



Exercise, Meditation and Depression

It is now well known that physical exercise can alter hormone levels within the body and have a positive effect on our moods, however new research has demonstrated that meditation offers similar benefits. Researchers at the School of Behavioural Sciences, James Cook University of North Queensland, Townsville, Australia studied the relationship between three hormones (hypothalamic pituitary adrenocortical (HPA) axis, beta-endorphin (beta-EP), corticotropin releasing hormone (CRH) and cortisol) and mood changes in 11 elite runners and 12 highly trained meditators matched in age, sex, and personality.

Despite the obvious metabolic differences between running and meditation, the researchers predicted that mood change after both of these activities would be similar if they could be associated with similar hormonal changes. Compared to pre-test and control values, mood was shown to be elevated after both activities but there was no significant difference between the two groups. There were significant elevations of beta-EP and CRH after running and of CRH after meditation, but no significant differences were seen in the increases in CRH levels between the groups. CRH was found to be directly related to positive mood changes after running and meditation. Cortisol levels were also noted to be generally high but erratic in both groups.

The researchers concluded that both running and meditation have a positive effect on our moods which is associated with the changes in relation to plasma corticotropin-releasing hormone.

Harte JL; Eifert GH; Smith R. The effects of running and meditation on beta-endorphin, corticotropin-releasing hormone and cortisol in plasma, and on mood. *Biol Psychol (NETHERLANDS)* Jun 1995, 40 (3) p251-65