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Survey of Distribution and Characteristics of *Glycyrrhiza glabra.* inTurkey

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Habitats of licorice (identified as *Glycyrrhiza glabra* L.) in ten regions of Turkey were in relatively moist soil regions such as river side and wheat field located 5 to 1,600 m above see level. Glabridin, a flavonoid specific to the root and stolon of *G. glabra* L., was detected in all the collected samples by Photodiode-array-HPLC. HPLC analysis of leaves indicated a significant difference in the chemical composition between the licorice plants growing in the west and those in the other regions of Turkey. Glycyrrhizin contents of these roots and stolons were found to vary from 1.1 to 8.0%o Of dry wt., depending on individual plants.

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4-Methylcatechol, an Inducer of Nerve Growth Factor Synthesis, Enhances Peripheral Nerve Regeneration across Nerve Gaps.

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The effects on peripheral nerve regeneration of 4-methylcatechol (MC), which is a potent inducer of nerve growth factor (NGF) synthesis *in vitro* and *in vivo*, was examined in a sciatic nerve-lesioned animal model. The sciatic nerve of adult male Wistar rats was transected and both of the cut ends were then inserted into sterile silicone tubes that were subsequently attached to an intervening silicone chamber. After surgery, the rats were injected i.p. every day for 2 weeks with MC. Two weeks after surgery, the density of nonmyelinated axons within the camber was significantly increased in the MC-treated group compared with that in the control group. Five weeks after surgery, both the number and the diameter of myelinated axons within the chamber of the MC-treated group. When the chamber was filled with anti-NGF antibody solution, most of the MC effect was blocked. These results suggest that MC stimulates *de nova* synthesis of NGF (and/or NGF-related molecules) which results in the enhancement of sporouting and maturarion of peripheral axons.

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Interferons Suppress Nerve Growth Factor Synthesis as a Result of Interference with Cell Growth in Astrocytes Cultured from Neonatal Mouse Brain

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Interferon (IFN)- β and IFN- γ inhibited the DNA synthesis and nerve growth factor (NGF) synthesis in growing astrocytes cultured from neonatal mouse brain, but they did not affect the NGF synthesis in quiescent astrocytes. IFN- β and IFN- γ also inhibited the enhanced DNA synthesis and NGF synthesis in growing astrocytes after the administration of basic fibroblast growth factor. These results indicated that NGF synthesis in astrocytes is regulated by IFNs associated with cell growth. The mechanism of IFN action on NGF synthesis/secretion is unknown, but the results that their effects last long after IFN removal from the cultures present the possibility that IFNs destabilize NGF mRNA.