5 clear signs to recognize that your horse's hoof is not healthy

A healthy hoof capsule should not show any irregularities. Any horizontal and vertical grooves, lines, cracks, discoloration are the first signs that the hoof with its different horn parts is in distress, out of balance.

1. **Horizontal Grooves**

These grooves are often dismissed as growth rings and considered relatively normal. However, these so-called metabolic growth rings must be distinguished from purely mechanically caused stress rings.

While metabolic rings are systemic in origin, they occur equally on all 4 hooves. They were generated at the same time in the coronary band and are therefore visible at the same height on each hoof.

The case is different with rings or better said, *folds*, which can be mechanically generated by individual stimuli, levers, compression or tensile forces on parts of the hoof capsule. The hoof wall tubules can become compressed, accumulate, cause levers due to not enough wear. The horn tubules of affected parts become too long; they experience less abrasion than other parts. They can accumulate and fold.

2. **Vertical Lines, Fissures and Cracks**

These are caused exclusively by hoof wall mechanics acting differently and against each other. Different forces generate these dynamics in different directions. The horn tubules are torn from their bond. At first, these changes are perceived on the surface of the hoof wall horn as lines, which quickly turn into fissures and can end up in cracks if left untreated.

3. **Horn discoloration (bruises)**

The term bruise is unfortunately misleading and incorrect. The discolorations in the horn are blood plasma or hemoglobin deposits resulting from a stressed and irritated corium that releases the color into the keratinized cell while it is produced. Unlike a bruise that would be trapped behind the horn (e.g., bruise behind a fingernail)
The corresponding dermis of a horn part (sole, wall, frog, lamellar layer) can be stressed due to levers, compression and tensile forces that it reacts with release of plasma or hemoglobin. The visible horn is dead and grows down; The visible color must therefore be correspondingly older.

4. **Uneven coronary band**

If the coronary band is no longer even, partially compressed, pushed up or bulges out, pressure or leverage forces are at work. The afflicted hoof wall parts may experience too little abrasion, become longer and the horn tubules may bend outward. The hoof capsule only allows this flare to a certain extent. The bearing edge at this point may chip off or the entire wall segment may become compressed. (see horizontal grooves)
This compression then causes pressure into the coronary band. The soft structures, the coronary band is pushed upwards, and it can bulge out.

5. **crooked hoof walls, unphysiological roundings**

The horse, because of its hinge joints, loads one side of the limb more than the other. This remains its whole life long. All bones, ligaments, tendons, joint surfaces deform accordingly. The hoof consequently follows these deformations and tries to compensate the load by adapting a certain shape. Since our domestic horses cannot run 20 miles a day and keep their hooves short, every millimeter of horn length is accompanied by corresponding leverage effects. The solution is not to eliminate the weight bearing hoof wall completely, as many hoof trimming methods teach. It makes more sense to make the supporting and absolutely necessary bearing edge FUNCTIONAL; To adapt it to the individual use of each horse.
This can only be done with a special rasping technique. Simply cutting off the longer and more slanted parts of the hoof wall from below does not help at all. They would then be shorter, but still crooked.
These parts are therefore slanted, because they are not under the horse's weight, are used less and experience less abrasion. Horn tubules can bend or, depending on the hoof type, compress and press into the joints.
Bent hoof walls, flaring hoof walls and unphysiological roundings are always a sign that the horse cannot use the hoof evenly.