degrading activity. The reduced hepatic clearance is also associated with reduced insulin sensitivity, supporting the relationship of insulin degradation to insulin action.

Streptozotocin (STZ) is a naturally occurring nitrosourea, broad-spectrum antibiotic and cytotoxic chemical. It is widely used to induce insulin-dependent diabetes mellitus in experimental animals because of its toxic effects on islet beta cells (Ohno et al., 2000). STZ has various biological actions including the production of acute and chronic cellular injury, carcinogenesis, teratogenesis and mutagenesis (Bolzan & Bianchi, 2002). In addition, it is hepatotoxic, nephrotoxic and causes gastric ulceration.

Zafar et al. 2009 reported that STZ-induced diabetes complication in liver is as destruction of hepatocytes. STZ made alteration in liver enzyme levels and morphological changes.

Streptozotocin action depends proportionally on concentration and time of experiment. STZ shows strong cytotoxic effect on liver at high concentration and after 48 h of STZ administration (Dabros et al., 2007).

The liver is responsible for more than half of the total insulin degradation, with kidney responsible for most of the rest (Duckworth & Kitabchi, 1981). After liver and kidney, the peripheral tissues, fat and muscle play important role in insulin removal, probably degrade the remainder of the insulin in the body, but the absolute contribution of these tissues to insulin turnover is uncertain.

Insulin uptake and degradation occur in adipocytes (Marshal, 1985), fibroblasts (Baldwin et al., 1981), monocytes (Powers et al., 1980), lymphocytes (Sonne & Gliemann, 1980), gastrointestinal cells (Bai et al., 1995), and many other tissues. All