

# 生精补血口服液对运动性 疲劳大鼠下丘脑垂体肾上腺轴的影响<sup>\*</sup>

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**摘要:**目的 观察生精补血口服液对大鼠 5-羟色胺(5-HT), 促肾上腺皮质激素(ACTH), 皮质酮/肾上腺酮(CORT), 促肾上腺皮质激素释放激素(CRH)水平的影响。方法 50只SD大鼠随机分为正常对照组、模型组、生精补血口服液高剂量组和低剂量组, 生脉饮组。正常对照组和模型组给予生理盐水, 生精补血口服液高剂量、低剂量组和生脉饮组分别给予等体积的药液。除正常对照组外给予各组5周游泳高强度耐力训练, 检测脑组织5-HT和血液ACTH、CORT、CRH的含量变化。结果 与正常对照组比较, 其他各组5-HT、ACTH、CORT、CRH含量均升高, 差异有统计学意义( $P < 0.05$ )。与模型组比较, 生精补血口服液高、低剂量组和生脉饮组5-HT、ACTH、CORT、CRH含量明显降低, 差异有统计学意义( $P < 0.05$ )。与生脉饮组比较, 生精补血口服液低剂量组5-HT、CRH含量升高, 差异有统计学意义( $P < 0.05$ )。结论 生精补血口服液可通过调控下丘脑—垂体—肾上腺轴, 调节相关激素分泌, 达到抗运动疲劳, 提高运动能力的作用。

**关键词:** 生精补血口服液; 运动性疲劳; 下丘脑—垂体—肾上腺轴

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## Effects of Essence Generating and Blood Enriching Oral Liquid on Hypothalamic Pituitary Adrenal Axis in Rats with Exercise-induced Fatigue

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**Abstract Objective:** To observe the effect of essence generating and blood enriching oral liquid on levels of 5-HT, ACTH, CORT and CRH. **Method:** 50 SD rats were randomly divided into normal control group, model group, "essence generating and blood enriching oral liquid" high dose group, low dose group and Shengmai Yin group. The normal control group and model group were given normal saline, the rest three groups were given an equal volume of liquid medicine. Except for the normal control group, each other group was given 5 weeks of high-intensity endurance training of swimming, the content change of brain 5-HT and blood ACTH, CORT, and CRH levels were measured. **Result:** Compared with the normal control group, the contents of 5-HT, ACTH, CORT, and CRH in other groups all increased, and the difference was statistically significant ( $P < 0.05$ ). Compared with the model group, the contents of 5-HT, ACTH, CORT, and CRH in the high-dose, low-dose of "essence generating and blood enriching oral liquid" group and Shengmai Yin groups significantly decreased, and the difference was statistically significant ( $P < 0.05$ ). Compared with the Shengmai Yin group, the content of 5-HT and CRH in the low-dose group of "essence generating and blood enriching o-

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