

[Young coconut juice may have estrogen-like characteristics which may attenuate hormonally-induced brain pathologies in females undergoing postmenopausal syndrome.](#) –Source: GreenMedInfo Summary

**Abstract Title:**

Young coconut juice significantly reduces histopathological changes in the brain that are induced by hormonal imbalance: a possible implication to postmenopausal women.

**Abstract Source:**

Histol Histopathol. 2009 Jun;24(6):667-74. PMID: [19337965](#)

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**Abstract:**

BACKGROUND AND AIM: Some degenerative diseases of the nervous system have been linked to hormonal imbalance in postmenopausal women. It is argued that young coconut juice (YCJ) could have some estrogen-like characteristics, but this is still debatable. Our aim was to investigate this argument, and to examine whether YCJ has any neuroprotective effects. MATERIALS AND METHODS: Four groups of female rats (10 in each group) were included in this study. These included sham-operated, ovariectomized (ovx), ovx and receiving estradiol benzoate (EB) injections intraperitoneally, and ovx and receiving YCJ orally. At the end of the five-week study, the rats were sacrificed, and their serum estradiol (E2) level was measured by chemiluminescent immunoassay. Moreover, the rat brains were excised, and the cortical pyramidal neurons were examined using markers of neuronal cell death, namely anti-neurofilament (NF200) and anti-parvalbumin (PV) antibodies. RESULTS: Our results showed that the rat group which received YCJ had its serum E2 level significantly ( $P<0.05$ ) higher than the ovx group which did not receive any treatment, and the sham-operated group. A similar trend was observed with the group which received EB injections, but no significant difference was present when the latter was compared with the sham-operated group. In addition, a significant reduction in neuronal cell death was observed in the YCJ-treated group, as compared to the ovx group which did not receive any treatment. This was indicated by the significantly ( $P<0.05$ ) higher number of neurons which were immunopositive for NF200 and PV. Interestingly, the number of these neurons was also significantly ( $P<0.05$ ) higher in the YCJ group, as compared to the EB group. CONCLUSION: This study confirms the argument that YCJ has estrogen-like characteristics, and it also adds more evidence to the observation that hormonal imbalance could induce some brain pathologies in females.

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**Study Type :** Human Study

**Additional Links**

**Substances :** [Coconut](#) : [CK\(124\)](#) : [AC\(35\)](#)

**Diseases :** [Postmenopausal Disorder: Brain/Nervous System Pathology](#) : [CK\(10\)](#) : [AC\(1\)](#)