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A Gila Monster warning

## [Gila Monster Venom for Losing Weight](#)

### *In diabetes cases*

Gila monster looks like hell and bites the same. This lizard and its cousins, the monitor lizards are the only venomous known lizards (would it be a surprise to know that snakes evolved from their ancestors?). Exenatide, a synthetic chemical imitating a compound encountered in the venomous saliva of the Gila monster led to healthy sustained glucose levels and progressive weight loss among patients with type 2 diabetes, as revealed by a three-year study made on 217 diabetes patients. "The weight loss factor is important because being overweight and weight gain is an almost universal problem for people with diabetes," said lead researcher Dr. John Buse, chief of endocrinology in the University of North Carolina at Chapel Hill School of Medicine. "In that context, it is exciting that patients that continue exenatide injections continue to lose a bit of weight while maintaining blood sugar control, even in their third year of therapy. While this weight loss is encouraging, it's important for people to understand that exenatide is not intended as a weight-loss drug and it is not approved for that purpose. Only people with type 2 diabetes should take exenatide." said Buse. Exenatide was approved by the FDA in April 2005 for type 2 diabetes patients who could not get their high blood glucose (the type of sugar found in the blood) to low limits in a combination with one or more than three other drugs, metformin or sulfonylurea thiazolidinedione. Besides the weight loss, the research also found that exenatide induced in 46 % of the subjects sustained glucose levels of 7 % and 30 % had levels of 6.5 %. Values of 7 % or less are considered to be healthy. Biomarkers indicating liver injury also dropped. Exenatide is injected twice daily within an hour before morning and evening meals, usually in addition to sulfonylurea, or in a combination of metformin and sulfonylurea. The drug imitates the hormone named exendin-4 from the saliva of the Gila monster, native to the southwestern United States and northwestern Mexico. The lizard hormone is half identical to a hormone in the human digestive tract, glucagon-like peptide-1 (GLP-1), that boosts the insulin synthesis when blood glucose levels rise. Insulin removes glucose from the blood into body tissues where it is employed for getting energy. But the lizard hormone acts longer than the human hormone and its synthetic form is more effective than GLP-1. Exenatide also hampers the emptying of the stomach, plummeting the appetite, which is how it leads to weight loss averaging 11 pounds (5 kg).