INTESTINAL ACTIVE

MULTICENTRIC STUDY

The nutritional solution of gastro-intestinal pathologies
(without pharmacological therapy)
INTRODUCTION

In cats and dogs, just as in humans, symptoms related to adverse reactions to food are very common and may concern a number of apparatuses and systems: gastro-intestinal, otological, nervous, urinary, respiratory and the skin. In detail, one of the apparatuses most commonly involved is the gastro-intestinal system. The main reason is because the intestinal mucus functions as a generic barrier. It must generate a protection response based on fish, potato, and supplemented with titrated nutraceutical foods.

Gastro-intestinal symptoms, such as vomiting on an empty stomach, vomiting after feeding, diarrhea, weight loss, abdominal pain, flatulence, borborigmus, and exaggerated desire to eat grass are especially frustrating for the following reasons: poor response to medicine, continuous relapses, animal suffering, and objective difficulty for owners to treat the pathology in terms of time, commitment and cost. In these cases, a specific diet is the most important instrument available to limit or avoid a large use of pharmaceuticals.

On this basis, the FORZA10 R&D Center has made it its goal to develop the concept to cure through nutrition by creating organ-specific nutraceutical products. The neologism “nutraceutical” is a combination of nutrition and pharmaceutical. Nutraceutics is a new branch of medicine that aims to study the effect of specific natural substances in both preventing and treating a variety of diseases.

Because of its characteristics, it could become the missing link between natural medicine and pharmacology. Nutraceutical foods are also capable of solving, simply and definitely, the objectively difficult obstacle of oral, parenteral or spot on medicine administration.

ADVANTAGES

- Titrated and standardized active ingredients
- Complete bioavailability of active ingredients (AFS patent)
- Innovative bicomponent
- No direct or in direct therapeutic intervention on the animal
- Rapid results
- Single source protein and single source carbohydrate
- Highly palatable
- Practical to use

AIM OF THE STUDY

The aim of this study is to evaluate the role carried out by FORZA10 Intestinal Active, based on fish, brown rice and supplemented with titrated and standardized phytotherapeutic active ingredients, on dogs affected by gastro-intestinal pathologies and without the use of pharmacologic therapy.

The effectiveness of the diet was tested through a dietetic trial period lasting 30 days. The results were based on specific clinical protocols developed and completed by 46 veterinary surgeons in Italy.

MATERIALS AND METHODS

The FORZA10 R&D Center, with the cooperation of 46 Italian Veterinary Surgeons, has carried out and completed a dietetic trial on 60 dogs affected by enteritis in late 2009 and in early 2010.

The duration of the trial was 30 days, the minimum amount of time necessary to observe significant clinical changes.

The study required a thorough examination of every subject that was clinically affected by enteritis: dehydration, excessive desire to eat grass, loss of appetite, weight loss, regurgitation, vomiting, abdominal pain, flatulence, borborigmus, diarrhea, constipation, mucus, irregular condition of feces, presence of blood in feces, fever, parasites. The dogs examined were given FORZA10 Intestinal Active, based on fish, potato, and supplemented with titrated and standardized phytotherapeutic active ingredients for 30 days.

During this period 4 checkups were required: one before starting the diet, one after 10 days, one after 20 days and the last one 30 days after the diet period started.

During the checkups the symptoms were found to be: severe, moderate or absent.

The breeds most commonly involved were: mixed breeds (31.7%), German Shepherds (16.7%) Yorkshire Terriers (8.3%) (other breeds 43.3%). There were 27 females (45%) and 33 males (55%). Average age was 6 years old. In 40% of the cases (24 dogs) the subjects previously received processed dog food, 35% (21 dogs) ate homemade and processed dog food and only 25% (15 dogs) ate homemade food.
The results clearly demonstrated that FORZA10 Intestinal Active is able to drastically and rapidly reduce typical gastro-intestinal symptoms. After just 10 days of following this diet, 90% of severe before the diet period decreased (3.4% of severe symptoms left), while after 20 days the symptoms were still only 1%. The moderate symptoms decreased from 67% to 34.5% after 10 days, then to 14% after 20 days. At the end of the trial, only 6% of the case were still presenting moderate symptoms, so that in 93% of the cases there have been a total regression of symptoms.

This research has demonstrated how, even though some symptoms remained after the 30 day period, the overall wellbeing of subjects had improved. Severe cases were improved in 97% either regressing to a moderate degree or disappearing altogether.

In order to measure the overall symptom regression during treatment we used an INTENSITY INDEX with values that vary on a scale of 0 (no symptoms) to 1 (display of a severe degree of symptoms) (see Graph 2) for the 4 trial phases.

Graph 1: Before the diet 60 dogs showed 67% of moderate symptoms and 33% of severe symptoms. After 30 days of treatment 93% of initial symptoms were gone.

Graph 2: The graph illustrates the reduction of average intensity of symptoms throughout the diet. The initial value before beginning the diet was 0.66. After 10 days of treatment the average intensity index was one third of the initial value and after 30 days the index was near 0.
This dietetic trial was based on direct collaboration with veterinary surgeons who contributed their clinical experiences.

During the study, veterinarians found that in the first check-ups after using FORZA10 Intestinal Active the first results were improvements in 73% of the cases, and the disappearance of symptoms in 22% (see Graph 3).

At the end of the trial 75% had healed and 20% improved for at least one symptom. Only 3 subjects did not improve, therefore demonstrating that the cause of the etiology was different from those considered. In fact, it is quite logical to consider that there are other etiologies for gastro-intestinal phenomenons that do not necessarily respond to this type of approach.

It is known that food hypersensitivity can strike at any level of the gastro-intestinal system (even the oral cavity). In most cases, clinical evidence refers to dysfunctions of the gastric tract and the small intestine, but colitis is also possible problem[1,2,3,4,5,6,7].

As visible in Graph 1, evidence emerged that after 10 days, more than 62% of the gastro-intestinal symptoms detected (347 active symptoms, severe or moderate) disappeared; and after 30 days, the percentage increased to 93%.

The results concerning weight loss, regurgitation, vomiting, flatulence and borborigmus, diarrhea, irregular condition of feces, blood in feces, and excessive desire to eat grass were especially interesting.

Thanks to an improvement of the intestinal pathology and to the high digestibility of FORZA10 Intestinal Active (important characteristic of the diets formulated specifically for patients with gastro-intestinal problems[6,7,8,9,10]) in all 33 subjects with weight loss, the situation has been resolved: in 73% of the cases it have been resolved after 20 days, and after 30 days 85% of subjects hadn’t been showing any signs of weight loss.

After 10 days, regurgitation, present in 18 dogs, disappeared in 94% of the cases, while vomiting, present in 16 dogs, disappeared after 86%. Both symptoms, regurgitation and vomiting, disappeared completely by the end of the trial.

Flatulence, a chronic and unpleasant problem which is very common in dogs, was present in 47 subjects. The severity gradually regressed during the trial and then completely disappeared in 87% of subjects after 30 days. As a matter of fact, highly digestible diets, such as FORZA 10 Intestinal Active, are highly suggested for subject affected by flatulence[11].

The presence of borborigmus, detected in 52 subjects, was reduced in 88% after 20 days and 94% after 30 days.

Diarrhea, present in almost all dogs with the majority having severe cases, was reduced in almost 90% of these cases after only 10 days, while 51% completely healed. Similarly, the condition of the feces, connected to the previous symptom, was brought back to normal (normal feces) or significantly improved in 75% of the dogs, with the complete absence of liquid feces.

The presence of mucus in the feces, detected in almost 67%, was reduced to a third after 10 days and there were no more severe cases.

Blood in feces detected in 32% of the subjects disappeared completely in 89% of them after the first check-up.

The excessive desire to eat grass, found in 34 dogs, returned to normal in 59% after 10 days and in 85% of the cases after 30 days.
**CONCLUSIONS**

**FORZA10 Intestinal Active** was specifically studied and formulated as a nutritional instrument for inflammations caused by food or by a multitude of other pathologies that target the gastrointestinal system. Specific antioxidants and phytotherapeutics have been added to **FORZA Intestinal Active** and may be acknowledged as being effective against food intolerances in conjunction with FORZA10's principle use of a single source of protein. Thanks to the innovative and exclusive patented technique AFS, all the properties of the antioxidants and other precious natural ingredients added to the formula are 100% preserved.

The study clearly highlights two fundamental results: effectiveness and rapid action. One of the most interesting results was on diarrhea, a common phenomenon in dogs and considered difficult to resolve: in the majority of the cases just after 10 days the symptom regressed completely (51%) or improved significantly (39%). In fact, during the same period, the cases of diarrhea decreased by 87%.

Use of **FORZA10 Intestinal Active** has determined the disappearance of 93% of symptoms and healed or improved in 95% of the dogs treated.

**INTESTINAL ACTIVE**

**FORZA10 Intestinal Active**, object of the present research, was specifically studied and formulated as a nutritional instrument for inflammations caused by food or by a multitude of other pathologies that target the gastrointestinal system. **FORZA10 Intestinal Active** features kibbles with a single source of protein (fish) and special tablets that contain a variety of natural principles. To preserve these from the high temperatures encountered during the extrusion process the tablets are made at room temperature and then 7% of the tablets are combined with the kibbles (SANyPet AFS European patent n. EP 2526781).

The special AFS tablets consisting of pure fish hydrolysates give great advantages because they are: absent of pharmaceutical excipients, highly palatable, hypoallergenic, have a desirable kibble density for standard parameters, and are easily eaten by dogs. **FORZA10 Intestinal Active** is regulated by the EU Directive 2008/38/CE, under the dietetic food category “Reduction of acute intestinal absorptive disorders”, “Compensation of malabsorption”; “Reduction of ingredient and nutrient intolerances”.

Specific antioxidants and phytotherapeutics have been added to **FORZA10 Intestinal Active** which has a single source of protein (fish) and one of carbohydrate (brown rice); it is indicated as a nutritional aid in the treatment of acute, chronic or recurrent inflammatory processes arising both from food intolerances and/or allergies, and from other factors identified by your veterinarian. The properties of the natural extracts added (titrated and standardized) in **FORZA10 Intestinal Active** are well-known both in conventional medicine and in phytotherapy:

**Lactic cultures**. Innovative complex of milk enzymes from selected strains “E 1707 Enterococcus faecium DSM 10663-NCIMB 10415™: 3.5 x 10^9 cfu, carried and stabilized by the special heart-shaped tablet. They induce humoral and specific cell immune functions in dogs and is capable of increasing the number of fecal IgA and IgG specifically against distemper viruses in puppies. It is effective in inhibiting inflammation in animals affected by IBD and controls the proliferation of potential pathogenic bacteria that are present in intestinal flora.

**Natural Heteropolysaccharide WBC (Plantago psyllium)**. The mucillages included in psyllium are used for their regulative action on intestinal transit, as well as for their emollient and protective action. They have a mechanical and osmotic laxative effect due to the fact that the highly hydrophilic mucillages of this nutrientaceutical ingredient increase their volume very quickly in the presence of liquids. In this way, a voluminous gel increases the volume of fecal bolus and stimulates peristalsis, helping bowel movement. The ability to draw liquids is helpful not only in case of constipation, but also in the case of diarrhea. In the latter case, it acts by absorbing excess liquids and increasing the consistency of fecal bolus (regulating the effect on intestinal transit). Psyllium seeds also have pre-biotic properties, thanks to their ability to maintain the balance of the bacterial flora and therefore limit harmful effects of enteropathogenic micro-organisms.

**Chestnut (Castanea sativa)**. Chestnut has a remarkable energetic effect, as well as an astringent, anti-inflammatory effect and also a protective effect on the gastro-intestinal mucosa and therefore limit harmful effects of enteropathogenic micro-organisms.

**Oregano (Origanum vulgare spp.)**. The phytocomplex contained therein has very high phenol values (Carvacrol 70.6% - Thymol 2.3% - gamma terpineine – alpha-cymene). Carvacrol has a high anti-fungal, anti-bacterial and antioxidant properties and thymol has antiseptic, antispasmodic and anti-parasitic role.

**Bio MOS and FOS**. Bio MOS-FOS is a cell component from beer yeast that modulates the intestinal bacterial activity. FOS are carbohydrates found naturally in fruits and vegetables, and they regulate the presence of several intestinal bacteria such as Bifidobacteria and Lactobacillus, providing ideal support for absorbing food. Research has demonstrated that they are able to increase the number of useful bacteria in the colon of cats and dogs and are able to control overgrowth or other inflammatory pathologies cause by harmful bacteria.

**Rose hip (Rosa canina L.)**. The titrated and standarized fruit extract is a precious natural source of vitamin C (present in quantities 50 - 500 times greater compared to citrus). Vitamin C is present in high dosages to compensate for excessive losses during feverish and diarrheic states. As a consequence of “intracellular carriers” it increases bioavailability of active principles, has a protective action on the vascular system, stimulates the immune system, and acts as an antioxidant.

**Electrolytes**. They provide moisture, compensating for heavy losses (especially sodium, potassium, chloride, bicarbonate) and maintain the correct osmotic pressure in and intra-cellular fluids.
FORZA10 Intestinal Active

“Compensation of maldigestion”; “Reduction of ingredient and from other factors identified by your veterinarian.

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AFS European patent n. EP pet with the kibbles (SANY the extrusion process the tablets are made at room 286x90}

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