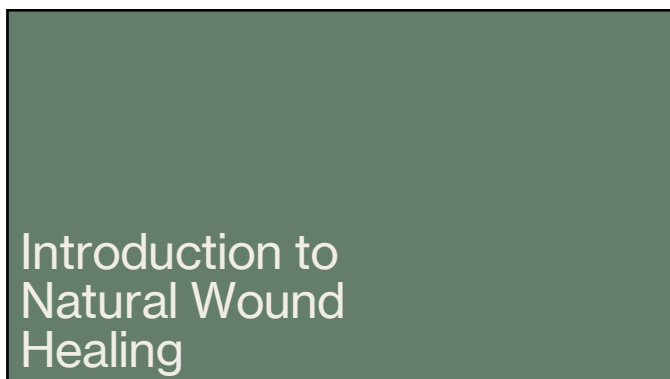








Why Natural Remedies Matter in Veterinary Care

Role of Natural Remedies

Natural remedies have been used for centuries in animal wound care and remain relevant in modern veterinary medicine.

Benefits and Mechanisms

Natural products provide antimicrobial effects, promote healing, reduce inflammation, and support tissue regeneration.

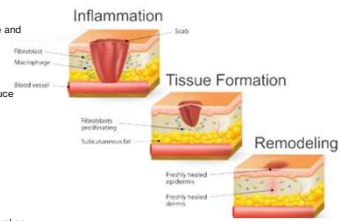
Practical Veterinary Application

Veterinary technicians must understand safe use and proper case selection (especially with AI !)

Accessibility and Cost-effectiveness

Natural remedies are widely available, cost-effective, and ideal for rural or rescue field settings.

NOT a substitute but an adjunct to care



Honey as a Natural Wound-Healing Agent

Mechanisms and Clinical Benefits of Honey

Antimicrobial Mechanisms

Honey inhibits bacteria with high osmolality, low pH, and hydrogen peroxide production in wounds.

Clinical Effectiveness

Honey effectively manages acute and chronic wounds, burns, and antibiotic-resistant infections in animals.

Useful prior to surgical closure to promote granulation tissue.

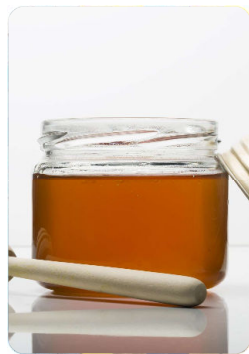
Advantages of Medical-Grade Honey

Medical-grade Bactericidal against methicillin-resistant *Staphylococcus* spp after 24 hours

Standardized potency, sterility, and consistent antibacterial activity

Medical-grade and Manuka honey contain additional antimicrobial compounds such as methylglyoxal and bee defensin-1.

Key takeaway: Medical grade honey greater consistency in composition, quality, sterility, and bactericidal activity



Evidence and Statistics Supporting Honey Use

Extensive Animal Studies

Over 400 animal studies support honey's medicinal use, mainly focusing on wound healing efficacy.

Antibacterial Properties

Medical-grade honey shows stronger antibacterial effects against common wound pathogens in dogs and cats.

In Vivo studies show 25% improvement in healing time

Improved Healing Outcomes

Animal models demonstrate reduced healing times and better tissue regeneration with honey treatments.

Adjunct Therapy Role

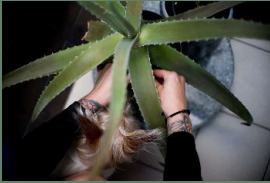
Honey complements conventional veterinary treatments, enhancing healing without replacing standard care.





Images courtesy of Crystal R. Zimmerman, DVM, MS, DACV, University of Tennessee
Karen M. Tobin, DVM, MS, DACV, University of Tennessee

Category	✅ SAFE (Preferred Use)	❌ UNSAFE (Avoid Use)
	Medical-grade honey (sterilized, standardized)	Raw/unfiltered honey (contamination risk)
	Manuka or veterinary-approved formulations	Grocery-store honey (variable quality, unknown potency)
	Applied to properly cleaned wounds	Use on deep puncture or surgical wounds without vet guidance
	Covered with sterile dressing to maintain contact	Leaving wounds exposed → contamination risk
	Monitored daily for healing progress	No monitoring or prolonged use without improvement



Aloe Vera and Other Natural Remedies

Aloe Vera: Properties and Wound-Healing Effects

Healing Components of Aloe Vera

Aloe vera contains polysaccharides, vitamins, enzymes, and amino acids that promote collagen synthesis and tissue regeneration.

Wound Healing Benefits

It accelerates wound contraction, improves tissue strength, and reduces healing time in animal studies.

Anti-Inflammatory and Antimicrobial Effects

Aloe vera exhibits anti-inflammatory and mild antimicrobial properties useful for superficial wounds and burns.

Uses

Skin abrasion, dermatitis or pyoderma, ear care and cleaning
Horses: Oral supplement for gastric ulcers along with omeprazole

***Unpurified products are toxic to dogs, cats and other small animals**



ALOE VERA	100% pure aloe (inner leaf gel only)	Products with alcohol (irritating, delays healing)
	Medical-grade or veterinary-approved aloe	Lidocaine/benzocaine-containing gels (toxic if ingested)
	Additive-free (no fragrance, dyes, preservatives)	Fragrances, dyes, preservatives (parabens, phenoxyethanol)
	Food-grade if ingestion risk (licking)	Essential oils (toxic to cats, birds, exotics)
	Used on superficial wounds only	Whole-leaf aloe (contains aloin → GI irritation if ingested)

Other Natural Adjuncts and Practical Considerations

Sugar Dressings in Wound Care

Sugar dressings inhibit bacterial growth by creating a **hyperosmotic** environment, promoting healing similar to honey treatments.

Draws fluid out of the wound and surrounding tissue

→ This helps reduce swelling (edema)

Pulls bacteria out of the wound environment

→ Dehydrates and inhibits bacterial growth (many bacteria cannot survive)

Creates a moist but controlled environment

→ Supports tissue repair and healing

Herbal Preparations Benefits

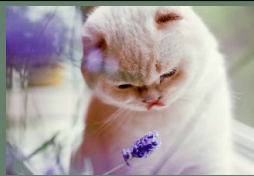
Herbal agents like calendula and chamomile show anti-inflammatory properties but have limited veterinary-specific evidence.

Critical Wound Care Practices

Proper cleaning, debridement, moisture balance, and infection control are essential for effective wound healing.



Species-Specific Applications



Exotics: Special Considerations

Stress reduction is critical!!

Unique Skin and Sensitivities

Exotic species have delicate skin and are sensitive to topical agents, requiring careful selection of wound treatments.

Safe Use of Natural Remedies

Natural remedies must be non-toxic, lightly scented, and applied thinly to avoid affecting thermoregulation and grooming.

Stress Reduction Importance

Minimizing handling stress is crucial, as excessive stress can delay wound healing in exotic animals.

Veterinary Direction and Monitoring

Natural remedies should be used only for minor wounds with guidance and close monitoring for healing progress.



Exotics: Environmental and Safety Factors

Environmental Control Importance

Precise humidity and temperature regulation are critical for wound healing in reptiles and amphibians.

Use of Honey for Wounds

Honey may be cautiously applied to minor wounds due to antimicrobial effects but requires careful use.

Avoiding Oils and Ointments

Oils and thick ointments should be avoided to prevent behavior interference and aspiration risks.

Veterinary Technician Care

Focus on optimal husbandry, contamination prevention, and prompt care escalation if healing stalls.



Large Animal Applications

Honey for Wound Management

Honey's anti-inflammatory and antimicrobial properties help control healing in equine wounds prone to granulation tissue.

Field Treatment Challenges

Field conditions and bandaging difficulties impact treatment choices and require practical solutions for large animals.

***Proper bandaging, regular wound monitoring, and client education are critical for successful natural remedy treatments with large animals



What's Next?



- **Calendula (marigold extract)** Anti-inflammatory and mild antimicrobial
- May support epithelialization
- **Chamomile** Mild antiseptic and soothing effect
- Useful for superficial irritation
- **Coconut oil** Some antimicrobial properties
- Helps maintain moisture barrier (limited wound evidence)
- **Turmeric (curcumin)** Anti-inflammatory and antimicrobial potential
- Limited veterinary dosing data

CAUTION!**Tea Tree oil**

- **Highly toxic when absorbed or ingested**, even at low concentrations Readily absorbed through skin, especially **open wounds**
- Causes **central nervous system depression, weakness, tremors, and liver toxicity**
- **Cats are especially at risk** due to limited ability to metabolize essential oils Grooming behavior → **high likelihood of ingestion after topical application**

<https://www.mdpi.com/2218-273X/13/9/1404>

Emerging evidence against ***Escherichia coli*** and ***Staphylococcus epidermidis***

CAUTION!**Garlic Paste**

- **Cytotoxic to healthy tissue** → directly damages cells needed for healing
- Causes **oxidative damage to red blood cells** → can lead to **hemolytic anemia** if ingested
- **No controlled evidence supporting safe or effective topical wound use**

CAUTION!**Undiluted Iodine**

Why it's used: Antiseptic properties

- **Too harsh for wound beds** → damages fibroblasts and new tissue growth
- Leads to **delayed epithelialization and prolonged healing time**
- Can cause **chemical burns and additional tissue necrosis**

Proper iodine use requires **dilution (e.g., povidone-iodine solutions)**



MUST be diluted to weak tea color for lavage 0.1-1% for lavage

Research and Information Access Using AI

Using AI to Find Accurate Information in Limited-Access Areas

AI as Research Aid

AI tools help access reliable veterinary information where clinics are unavailable, supporting knowledge gathering.

Cross-Checking Sources

Cross-reference AI results with trusted veterinary journals and databases for accuracy and reliability.

Species-Specific Verification

Verify dosing and safety information specific to animal species to ensure proper care and prevent errors.

Identifying Urgent Care Flags

AI can highlight warning signs that require immediate veterinary attention for timely intervention.



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THANK YOU!

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