

### Influence of a Brewers' Yeast Fibre product on skin, coat, digestion and faeces in dogs and cats

Author: Maike Rakebrandt, Senior Product Management Equine & Pet, Leiber GmbH (2021)



Brewers' yeast has been successfully used in pet food for decades. The positive nutritive effect but also its positive effect on skin, coat and digestion has been confirmed many times in scientific literature, but also in practice. According 1954 Leiber produced a unique combination of real inactivated brewers' yeast with valuable dietary fibre carriers: **Leiber YeaFi**<sup>®</sup> (Yeast Fibre) products. The fibre components reinforce the beneficial nutritional properties of brewers' yeast in an ideal way. Functional fibres from secondary food streams are not only fully in line with the sustainability trend, they also have many dietetic and prebiotic advantages. In addition **Leiber YeaFi**<sup>®</sup> products are less hygroscopic and therefore easier to handle in storage, processing or direct feeding like raw food (BARF) and cooked homemade food than pure dried brewers' yeast.

The purpose of the field trial was to identify the influence of a Leiber YeaFi® product on various health parameters in dogs and cats.

#### Material & method:

A practical acceptance and impact assessment was carried out by an external market research institute in an own household panel. 30 dogs and 30 cats of different age, breed and sex participated in the field trial and remained in their familiar environment. All test candidates were healthy and received their daily meals as usual based on wet food, mixed with **Leiber YeaFi® AB**.

**Leiber YeaFi® AB** consists of real brewers' yeast, which is gently dried and bound in a unique process with apple pomace and sugar beet pulp in a 40:30:30 ratio. In order to mix it more homogeneously into the wet food, **Leiber YeaFi® AB** was milled into a fine powder (min. 95% < 500  $\mu$ ).

The pet owners gave the cat and dog one portion of **Leiber YeaFi®AB** once a day in the main meal of wet food in following dosages:

Cat (1 to 11 years old):	Dog (1 to 11 years old):
2 g per day	< 10 kg body weight: 4 g per day
	10-25 kg body weight: 8 g per day
	> 25 kg body weight: 12 g per day

The bowl of wet food was available as usual for the dogs and cats. The participants prepared the test feed themselves fresh every day. Before the test started and after 14 days (end of the test), they filled out a standardised questionnaire. Following parameters were subjectively assessed by the animal

owners in the questionnaire: general health and well-being, skin health, dandruff, coat health, coat shine, hair shedding, mouth odour, digestion, digestive problems, faeces consistency, faecal odour, agility and acceptance.

The questionnaire, data collection and data evaluation were carried out externally by the market research institute.

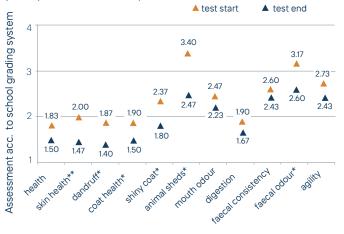
#### **Results:**

Leiber YeaFi® AB was mixed from the pet owners directly into the wet food without any problems. The food was well accepted esp. from the dogs. 83% of dogs liked their wet food with Leiber YeaFi® AB as much or even more than before.

The use of **Leiber YeaFi® AB** showed an improvement in all parameters surveyed, both in the dog and especially in the cat. There was a significant improvement in coat health and coat shine (see Fig. 1 and 2), as well as hair, skin health and dandruff (see Fig. 1). Also significant positive changes were seen in faecal odour, general health and well-being (see Fig. 1).



## Fig. 1: Effectiveness evaluation Leiber YeaFi<sup> $\circ$ </sup> AB by cat owners (n = 30); mean values in comparison



\* resp. \*\* = significant changes

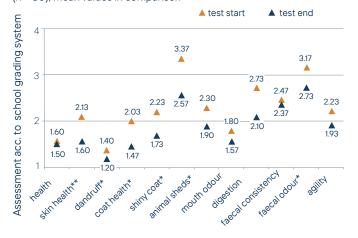
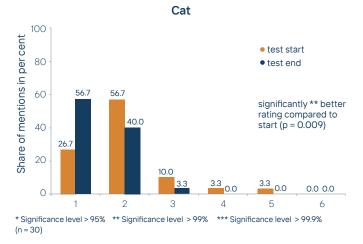
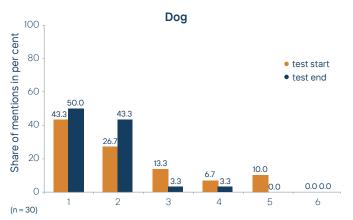


Fig. 2: Effectiveness evaluation Leiber YeaFi<sup> $\circ$ </sup> AB by dog owners (n = 30); mean values in comparison

Using a school grading system, the dog and cat owners rated the skin health of their animals before and after feeding **Leiber YeaFi® AB** with 1 = very healthy skin to 6 = severe skin problems. Already 14 days after feeding **Leiber YeaFi® AB**, there was a significant improvement in the skin condition of the cat (+20%) and also a clear improvement in the dog (see Fig. 3).

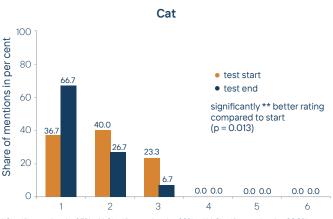




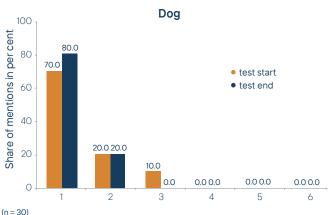


A better skin health was also confirmed by the results on building dandruff. The score was 1 = has no dandruff at all to 6 = hasa lot of dandruff. Here, too, there was a significant reduction in cats (+30%) and a positive trend in dogs (see Fig. 4).

Fig. 4: Dandruff building: rating of the pet owners in per cent



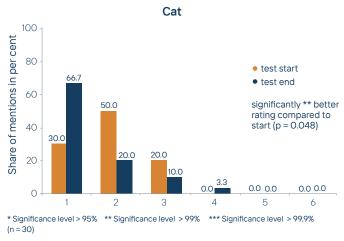
\* Significance level > 95% \*\* Significance level > 99% \*\*\* Significance level > 99.9% (n = 30)

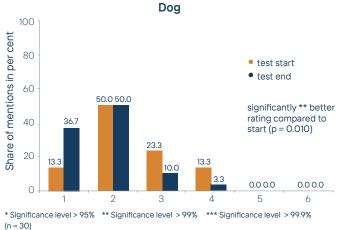


The coat health was rated from 1 = very healthy coat to 6 = severe coat problems such as shaggy or matted coat. In Fig. 5 the coat health was significantly improved for both the cat (+36,7%) and the dog (+23,4%).

## 

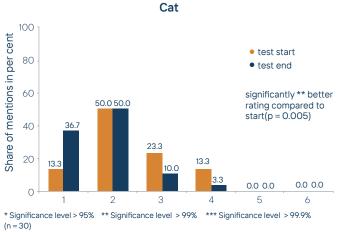
#### Fig. 5: Coat health: rating of the pet owners in per cent

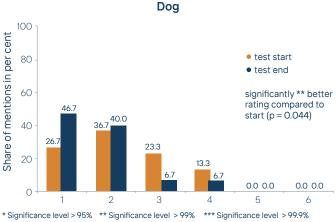




For many pet owners, a shiny coat is an important indicator of good overall health and well-being for their animals. The pet owners rated 1 = very shiny coat to 6 = very dull coat. Both dogs (+20%) and cats (+23,4%) showed significantly better coat shine after administration of **Leiber YeaFi® AB** and that after only 14 days of feeding (see Fig. 6).

Fig. 6: Shiny coat: rating of the pet owners in per cent

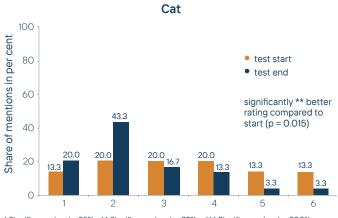




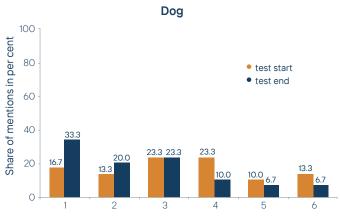
(n = 30)

In addition to coat shine, the hair shedding of the animals was also evaluated with 1 = no hair at all/almost no hair to 6 = very much hair. Especially for cats that are kept indoors or long-haired breeds, a constant loss of hair is stressful esp. for the owners and a faster "shedding" is therefore desirable. Here, too, a significantly faster "shedding" and thus less hair after 14 days was observed in the cat (ca. +30%) and a positive tendency in the dog (see Fig. 7).

Fig. 7: Hair shedding: rating of the pet owners in per cent



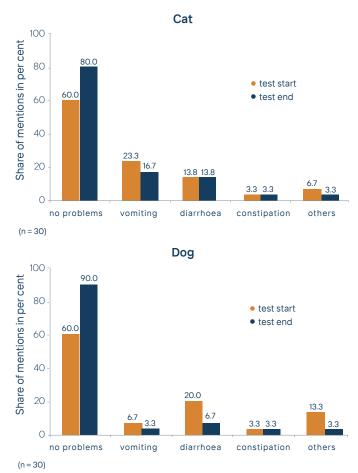
\* Significance level > 95% \*\* Significance level > 99% \*\*\* Significance level > 99.9% (n = 30) 



(n = 30)



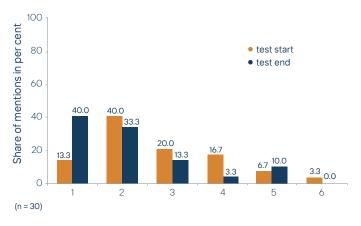
The questionnaire showed a positive trend in improvement of general digestion for cats and dogs. One question dealt with specific digestive problems like diarrhoea, vomiting or constipation. Here, too, there was a clear improvement in symptoms, esp. in diarrhoea, but also vomiting (see Fig. 8). 20% more cats and 30% more dogs were classified as "have no digestive problems" at the end of the test.



#### Fig. 8: Digestive problems: rating of the pet owners in per cent

In addition, the dog's tendency to flatulence was assessed with 1 = no flatulence at all to 6 = often severe flatulence. More than 26% of the dog owners saw an improvement resp. less flatulence after administration of **Leiber YeaFi® AB** (see Fig. 8a).

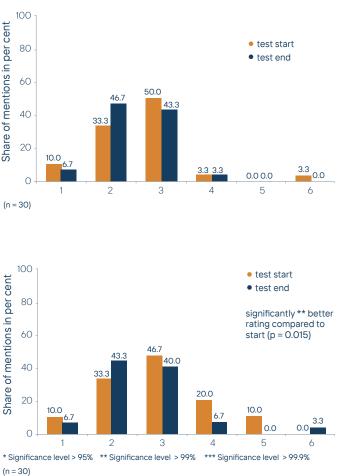
Fig. 8a: Flatulance: rating of the dog owners in per cent



Changes in faecal consistency and faecal odour were also assessed by the participants. Faecal consistency was rated from 1 = very firm faeces to 6 = very soft, mushy faeces. Both dogs and esp. cats (see Fig. 9) showed an improvement in faecal consistency towards less soft faeces. This is also confirmed by the reduction of diarrhoea in dogs and cats (see Fig. 8). In another study (HESTA 2021) with Beagle dogs at the University of Ghent, it was also shown that **Leiber YeaFi® AB** influenced the faecal consistency positively into a better stool (firm but not hard). The study continued to show no increase in faecal volume, even at higher doses of **Leiber YeaFi® AB**.

Very surprising were the results on faecal odour, which was rated from 1 = no/very little faecal odour to 6 = very intense faecal odour. Faecal odour could be significantly reduced with ca. 26.7% in cats (see Fig. 9). Especially for indoor cats owners, a less intense faecal odour is a very positive aspect.

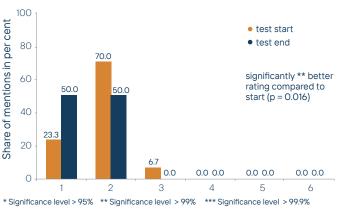
Fig. 9: Faecal consistency and faecal odour: rating of the <u>cat</u> owners in per cent





The general health and well-being of the animals was assessed by the pet owners using the standard school grading system (1 = very good to 6 = very poor) before and after the test. After using **Leiber YeaFi® AB**, the pet owners rated the overall health and well-being of their animals as improved. In the case of cats even as significantly improved (see Fig. 10).

Fig. 10: General health and well-being: rating of the cat owners in per cent



(n = 30)

All in all, the use of **Leiber YeaFi® AB** was very positive in many areas of effects like digestion, skin and coat health for both cats and dogs. **Leiber YeaFi® AB** is easy to handle, esp. in direct feeding concepts like raw food (BARF) and cooked homemade food. 80% of dog owners concluded that they would feed **Leiber YeaFi® AB** to their pets also in the future.

#### Take-home message:

#### Leiber YeaFi® AB showed after 14 days of feeding:

- clear improvement in skin condition
- clear reduction in dandruff building
- clear improvement in coat health and coat shine
- clear reduction of hair shedding
- better general digestion
- reduced symptoms like diarrhoea and vomiting
- reduced flatulence
- improvement in faecal consistency
- clear reduced faecal odour
- improved overall health and well-being

Leiber YeaFi<sup>®</sup> AB has a positive effect esp. on digestion, coat and skin. It is easy to handle and also suitable for use in direct feeding such as raw food (BARF) or cooked home-made diets.



Influence of a Brewers' Yeast Fibre product on skin, coat, digestion and faecal parameters in dogs and cats. SAW Marktfoschung Ratingen (G), Leiber GmbH (2021)

#### Literature:

HESTA, 2021: Effect of different brewers' yeast products on faecal characteristics in healthy adult dogs. Faculty of Veterinary Medicine, Facultaet Diergeneeskunde, University of Ghent (BEL), Prof. Dr. M. Hesta; unpublished (2021)

#### For more details and information please contact:

Maike Rakebrandt, Senior Product Management Equine & Pet Phone: +49 5461 9303-750 | m.rakebrandt@leibergmbh.de

Leiber GmbH | Hafenstraße 24 | 49565 Bramsche | Germany Phone: +49 5461 9303-0 | Fax: +49 5461 9303-29 | info@leibergmbh.de leibergmbh.de



# Sustainable. Innovative. Effective.



leibergmbh.de