

EM Effective Micro-organisms

Equine information leaflet

EM & the care of horses

1. General information on EM

EM stands for “Effective Micro-organisms” and is a liquid culture of about one hundred micro-organisms from 5 major microbe groups. It was developed in Japan in the seventies and

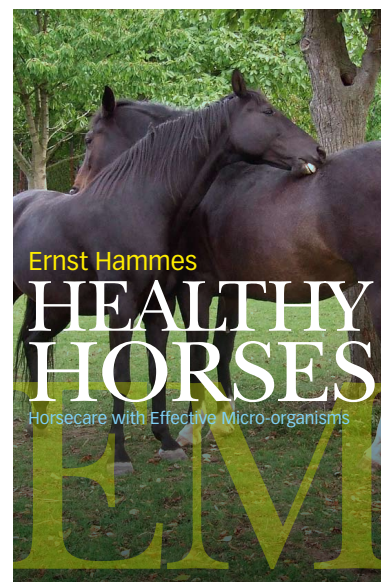
is now being used in more than eighty countries.

The micro-organisms in EM are taken from natural sources and are not genetically modified. They are primarily organisms which are traditionally used for fermentation of human food. EM has never been found harmful to plants, animals or humans, and is safe for the environment. It is harmless if accidentally ingested.

Originally developed for higher horticultural productivity, the use of EM has been extended from agriculture to animal husbandry, aquaculture, general waste management, environmental regeneration and technical and medical applications.

Thorough experience in the use of EM for cattle husbandry, poultry farming, piggeries, fisheries, shrimp farming etc. has been gathered, but to our knowledge there is no systematic documentation of EM use in the care of horses published. This summary is based on experiences gained in the field of equine with EM colleagues across the world. We have however published a book called “Healthy Horses & EM” written by Ernest Hammes with testimonials of many horse owners of their experiences with using EM in their horse care regime.

For the technical terms used in this summary – such as activated EM solution (Actiferm), EM-5 & Syn-Vital . EM use in the care of horses is reported to make the animals more disease and stress resistant, e.g. to changes of weather and temperature, to improve their general health, to improve their coat, to decrease requirements for compound feed (and expenses), to decrease unpleasant odour, to eliminate ticks and to reduce fly nuisance. EM use also adds to the value of the excrements as compost and liquid fertiliser. It goes without saying that the use of EM is complementary to appropriate care of animals and does not invalidate other knowledge and skills in the care of the animals.



2. EM use in the care of horses

2.1. EM treatment of the stables

Activated EM solution should be used in a dilution with water (1:10 up to 1:100) to wash floors, walls and ceilings of stables and anything that comes into contact with the horses, troughs, harnesses etc. If the floor consists of sand, activated EM solution can also be sprayed over the sand. Open stables will also benefit from a spray of activated EM (diluted 1:1,000) every few months.

Activated EM is also available in vacuum packed boxes called **ACTIFERM**, ready to use immediately.

Daily EM applications in the stables will control bad odours, flies, ticks, and, to some extent, fungal and other diseases which are being transmitted via soil or floors. In cases of sick animals in need of disinfection measures on their environment, EM can very well replace the use of biocidal applications such as disinfectants. EM use takes away factors which are stressful for the horses and it helps in preventing diseases. EM applications on leather equipment help in preventing fungal growth on the equipment which would occur under high humidity conditions and when little used.

2.2. EM for washing the animals

Whenever the horses are getting a wash or a bath, activated EM should be added in the last rinse of the animal, at a dilution of 1:100. After this EM rinse, further washing should be avoided. This helps in keeping flies and ticks away and is preventive measure minimising cross infection of disease causing pathogens. For the control of ticks, the use of EM5 is strongly recommended as it has proven to be more efficient than chemical acaricides.

2.3. EM in food and drink

EM activated should be added to the horses drinking water in a concentration of 0.1 % (1 : 1.000), either by continuously adding it (via a drip dosatron system) or to the general drinking water supply of the horses, by adding it to buckets or troughs when needed.

In horses accustomed to EM, an additional dose of 10 to 20 ml activated EM given via the mouth of the animal, may be administered on a daily base. Whenever hay or straw is given as fodder, this may be sprayed with the same highly diluted EM solution.

Syn-Vital – Probiotic feed additive.

Syn-Vital is a feed additive made from EM Effective Micro-organisms and wheat bran. The beneficial lactic acid producing bacteria in Syn-Vital makes it easier for the horse to digest and

utilise their feed, thus improving the feed conversion. This is important for all healthy animals. About 100 grams Syn-Vital should be fed daily to a horse, reduce the amount to half for very young foals. (100 gr Syn-Vital has a volume of approximate one small cup.)

Regular feeding of Syn-Vital will lead to weight gain due to improved food utilisation, and thus will necessitate (and make possible) reduction of fodder rations, viz. Up to 20%. Syn-Vital is registered and approved as an animal feed additive under EU regulations.

The odours of urine and dung under EM care are said to be less offensive.

(The dung from horses fed with Syn-Vital has a higher nutritive and fertiliser value for the soil and can be utilised for horticultural and agricultural purposes.)

2.4. EM in veterinary care

For the care of wounds: gauze for cleaning and dressings for wounds can be soaked in undiluted EM. Even wounds from bites or tics which would normally require surgical care, possible tranquilisation, and attention from several qualified people, may be washed three times daily with EM solution. In the second week: twice daily, and later once daily. It may be possible to avoid antibiotics. Bleeding will stop fast, inflammatory swellings will be minimised, pus formation and growth of wild tissue can be avoided, healing is improved and leaves fine healthy scars. During such a treatment, the animal will be allowed its usual activity and movement.

In the case of treating infected wounds or wounds covered with crust and dirt: even when already malodorous, a paste made from a seed oil (olive oil, sesame oil) and from EM stock solution (also along with EM-X ceramics powder, can be applied daily.

In the case of hoof ulcers (due to foreign bodies) which have to be opened surgically, activated EM solution should be flushed into the ulcer cavity, and an EM-soaked wick introduced. This should be repeated at least every second day.

In periods of intensive wound care or ulcer treatment, when the danger of infection and fever are to be avoided, the daily doses of extended EM should be doubled.

In cases of suspicious changes in the appearance of the coat, it is recommended to massage the affected area with a sponge soaked in undiluted activated EM solution. This will help to relax and soothe the animal, control fly nuisance and prevent infections.

In the case of sore gums and mouth, undiluted EM may be applied with the help of cotton swabs. Eye irritations and inflammations should be controlled at an early stage by washing with a luke warm mixture of activated EM and water of 1:1. It also helps to control fly nuisance. As horses are

strongly dependent on their eye-sight, early treatment of eye problems will reduce stress significantly.

If EM is firmly established in the environment and regularly given to the adult animals, a newborn animal may receive its first dose of activated EM solution on the second day of its life; for the first month of life, 1 ml of EM per day is appropriate.

An experienced horse keeper in Germany working with EM for several years is fully convinced of the benefits exerted by EM on the general microbial environment of stables, corals and horses. Under such conditions, even commonly recommended immunisations can be avoided, in particular in the newborn animals, and antibiotic treatments which are standard procedure but pose a definite stress on the animal and its intestinal and immune system can also be avoided.

3. Further implications of EM use

In the course of time, every EM user will discover the various benefits of EM, its far-reaching and long-term “downstream” benefits. We very much invite all users to share their experiences with us and get back to us for other applications of EM, such as in

Animal husbandry, agriculture, wastewater treatment, composting, household use, and environmental regeneration.

For information on supply and costs and other applications, please refer to our separate information material. You are welcome to contact us at the following address for supply of EM and for information:



EM® EQUINE RANGE
Effective Micro-Organisms

**EFFECTIVE MICRO-ORGANISMS
TO BEAT SEASONAL SKIN PROBLEMS**

- 100% Natural and Safe
- A new holistic approach to suppressing disease-causing fungi and bacteria
- Increases natural resistance
- Helps horses cope with stress
- Cost effective performance boost

EM® Syn-Vital
Probiotic bran supplement inoculated with a multitude of good bacteria for a health boost.

EM® Skin Care
A topical spray treatment of beneficial microbes for all seasonal skin problems

Improved Performance & Health

Working Together For a Sustainable Future
www.effectivemicro-organisms.co.uk

EM Effective Micro-organisms Ltd Ebear
Farm,
Westleigh,
Tiverton , Devon. EX16 7HN
Tel 01823 67 33 44

Email: info@effectivemicro-organisms.co.uk

Websites: www.effectivemicro-organisms.co.uk general/agriculture/
environment

www.emna.eu organic gardening/cleaning