

# Team ameliorates insulin resistance in Type 2 diabetic rats

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A research team from China investigated the effects of the Chinese herbal decoction, Yi-Qi-Zeng-Min-Tang (YQZMT), on insulin resistance in Type 2 diabetic rats. The results showed that YQZMT, which ameliorates insulin resistance and does not cause increase in body weight, may be a suitable therapeutic adjunct for the treatment of Type 2 diabetes.

The prevalence of type 2 diabetes is dramatically increasing throughout the world. [Insulin resistance](#) is a hallmark of type 2 diabetes, and it most often precedes the onset of hyperglycemia and predicts development of type 2 [diabetes](#). At present, thiazolidinediones (TZD), the agonists of the peroxisome proliferators-activated receptor  $\gamma$ , are the main agents to improve insulin sensitivity in the liver, adipose tissue, and skeletal muscle, thus improving glycaemic control in patients with [type 2 diabetes](#). Despite the efficacy, some deleterious side effects of TZDs, including rosiglitazone and pioglitazone, have been noted, such as increasing body weight and aggravating heart failure through fluid retention. Therefore, development of new agents may be helpful in the treatment of type 2 diabetic patients with insulin resistance.

A research article published on February 28, 2011 in the *World Journal of Gastroenterology* addresses this question. The research team led by Professor Wen-Jian Wang from Institute of Chinese Integrative Medicine, Huashan Hospital of Fudan University investigated the effect of the Chinese herbal decoction, Yi-Qi-Zeng-Min-Tang (YQZMT), on insulin resistance in type 2 diabetic rats.

The results of this study indicated that YQZMT has beneficial effect in insulin resistance, glycaemic control, dyslipidemia, free fatty acids and adipocytokines, and does not cause any increase in body weight in high-fat diet and low-dose streptozotocin induced type 2 diabetic rats.

The findings demonstrate that YQZMT displays the insulin sensitization characteristic of rosiglitazone, but unlike rosiglitazone, does not cause any increase in body weight. Administration of YQZMT may be a suitable adjunct for the treatment of insulin resistance patients. Further studies will be required to identify the ingredients and chemicals in YQZMT responsible for the beneficial effects observed in the present study.

**More information:** Zhang Z, Xue HL, Liu Y, Wang WJ. Yi-Qi-Zeng-Min-Tang, a Chinese Herbal Decoction, ameliorates insulin resistance in high-fat diet and low-dose streptozotocin-induced type 2 diabetic rats. World J Gastroenterol 2011; 17(8): 987-995.

[www.wjgnet.com/1007-9327/full/v17/i8/987.htm](http://www.wjgnet.com/1007-9327/full/v17/i8/987.htm)

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