

Dendritic development in the neocortex of adult rats subjected to postnatal malnutrition

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The Golgi-Cox method was used to study the maturation of the large pyramidal cells of the Vth cortical layer in two groups of adult rats, one subjected to early postnatal malnutrition and another malnourished only during the second month of life. The main alterations were observed in the pyramidal cells of cortical layer V of rats malnourished during the first month of life. They consist of a decrease in the number and span of dendritic basilar processes. In animals malnourished during the second month of life, the number and span of basilar dendritic processes in pyramidal cells of layer V, were normal. It is postulated that early postnatal malnutrition induced immediately after birth, profoundly disturbs the process of neuronal maturation in the neocortex of the rat brain, probably with permanent effects. © 1985.