P-6 THE EFFECTS OF GINKGO BILOBA L. AND CAMELIA SINENSIS L. EXTRACTS ON DIABETES-RELATED DISTRESS AND QUALITY OF LIFE IN PATIENTS WITH TYPE 2 DIABETES

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Diabetes (DM) has strong negative impact on quality of life (QoL). People with diabetes feel overwhelmed by the continuous burden of their disease and its management. These emotional and social burdens may be compounded by the acute physical distress of hyperglycemia and by the chronic physical distress of diabetes-related complications. On the other hand, these persistent feelings diminishes self-care, which in turn leads to worsened glycemic control, increased risk for complications, and exacerbation of diabetes. Thus, it is also very important to have good QoL maintaining long-term health and well-being.

The aim of this study was to evaluate possible changes in psychological state of type 2 diabetic patients treated with Green tea and Ginkgo biloba extracts, acting as antioxidants in development of DM.

The results are from 49 patients with type 2 DM (aged 35-80) which were randomly allocated to receive standardized Ginkgo biloba (Ginkgo biloba L.) dry extract (Ex.Gb), standardized Green tea (Camellia sinensis L.) leaves extract (Ex.Cs) or placebo capsules. All participants were asked to fill in two self-administered questionnaires at baseline and after 9 and 18 months of receiving preparations. WHO Brief Quality of Life Questionnaire was used to assess the QoL [1]. Diabetes Distress Scale was used to assess psychological distress related to DM [2].

There were no statistically significant differences neither between men nor women in Ex.Gb and Ex.Cs groups as compared with placebo group. However, some significant changes were detected within both antioxidant groups. Interpersonal distress related to DM significantly decreased (p=0.045) and environment aspect of QoL significantly improved (p=0.05) in women of Ex.Gb group after 9 and after 18 months. As well as environment aspect of QoL significantly improved (p=0.017) in men of Ex.Cs group. Meanwhile, there were no significant changes during all the period of the study in placebo group, neither between men nor women.

In conclusion, Green tea and Gingko biloba extracts with strong antioxidant effect have positive impact on psychological state in patients with type 2 diabetes mellitus. Nevertheless, the further study in different circumstances needs to be performed.

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P-7 SMALL MAMMALIAN SUCCESSION AFTER FIRE IN PINUS BRUTIA (TEN.) FORESTS
In Mediterranean ecosystems, numerous fires occur and very large areas are affected by fires every year. *Pinus brutia* forests which have widespread distribution in eastern Mediterranean region are fire-resilient with their adaptive features that make them regenerate in a short period. In this study, we aimed to determine changes of small mammal community structure with successional gradient after fire in *P. brutia* forest.

Sampling was made in three replication sites of every successional stage (burned 3, 6, 9, 10, 16 and 26 years ago) and two for unburned areas. Sherman live traps were used to capture small mammals in 5x5 grid with 10 m intervals in every replication site. Microhabitat variables were recorded around the all trap locations to determine habitat preferences of small mammal species.

Total 675 individuals belong to 6 small mammal species (*Apodemus mystacinus, Apodemus flavicollis, Mus macedonicus, Crocidura suaveolens*, *Rattus rattus* and *Dryomys nitedula*) were caught during the study. *A. mystacinus* is a species which prefers rocky and bare habitats was predominant all sites except one the replication site of the unburned areas. Abundances of *A. flavicollis* and *C. suaveolens* display increase with successional gradient and it was found that both prefer habitats which have higher vegetation height, cover and plant species richness. However, *M. macedonicus* which its abundance negatively correlated with plant species richness, shrub cover and shrub species richness, decrease with the successional gradient.

As a result, small mammals showed a change with successional gradient. The changes of small mammal community structure occurred as depend on habitat components relating to plant architectural and vertical diversity.