

- A Review

## Legal and illegal use of insulin in sports and its advrse effects on health

## ■ JAIPAL

Received : 26.08.2013; Accepted : 25.10.2013

## ■ ABSTRACT

A lot of studies concerning the impact on glycogen production, protein biosynthesis, and inhibition of protein breakdown have illustrated its importance for healthy humans and diabetics as well as elite athletes. Analytical method has been used for this article by reviewing relevant publications. This review provides an overview on the legal and illegal use of insulin sports and discusses their benefits and adverse effect on health. Use of Insulins is in the list of prohibited substances of World Anti-Doping Agency's (WADA); the use of insulins is banned both in competition and out of competition and insulins are usually tested by authorized anti-doping laboratories of WADA. Insulin was banned by the International Olympic Committee in 1998. The most common side effect use of insulin is hypoglycemia (low blood glucose), which is potentially serious and can be life-threatening; other complications of associated with insulin use included weight gain, injection site abnormalities, and insulin allergy.

Author for correspondence :

JAIPAL

Jawahar Navodaya Vidyalaya, Butana, SONIPAT (HARYANA) INDIA Email: jaipalomparkash@gmail.com ■ Key Words : Insulin, Sports, Health, WADA

■ How to cite this paper : Jaipal (2013). Legal and illegal use of insulin in sports and its advrse effects on health. *Internat. J. Phy. Edu.*, 6 (2) : 98-101.