

## Discovery of insulin production from stem cells showing hope to diabetes

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People with type 2 diabetes can often control their blood glucose concentrations through a combination of diet, exercise, and oral medication. Type 2 diabetes often progresses to the point where only insulin therapy will control blood glucose concentrations.

A polypeptide hormone secreted by the islets of Langerhans and functioning in the regulation of the metabolism of carbohydrates and fats, especially the conversion of glucose to glycogen, which lowers the blood glucose level. The liver acts as the energy center of the body, metabolizing food into glucose. The majority of nutrients and glucose are absorbed into the body while in the small intestine. The pancreas produces the hormone insulin which acts like a key to unlock cells and allow glucose (energy) absorption.

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Further research and development of this technique could lead to a renewable source of cells for treatment of people with diabetes.