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In the last years, herbal products underwent a great increase of their distribution both in the human and veterinary medicine, particularly in the horse market. This fact can be ascribed to different factors: a sort of growing suspicion in the use of traditional drugs and an increase in the horses' health perception. For this reason nowadays is worldwide diffused the use of a great variety of products, mainly dietary supplements and nutraceuticals, containing herbal products or extracts essentially claimed to enhance horses' welfare and increase performances.

In human and veterinary medicine there is an increasing interest to find new natural substances, mainly herbal derivates, that improve biological function and increase the body health.

Herbs are considered a very important resource as healthpromoting substances. The idea of using special vegetable based foods and other plant material for health promotion is nothing new. Hippocrates (400 B.C.) is reported to have said "Let food be your medicine and medicine be your food". However the concept that herbal supplement are natural and - then - safe is fallacious. A presumption of safety derives from a history of exposure to the agent as a part of normal diet or a part of long-term practice. Several factor are believed to contribute to the increasing trend of herbal utilization: the owner desire of being an active part in horse's care, the easy accessibility on the supplement market and the perception that herbs are safer because natural is synonymous of welfare.

Nowadays a large number of natural products, with varying structures and different mechanisms of activities, have been reported and hundreds of phytochemicals have been identified, even if studies on how this compounds act have just begun. More and more evidences have been produced about the importance of studying herbal products to identify their real effect and, more important, the absence of undesired side effects. In fact there is a lack of specific legislation that regulates the classification, marketing and safety evaluation of animal herbal supplements.

The absence of common regulatory control over herbal products have two effects: from one hand, it is hard to recognize good products from others that are of very poor quality; from the other, the consumer could be sometime exposed to the risk of intoxication.



Panazq Ginsengs

# **Plants uses**

Apart of the use of ready-to -use supplements available on the market, it is possible to use fresh plants (them often), dry plants or mother tinctures (maceration of plants in cider vinegar or alcohol to extract active principles) that we can mix to the ration, the water or/and clay.

Herbal derivates can be offered to horses in different ways:

- Mixed it in the food, or in the water.
- Put less in the bowl at a time to be sure that your animal will drink or eat them comletely.
- Put directly in the months.
- Sprinkle on the hair on a accessible area on the animal where he is able to lick himself.

## **Manufacturing techniques**

We will list here a series of recipes on "how to prepare your own plant derivate". Use these directions under the advice of a veterinarian.

Garlic mother tincture

Fill a pot with 1/2 to 2/3 of chopped garlic. Cover with apple cider vinegar till 1 inch from the top of the pot. Keep in a dark and dry place and stir up often

After 1 to 2 mouths maceration, filter.

Put back in a recipient and let it decants

To bottom of the pot can be recycled for your personal needs as salad dressed.

### Camphor oil

250 ml peanuts or olive oil (cold pressed)2 to 4 squares of camphor (available in pharmacy) depending on your needGently warm the camphor in a bit of oil

(take an empty and clean conserve's can to save your cauldron)

When the camphor is melted, put the rest of thee oil and mix.

We use 4 squares if we want to warm. For example in case of arthritis, stretched ligament, etc. We use 2 squares to soften a cyst.

### Insect's hunter

1/2 ounce of laurel or cedar-tree essential oil
1/2 ounce of Mentha pulegium essential oil
1 ounce of citronella essential oil
5 ml of garlic mother tincture
12 ounces of sunflower essential oil
Mix everything
Vaporize over the animal or rub him for some days. This liquid stays on the animal many days.

Activated charcoal Ointment 1 part of olive oil 1 part of bee's wax 1 part of activated charcoal some drops of pine or/and fir-tree essential oils For a sulphur ointment use to same recipe but put 1/2 part of sulphur instead of the activated charcoal.

Sulphur ointment 1 part of sulphur in powder 10 part of saindoux Stirrup strongly Indicated in case of scabies, fungi, wound or infections.

*Sanguinaria canadensis* - Bloodroot mother tincture For grave and chronic lung troubles

#### Schisandra Chinensis Schisandraceae



1 to 2 Sanguinaria roots, (about 2 tablespoons more then less)
26 ounces of gin
Macerate 1 month before using it
The root most stay in the gin
Give mother tincture in water (20 cc one time a day directly in the mouth or in the ration).

### **Applied therapies for animals**

### Immunity

It is common opinion that sport horses are periled to different stress which can deteriorate the immune response. Immune system activity depends on several factors, such as nutrition and physical activity. In particular the protein depletion includes a loss of capacity of several essential functions of the immune system or the respiratory tract. Furthermore, strenuous or incorrect exercise has been recognized as a stressful condition, which can significantly alter the host's immune response and its susceptibility to disease. If moderate training generally has beneficial effects on host defence mechanisms, high-intensity exercise and over-training might impair it.

Aging and travelling stress are also known to affect immune function. Older horses had reduced immune function, but were more resistant to exercise-induced immune suppression than younger horses.

Many herbal based products report as a claim on the label: "Improves immune system"; most of them contain nutrients, e.g. vitamins, and herbal extracts such as Echinacea.

Echinacea is a flowering plants of the *Asteraceae* Family, native of eastern North America. The genus name is from the Greek *echino*, meaning "hedgehog", a reference to the spiny central disk. The species traditionally used are: *Echinacea angustifolia* (Narrow-leaf Coneflowe), *Echinacea pallida* (Pale Purple Coneflower), *Echinacea purpurea* (Purple Coneflower). Echinacea has been attributed the ability to boost the body's immune system and protect the body against infections. The roots, the leaves or the whole plant may be used in the dietary supplement preparation.

Echinacea may be best know as an immuno-stimulant in healthy or in immuno-suppressed animals.

#### Herbs in respiratory diseases

Herbs had been used to treat with success in treating chronic respiratory diseases in horses. Pearson reach to goal in 2004 as many before with a mix containing: *Aillum sativum* (garlic), *Eupatorium perfoliatum* (boneset), Marrubium vulgare (white horehound), Sambucus nigra (Black Elder), Hyssopus officinalis (hyssop). Its obvious that a lot still needs to be done to know about all the mechanism involve in the process.

It is also well known, on anecdotic basis, that owners putting fir-tree branch on the floor of horses box to prevent or help the respiratory system healing process. It could be a nice suggestion to use when it when shipping or travelling with a horse. They really often have to face high humidity and/or dusty conditions.

Blood root mother tincture can also be really useful in case of serious and chronic respiratory diseases. The way to prepare it is this one: mace-



Uncaria



**Uncaria Tomentosa** 



Uncaria

rate for 1 mouth in 26 ounces of gin, 1-2 blood-root roots.

## Arthritis

*Taraxacum officinalis* (dandelion), *Harpagophytum procumbens* (devil's claw), *Symphytum officinalis* (comfrey), *Arctium lappa* (burdock), *Urtica dioica* (stinging nettle) composed herbal abstract had been studied with successful results in osteo-arthritis.

#### Dermatitis

Flaxseed (*Linum usitatissinum*) supplementation resulted in a significant reduction in the area of the lesions caused by subcutaneous culicoides extract injection in different studies.

#### Pain control

Among helpful herbal extracts used during competition to increase horse welfare we note: *Boswellia serrata, Harpagophytum procumbens, Equisetum arvense, Glycyrrhiza glabra, Oenothera biennis.* Bromeline and



Gingko Diagonal

cetyl-myristoleate can also have an important role in the inflammation control.

### Joint safety

Lameness is a big threatening illness for horses competing endurance, the possibility to use non-doping substances that can help in maintaining healthy joints. Alternative solutions find then is utmost importance. We can list here omega 3 fatty acid, glucosamine and others glycans, and methyl-sulpho-methane (MSM).

### **Improving performance**

Horse owners and trainers are always looking for substances that can improve the athletic performance in general.

One of the most widespread herbal product well known for its multipurpose use in the horse is garlic. Garlic is one of the first plant called "performance-enhancing" agents. In fact, garlic was fed to ancient Greek athletes before they competed, because it was associated with strength and work capacity.

Garlic is used as an ingredient or supplement in a number of feedstuffs. However, there are some preliminary studies that report garlic toxicity for horses. In particular horses consuming increasing amounts of freeze-dried garlic (FDG) had haematological findings that were indicative of Heinz body anaemia. Then, in absence of regulatory control over garlic inclusion rates it exits a potential risk for intoxication when commercial garlic products are used especially in particular condition such as debilitated horses.

Other products are promoted as multi-purpose performance enhancers and contain Schizandra chinensis. Schizandra bail (*Schizandraceae* family) is a plant that grows wild in far Eastern countries. It is used traditionally



Gingl

as adapting aid that is able to assist the normalization of body system function altered by stress rather than exerting a stimulatory effect. Schisandra exhibits a remarkable effect on the physical performance of race horses in particular on speed heart rate, quick recovery respiratory frequency and lower lactate values. Furthermore it

accelerates the recovery of muscular metabolism.

# Some "naturals" tools and their properties

# Apple cider vinegar

As clays and garlic, the cider vinegar has an important herbs supporter that you could use in many circumstances.

In term of mineral, it contains mainly potassium (K), calcium (Ca), iron (Fe), magnesium (Mg), sulphur (S). As to vitamins it has : A,E,B1, B2, B6. It also contains essential acids.

The apple cider vinegar can be used as a de-worming agent, a depurator, anti-inflammatory (internal and external), adjuvant, anti-acid, anti-septic, re-mineralising agent, Ph equilibrator and arthritis fighter. It have been observed in England, in racing horse's field, to increase energy, diminish stress and reinforcing tendon and articulations.

This vinegar can give a shiny, soft and healthy condition to the animal's hairs and its mainly true for horses.

### Ricinus oil, Edgar Cayce method

This is used in many situations and it has users for example in: arthritis, bursitis, tendonitis, diverticulitis, chronic

Devil's Claw





constipation, endometriosis, firbrome, cysts, back pain and adherence's healing process. By itself, the ricinus oil is an excellent heat conductor and an emollient (against irritation). It will increase blood circulation and moreover with heat source.

Saturate of oil a tissue, triple thickness, and apply a message directly on your animal. It's possible to use the pure oil or a combination with essentials oil like eucalyptus (reduce inflammation), lavender (relaxing), thymus (tonic, antiseptic). A general recipe is: 4 parts ricinus oil added with 1 part of essential oil.

For animals, ricinus oils can also be camphorate with

camphor oil to help warming and penetrating the skin (see a recipe below in manufacturing techniques). At this mixture add 250 ml of ricinus oil softly warmed and use it for specific needs. It can be trustily used for many mouths.

# Activated wood coal.

The activated wood coal properties are: cleaner, absorbent, diarrhoea controller, antiseptic, anti- poison. For a horses, a suggested dosage can be, 1/4 to 1/3 cup, 1 to 5 time a day. Activate wood coal could lead to dry up the milk of your animal.

# **Properties of different herbs**

Allium sativum - Garlic - Ail

Garlic contains : calcium (Ca), phosphorus (P), iron (Fe), Sulphur (S), potassium (K), sodium (NaCl). The garlic is: anti-septic, anti-cancer, antibiotic, anti-arthritic, stimulates the immunity, fight tiredness, is an anti-elmyntic agent. It neutralise and eliminate heavy metals in a proper way. Mainly used to prevent or cure the digestive and respiratory systems. Give your horse garlic on is own form and integrated in the ration.

*Equisetun arvense* - Horsetail - Prêle Re-mineralising agent.

*Juglans nigra* - Black walnut - Noyer noir Fight worms and mycosis.

### Urtica dioica

In case of anaemia and blood depurator.

*Taraxacum officinalis* - Dandelion - Pissenlit Lever and kidneys cleaner. For an overweight animal: give 1 teaspoon of dry leafs in the ration, 2 times a week.

### Thymus serpillus

Useful to reinforce, support and stimulate immunitary system, lungs and intestines.

*Capsella bursa-pastoris* - Shepherd's purse -Bourse-àpasteur Post haemorrhage use.

