- 10 g; Turmeric -10 g; Jaggery- 100 g; Pepper-10 g; Betel leaves- 10 no.s; Ginger – 100 g

Preparation:
(i) Soak pepper and cumin seeds for 30 mts. (ii) Blend along with other ingredients to form a paste.

Application:
(i) Roll the paste into small balls. (ii) Administer orally in small portions with salt 3-4 times a day for 3 days.

Ingredients:
Onion- 100 g; Garlic-10 pearls; Dry Chilly- 2; Cumin seeds- 10 g; Turmeric -10 g; Jaggery- 100 g; Pepper-10 g; Betel leaves- 10 no.s; Ginger – 100 g

Preparation:
(i) Soak pepper and cumin seeds for 30 mts. (ii) Blend along with other ingredients to form a paste.

Application:
(i) Roll the paste into small balls. (ii) Administer orally in small portions with salt 3-4 times a day for 3 days.
Ingredients:
Onion- 1 no; Garlic-5 pearls; Mustard seeds- 10 g; Neem leaves- 1 handful; Cumin- 10 g; Bitter gourd- 50 g; Turmeric- 5 g; Pepper- 5 g; Banana stem- 100 g; Common leucas- 1 handful; Jaggery- 100 g.

Preparation:
(i) Soak pepper, cumin and mustard seeds for 30 mts. (ii) Blend along with other ingredients to form a paste.

Application:
(i) Roll the paste into small balls. (ii) Administer in small portions with salt once daily for 3 days.
Ingredients:
Garlic– 10 pearls; Neem leaves- 1 handful; Neem fruit-1 handful; Acorus rhizome- 10 g; Turmeric powder- 20 g; Lantana leaves- 1 handful; Tulsi leaves- 1 handful.

Preparation:
(i) Blend all the ingredients. (ii) Add one litre of clean water. (iii) Strain with a fine sieve or muslin cloth. (iv) Transfer to a bottle attached to a sprayer.

Application:
(i) Spray on the entire body of the animal. (ii) Also spray on any cracks and crevices in the cattle shed. (iii) Application can also be done using a cloth dipped in the solution. (iv) Repeat once a week till the condition resolves. (v) Do the application only during sunny part of the day.
**Ingredients:**
Garlic-5 pearls; Turmeric powder- 10 g; Cumin seeds-15 g; Sweet basil – 1 handful; Neem leaves – 1 handful; Butter(preferred) or ghee-50 g.

**Preparation:**
(i) Soak cumin seeds in water for 15 mts. (ii) Blend all ingredients to a fine paste. (iii) Add butter and mix well.

**Application:**
(i) Apply on affected part as many times as possible till condition resolves. (ii) Apply after drying the skin surface.