ONE WORLD, ONE MEDICINE,
ONE HEALTH
POSTER SESSION ABSTRACTS

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BREEDING AS A SOLUTION TO POACHING IN THE HUMID FOREST ZONE OF EAST-CAMEROON?

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Topic: 13. One World, One Medicine, One Health

This study aims to provide the socio-humanitarian NGO, GeoAid International Cameroon with information that will enable it to develop livestock and improve the cane-rats project already set up. For that purpose, 492 people and 33 associations were surveyed in LOMIE, MESSOK, and NGOYLA. The collected data was processed using Microsoft office Excel and Epi Info. According the surveys, 99% of respondents are engaged in agriculture and 37% are engaged in hunting and gathering. Overall, 96% of people have at least one pet, 70.11% are male and 39.89% female. Their average age is between 35 and 55 years, 48% have an elementary school level, and 2% have undergone training on livestock. The traditional poultry farming predominates with a frequency of 78%. Over 98% of respondents opt for straying animals. Diseases, lack of supervision and capital are the major obstacles to livestock development in this part of Cameroon. As for the cane-rats project, it targeted the hunters and the poor. As such, 165 grasscutter (Thryonomys swinderianus) begetters (132 female and 33 male) were distributed to 33 associations. Six months later, 36.36% of the groups had totally lost their begetters, 24.24% still have all their animals, 30.30% have 03 grasscutters and, 9.1% have 02 births. There were 06 cases of gestation, and 03 farrowing. Observations made on the field reveal that: socio-cultural considerations, the lack of grasscutter breeding techniques, and the lack of health monitoring led to the loss of several grasscutters.
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PLASMA PROTEIN PROFILES AND FIBRINOGEN CONCENTRATIONS IN DOGS WITH EXPERIMENTALLY INDUCED STAPHYLOCOCCUS AUREUS INFECTION

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Topic: 13. One World, One Medicine, One Health

The aim of the present study was to define changes in concentrations of total proteins, albumin (as a negative acute phase protein), globulins and fibrinogen (as a positive acute phase protein) in dogs with experimentally-induced Staphylococcus aureus infection. For that, 9 male mongrel adult dogs were subcutaneously inoculated with S. aureus suspension (5 mL, \(10^9\) cfu/mL) while 6 control dogs were injected with saline solution and the plasma concentrations of total proteins, albumin, globulins and fibrinogen as well as the albumin/globulins ratios were determined before injection, 6 hours and 1, 2, 3, 7, 14, 21 days after. Whereas biochemical parameters remained stable in the controls, proteinemia slightly and significantly increased on day 7 in the inoculated dogs. In parallel, the globulin concentrations markedly increased and albuminaemia as well as the A/G ratios dramatically declined compared to the controls since day 3 to day 14 and maximal variations were also observed on day 7. On the other hand, the staphylococcal infection induced gradual and marked increases in fibrinogen concentrations since 6\(^{th}\) hour until the 3\(^{rd}\)-7\(^{th}\) days (maximal values) and thereafter this marker slowly declined. Strong positive correlations were recorded between proteinemia, globulins and the fibrinogen concentrations. These results confirm that the concentrations of albumin may be considered as a negative acute phase protein and the concentrations of fibrinogen as a positive acute phase protein and show that the fibrinogen concentrations could be useful for the diagnosis and the follow up of a bacterial infection in dogs.
The aim of the present study was to evaluate the C-reactive protein (CRP) concentration as a positive acute phase protein in dogs with experimentally-induced Staphylococcus aureus infection. For that, bacterial suspension (5 mL, density: \(3.1 \times 10^9\) c.f.u./mL) was subcutaneously applied to 9 mongrel, 2 years old, male dogs whereas 6 other dogs served as negative controls and were injected with saline solution. Plasma CRP concentrations were determined using a species-specific commercial ELISA kit before application (t = 0 hour), 6, 24, 48 and 72 hours and 7, 14, 21 days later. Plasma CRP concentrations were significantly higher in infected dogs than in the controls since 6th hour and for the whole experimental period. Furthermore, this marker significantly peaked at 24th h and day 7. In parallel, systemic and local clinical signs gradually developed during the first 48 hours and marked increases in CRP concentrations at 24th h were associated with severe clinical symptoms while the second peak of CRP concentrations (on day 7) was not coupled with clinical signs. We can claim that CRP may be use as early diagnostic marker in staphylococcal infection because the clinical signs (body temperature, respiratory and heart rates) started to increase since at 24th h while the CRP started to rise since 6th h. These results indicated that plasma CRP concentrations increased in early stage of Staphylococcus infection and could be used as a helpful indicator for an early diagnostic in dogs.
EVALUATION OF THE HEMOSTATIC AND HISTOPATHOLOGICAL EFFECTS OF ANKAFERD BLOOD STOPPER IN EXPERIMENTAL LIVER INJURY IN RATS

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Topic: 13. One World, One Medicine, One Health

We studied the hemostatic and histopathological effects, and intra-abdominal adhesion scores of a new hemostatic agent, Ankaferd Blood Stopper (ABS), in an experimental liver injury model and compared it with regenerated oxidized cellulose. Thirty-six rats were randomly assigned to ABS, oxidized cellulose (Surgicel), and control groups (n = 12, each). A wedge resection was performed on the left medial lobe of the liver. In the ABS group the liver surface was sprayed with ABS, whereas in the Surgicel group the liver was covered with double-layered oxidized cellulose. In the control group, saline solution was sprayed on the cut surface. The mean bleeding time was shorter in the ABS (23.08 +/- 6.99 s) and Surgicel groups (47.91 +/- 8.21 s) than in the control group (223.42 +/- 57.83 s). No significant difference was found in the ABS and Surgicel groups in terms of preoperative and postoperative hematocrit (hct) values (P > 0.05). Whereas there was no significant difference on day 7 (P > 0.05), total adhesion score of ABS group was lower than both Surgicel (P < 0.05) and control groups (P < 0.01) on day 14. Liver sections from ABS group displayed more favorable histopathological changes when compared with Surgicel group on day 7 and day 14. All livers in the ABS group completed their regeneration process with minimal signs of inflammation. Our findings suggest that ABS is more effective than Surgicel and control groups in achieving hemostasis and in reducing blood loss. Apart from this, ABS causes more encouraging histopathological changes and better intra-abdominal adhesion scores in rat experimental liver trauma model.
EFFECT OF VITAMIN C ADMINISTRATION ON LIPID PEROXIDATION AND ANTIOXIDANT ENZYME ACTIVITY IN RATS EXPOSED TO CHLORPYRIPHOS AND LEAD ACETATE.

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Topic: 13. One World, One Medicine, One Health

Experimental study was designed to evaluate the effects of chlorpyriphos, lead acetate, vitamin C on the activity of oxidative stress parameters in wistar rats. Rats of 150-200g body weight were divided into eight groups of six animals each and were subjected to various daily oral treatment regimes for 98 days. Group I served as control receiving only corn oil, group II received chlorpyriphos @ 5.5 mg/kg in corn oil, group III received lead acetate @100 ppm in water, whereas animals in group IVth received a combination of chlorpyriphos @ 5.5mg/kg in corn oil and lead acetate @ 100 ppm in water. Group Vth received vitamin C @ 100mg/kg in water, group VIth received a combination of chlorpyriphos @ 5.5mg/kg and vitamin C @ 100mg/kg, group VIIth received lead acetate @ 100 ppm in water and vitamin C @ 100mg/kg and group VIIIth received chlorpyriphos @ 5.5mg/kg, lead acetate @100ppm in water and vitamin C @ 100mg/kg. Results of the study concluded that administration of both chlorpyriphos and lead acetate caused a significant decrease in oxidative stress parameters viz. blood glutathione, catalase, superoxide dismutase (SOD), glutathione peroxidase (GPx), glutathione-s-transferase (GST) along with a significant increase in lipid peroxidation level when given alone or in combination. The study demonstrated that pretreatment of chlorpyriphos and lead treated rats with vitamin C significantly improved some of altered oxidative stress parameters revealing the protective effect of this vitamin C against oxidative stress induced by chlorpyriphos and lead.
Changes in Tissue Ascorbate Levels After Exposure of Chlorpyriphos and Lead Acetate Wistar Rats: Possible Protective Effect of Vitamin C

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Present study was designed to evaluate the effects of chlorpyriphos, lead acetate, vitamin C on the tissue ascorbate levels. Rats weighing 150-200g were divided into eight groups of six animals each and subjected to various daily oral treatment regimes for 98 days. Group I served as control receiving only corn oil, group II received chlorpyriphos @ 5.5 mg/ kg in corn oil, group III received lead acetate @100 ppm in water, group IVth received a combination of chlorpyriphos @ 5.5mg/kg and lead acetate @ 100 ppm. Group Vth received vitamin C @ 100mg/kg in water, group VIth received a combination of chlorpyriphos @ 5.5mg/kg and vitamin C @ 100mg/kg, group VIIth received lead acetate @ 100 ppm and vitamin C @ 100mg/kg and group VIIIth received chlorpyriphos @ 5.5mg/kg, lead acetate @100 ppm and vitamin C. After 98 days exposure of chlorpyriphos and lead acetate the concentration of ascorbate in liver, kidney and lung homogenates was decreased significantly as compared to the control group besides a significant decrease was also observed in the homogenates of brain and heart tissues of chlorpyriphos and lead treatment groups respectively. Animals receiving both chlorpyriphos and lead acetate the concentration of ascorbate were significantly decreased in kidney, lung and liver homogenates as compared to control group. The results indicate that antioxidant molecules like vitamin C have been proven to mitigate chlorpyriphos and lead induced toxicity. Further research be geared towards identifying more agents that may ameliorate such adverse effects.
DETERMINATION OF THE PHASE OF CACTI COCHINEAL (DACTYLOPIUS COCCUS COSTA) WITH HIGHER YIELD OF CARMINIC ACID BY CAPILLARY ELECTROPHORESIS

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Topic: 13. One World, One Medicine, One Health

Dactylopius coccus (“cochineal”) is a parasitic insect of cacti genera Opuntia and Nopalea. From the adult females of cochineal is extracted the carminic acid, used in antique as natural dye in fabrics, food, cosmetics, and currently in medicines. Carminic acid has been approved by US Food and Drug Administration (FDA), and due the ban of artificial dyes, its current demand has increased, as well as its market value. It is important to know, from the production side, the maturation stage with higher concentration of carminic acid, because this determines its market value. In the present study is described the development of capillary electrophoresis as innovative method to this quantitative determination. The working parameters were evaluated and validated, showing to be a method fast (run time of 5 min.), precise (CV=3.0%), linear ($r^2=0.98$, IC(b)) not including 0) specific, accurate and reproducible (CV from % of recovery =3.08%), as well as cheap; reason to propose it as an excellent option versus the current method used, spectrophotometry (which is not specific), and allowing to have a more reliable result giving a real commercial value to the product. The phase Adult II showed to have the highest concentration of carminic acid (0.016-0.030g) ($P=0.05$) and females 4-7 days after oviposition ($P=0.05$), this last allows the producer to have the dual benefit of high production and reproduction.
Recent findings have shown the role of macrophages in the repair of persisting skeletal muscle damages, as seen in muscular dystrophies, leading to progressive fibrosis, thus exacerbating disease severity. The aim of this work was to study the presence of macrophages subtypes in muscles (masseter, diaphragm, triceps braquii and biceps femoris) of Golden Retriever dogs affected by progressive muscular dystrophy (GRMD). Immunohistochemical analyses of the expression of macrophages subtypes M1 (CD68) e M2 (CD163) were performed on samples muscles of 17 male GRMD classified into two groups: G I (0-1 year old, n=9) and G II (> 1 year old, n=8). The average immunostaining of M1 macrophages of both groups was mild. The number of M1 was significantly lower than M2 macrophages. The expression of M2 in both groups ranged from moderate to severe in all muscles. The M2 expression did not differ statistically between groups I and II, but in Group II showed higher counts. Additionally, it was found that the triceps muscle of G II showed higher scores of CD163 followed by discrete markings and moderate in the masseter, biceps femoris and diaphragm. We concluded that M2 macrophage play an important role in the dystrophic lesions in dogs. A moderate increase of M2 macrophage with the age was observed, indicating the relationship of those cells with the chronicity of muscle damage in GRMD.
BIRTH OF THE VETERINARY PROFESSION IN MEXICO

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Topic: 13. One World, One Medicine, One Health

Since ancient times in Mexico, the observation and care for animals have been present. This is evidenced by the cave paintings in Baja California that are dated since more than ten thousand years ago, by the gigantic animal sculptures of the Mexica or Aztec culture, by the mural paintings in the prehispanic temples in Teotihuacan and also by the feather artwork. Hernan Cortes, the Spanish conqueror who arrived at the mexican coast of Veracruz, wrote to the emperor Charles V letters describing the ponds and zoos that sheltered the animals of the region, birds, fishes, mammals, reptiles and amphibians that were property of the Mexican Emperor Moctezuma. Cortes mentioned the work of animal caretakers who were highly trained personnel who would nowadays be considered as veterinarians. The Spanish monk Bernardino de Sahagun also described in his eleventh book the animals of the region and their use for food, clothing and medicine. The conquerors of Mexico introduced animals that did not exist in America, such as horses during the conquest and bovines at later times, during the colony. It was until 1853, after the independence of Mexico, when under the government of Antonio Lopez de Santa Ana, the School for agronomists and veterinarians was established, but the profession of Veterinary Medicine was only instituted as such in the National University of Mexico until 1925 when the institution became autonomous and the Veterinary School was separated from the Agronomy Department.
A STUDY ON THE OCCURRENCE OF AFLATOXIN, ZEARALENONE AND DEOXYNIVALENOL IN SOME FEED AND FEEDSTUFFS IN TURKEY

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Aflatoxins are produced by species of *Aspergillus* which contaminate plant products. *A. flavus* produces only B aflatoxins, while the other two species produce both B and G aflatoxins. Zearalenone is a fusariotoxin produced by some species of genus *Fusarium* and leads to a number of diseases in animals having as a consequence a considerable loss of production and a high rate of mortality. Deoxynivalenol is one of the toxins mainly produced by *Fusarium graminearum*. This toxin responsible for emesis and feed refusal in non-ruminant animals. When the previous survey studies on mycotoxin contamination in feeds and feedstuffs considered, it was appeared that results were variable and the mycotoxin was still important global problem. The aim of this study was to investigate the occurrence of Aflatoxins (B1, B2, G1, G2), Zearalenone and Deoxynivalenol in some feed and feedstuffs obtained from different farms and enterprises in Turkey. A total of 76 samples of feedstuffs and 30 feeds were obtained from farms and animal feed manufacturers. All samples were analyzed by using high-pressure liquid chromatography (HPLC) for Aflatoxins, Zearalenone and Deoxynivalenol. Aflatoxin-B1, B2, G1 and G2 were detected in 20, 6, 4 and 4 samples of feedstuffs and 17, 1, 9 and 1 samples of feeds, respectively. Zearalenone and Deoxynivalenol were detected in 24 and 14 samples of feedstuffs, respectively and 22 and 13 samples of feeds, respectively.
The main aim of this study was to evaluate the anti-ovulatory effects of prednisolone and flunixin meglumine by the way of observing the corpus hemorrhagic (CH) in rat's ovaries. 25 female rats (25 days old) were used in this study and divided into 5 groups. Rats in group 1 were considered as control. All rats in groups 2, 3, 4 and 5 were received a single subcutaneously injection of 5 IU PMSG. Flunixin meglumine and prednisolone were injected intramuscularly at the rates for groups 3, 5 and 2,4 respectively, were injected intramuscularly. An intraperitoneally administration of HCG(10 IU) was carried out in group 4 and 5. These animals were euthanized with ketamine (50 mg/kg group) and their oviducts and ovaries were removed immediately. The total mature follicles and CH were counted under stereomicroscope. Our results showed that, the mean distribution of CH in ovaries of rats that received prednisolone and HCG were significantly higher than the rats that received prednisolone alone (1.17±.75 vs 4.83±2.64; P<0.05). The rats that were received flunixin meglumine and HCG did not show significant (P> 0.05) increased number of CH than those that received only flunixin meglumine. These results indicate that, prednisolone blocks the ovulation via the hypothalamus pituitary level and flunixin meglumine acts directly on the ovary. The inhibitory effects of flunixin meglumine did not response to HCG. It means that either the rats receive only flunixin meglumine or alone with the HCG, does not affects the total number of CH on the ovaries.
NUTRITIONAL HANDLING AS A RESOURCE TO RAISE STABLED HORSES’ WELL FARE

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Horses in the wild feed constantly. So they cannot be deprived from this morph physiological necessity when stabled. In case that happens, it’s possible that behavioral abnormalities appear, especially those related to stress, which can decrease the animal’s efficiency, no matter its activity. This research’s objective is to assess the influence of hay disposal in the levels of behavioral abnormalities appearance in stabled horses in the region of São José do Rio Preto/SP/Brazil. The research tool used in this process was a questionnaire filled in by handlers / trainers / owners of 30 horse businesses, where three animals were randomly picked in each establishment. In total, 90 animals were assessed, from which 30 showed relevant stress evidence. 63.34% of these animals were hay fed twice a day; 23.33% were fed constantly a day; 10% were fed once a day; 3% were fed five times a day. The majority of animals with relevant stress behavior had hay disposed on the ground, what can be considered an aggravating factor for high levels of stress, while the animals without relevant stress behavior had hay disposed inside net shaped bags. So, hay disposal influences in the levels of behavioral abnormalities appearance in stabled horses. Time of ingestion is directly related to form of disposal, because it takes more time to the animal to fully ingest the hay disposed in net shaped bags. Therefore, different ways of hay disposal can be adopted as new resources of nutritional handling in order to improve animal well fare.
PROFILE OF FRESHMEN STUDENTS IN THE COURSE OF VETERINARY MEDICINE OF UNESP, JABOTICABAL, SÃO PAULO, BRAZIL

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Topic: 12. World Summit / Strengthening Cooperation and Communication between Animal Health and Public Health Sector

It is known that the spectrum of professional duties of veterinarians is very broad. Therefore the degree course in Veterinary Medicine must ensure training professional with generalist profile, humanist, able to understand and translate the needs of individuals and communities. Thus, the present study aimed to profile the student entering the course of veterinary medicine in 2013. It was applied a semistructured questionnaire individually, so they could better understand the students of this undergraduate program. From the responses, it is clear that a large portion, 69.56% (32/46) of the students are women, and most - 78.26% (36/46), are aged between 17 and 19 years, which features a profile of young freshmen, who often do not know all the options and aspects that the chosen course can offer. This can be proved by the fact that when asked about the four areas of the veterinarian that they considered most important, 67.39%, 63.04% and 69.56%, still opt, respectively, for companion animals, production animals and reproduction, in other words content relating to the veterinary clinic. Therefore, freshmen students still have in mind that the veterinarian is essentially formed to act in curing a particular disease, not prevention. Thus, it is evident the need of a better approach on the role of a trader in the area of public health and preventive during graduation, so that students are adequately prepared to develop these functions in the labor market.

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THE LEVELS OF SELECTED HORMONES IN BLOOD OF CHICKEN EMBRYOS AND POSTHATCH CHICKENS EXPOSED TO RADIOFREQUENCY ELECTROMAGNETIC FIELD DURING INCUBATION

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Key words: Electromagnetic fields, mobile phone, Thyroid hormone, Corticosterone, Chicken embryo

During the course of evolution, living organisms have developed in the constant presence of natural electromagnetic fields. Today artificial electromagnetic fields, which are a consequence of human progress, begin to play a considerable role in shaping the Earth’s electromagnetic environment. Among these, fields generated by mobile telephony deserve special attention due to their prevalence. Despite the many studies, the possible health consequences of exposure to weak electromagnetic fields, including EMF produced by mobile telephony, have not been conclusively established. One of the research areas receiving special emphasis in recent times is the impact of electromagnetic fields on organisms at the embryo stage of development, neonatal organisms, and juvenile organisms. Due to the rate and specific characteristics of development and the well understood process of embryogenesis, chick embryo is frequently used as a model in different kinds of biological research, including studies investigating the effect of EMF on living organisms. This study attempted to determine the effect of a 1800 MHz electromagnetic field (EMF) on thyroxine (T₄), triiodothyronine (T₃) and corticosterone (CORT) concentrations in the blood plasma of chick embryo, and to investigate the effect of EMF exposure during embryogenesis on the level of these hormones in birds that are ready for slaughter.

Throughout the incubation period, embryos from the experimental group were exposed to an 1800 MHz electromagnetic field with power density of 0.1 W/m², 10 times during 24 hours for 4 minutes. Blood samples were collected to determine T₄, T₃ and CORT concentrations at 12 (E12) and 18 (E18) days of incubation, from newly hatched chicks (D1) and from birds ready for slaughter (D42). The results showed that T₄ and T₃ concentrations decreased markedly and CORT levels increased in embryos and in newly hatched chicks exposed to EMF during embryogenesis. Differences in thyroxine, triiodothyronine and corticosterone concentrations between the EMF-exposed group and the embryos incubated without additional EMF were highest in newly hatched chicks, which may be indicative of the cumulative effect of the electromagnetic field on the hypothalamic-pituitary-thyroid (HPT) axis. However, no changes were found in the level of the analysed hormones in birds ready for slaughter that were exposed to EMF during embryogenesis. The results obtained may therefore suggest that the additional 1800 MHz radio frequency electromagnetic field stimulates HPA axis function by inducing adrenal steroidogenic cells to synthesize CORT while inhibiting thyroid hormone synthesis and secretion.

This study was performed under the project NN311536340 „Chicken embryo as a model in studies on the influence of radio frequency electromagnetic fields on the embryogenesis process”
EFFECT OF LONG-TERM WEAKENED GEOMAGNETIC FIELD (GMF) ON MENTAL STATE OF LABORATORY RATS

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Living creatures were developing in constant presence of geomagnetic field (GMF) and developed the ability to detect it and to process information that is contributed with it.

Natural GMF is essential for normal development. Geomagnetic shielding resulted in the anatomical and physiological abnormalities during early stages of growth in amphibians [Asashima et al., 1991] and mammals [Kopanev et al., 1979; Zhang et al., 2007]. Connected with sun activity perturbations of GMF may have negative effects on animal and human health inducing more frequent convulsive seizures [Rajaram & Mitra, 1981; Persinger & Psych, 1995], increase depressive episodes [Kay, 1994] and suicides [Berk et al., 2006], disruptions in heart rate [Stoupel, 2002; Chibisov et al., 2004] and are potential reason for development of schizophrenia in individuals born after periods of increased geomagnetic activity [Kay, 2004]. Since beginning of the last century the electromagnetic environment of Earth was undergoing the substantial changes owing to commonly used electric energy, telecommunication and modern medicine. In addition, a substantial part of human population is exposed to risk of continual disarrays in GMF generated by ubiquitous steel elements in almost every building and means of transport. These problems also concern the livestock animals especially those keeping in the factory farming conditions.

Our previous studies showed that aberrations of local GMF as well as hypogeomagnetic condition resulted in abnormalities in some hematological parameters, content of microelement and heavy metals in the hair and on immune system [Tombarkiewicz, 2008; Tombarkiewicz & Roman 2009]. Thus, it seems to be important the studying of the effects of disturbances in GMF on the human health and animal well-being. In the present study we investigated if prolonged weakening of the GMF would cause decreased sucrose intake, and if it will affect the level of ACTH and corticosterone which reflects the stress status and is indicative of the hypothalamo-pituitary-adrenal axis stimulation. In our investigation we used an animal model of depression, chronic exposure to mild stressors (e.g. food and/or water deprivation, reversed light/dark cycle) caused behavioral and hormonal changes, which in humans, often are associated with depression.

The experiment was carried out on male Wistar rats, which were divided on three groups: group A - rats maintained in normal conditions, group B - rats were kept in weakened geomagnetic field from 2 months, and group C rats were kept in weakened geomagnetic field from two generations. Results of sucrose test could suggest greatest immunity on stress of rats kept in hypogeomagnetic conditions, but higher level of corticosterone in group of rats kept in shielding GMF can suggest, that lasting weakening the GMF was the higher stress than chich was caused by other stressors used in animal model of depression.
The aim of this study was to perform a situation diagnosis on the teaching quality in courses of Veterinary Medicine from the State of Sao Paulo, Brazil. Therefore, the analysis of curriculum was performed using a documentary research taking by source the curricular arrays used in the courses that have expressed interest and confirmed their participation in the research. Curricular arrays of 27 universities, which 4 of them were public and 23 were private. The results showed that they don't cover properly all the field of veterinary career. It was observed that 56.28% of the time devoted to required courses is intended to contents of Veterinary Science, 36.46% to the contents of Biological Sciences and only 7.26% to the contents of Humanities and Social Sciences. Within the contents of Veterinary Science, 32.19% are related to Veterinary Clinic, 14.42% to Animal Husbandry and Production, 4.90% to Preventive Veterinary Medicine and Public Health and 4.77% to Inspection and Technology of Animal Products. Therefore, the disciplines related to different areas of professional activities have very different workloads, which didn't favor the approach of students to the areas being targeted for an individual formation and healing, without awareness of their role in society. It follows that, a restructuring on veterinary teaching based on all areas integration are required, using the interdisciplinarity strategy and changing the way of the teachers to think and teach, besides working all together in each course.