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Title :	The effect of quercetin on insulin response in non diabetic mice
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Abstract :	<p>Introduction: Insulin resistance is a pathologic feature that not only effect in development of type 2 diabetes but also in a varied range of disease .Oxidative stress with imbalance between cellular oxidants production and antioxidant defense has a specific role in multi factorial etiology of myocyte insulin resistance etiology. Quercetin with its anti inflammatory and antioxidant effects can be involved in insulin response. Aims: This study was investigated the effect of quercetin on insulin responsiveness in non diabetic mice. Methods: Sixteen adult mice were divided into two groups: control and treatments group,the experimental group were received quercetin 40 mg /Kg intraperitoneally for 6 days. On the 7th day, fasting blood glucose was measured by a glucometer using tail blood samples. In the time of 30, 60 and 120 minutes after injection of 10 unit insulin in both groups, blood glucose was measured again and insulin resistance was determined by insulin tolerance test protocol. Results : The results indicated that treatment with quercetin reduced fasting blood glucose and blood glucose in response to insulin injection in the time of 30,60,120 minute after injection and insulin test protocol was showed a significant decrease in insulin resistace. Conclusion: Quercetin as a beneficent antioxidant can decrease insulin resistance and maybe can be used as an anti diabetic agent.</p>
Keywords :	quercetin,insulin resistance,oxidative stress