Background: Insulin injection education is important in diabetes mellitus patients' treatment in order to control blood glucose levels. Objective: To present a new innovative teaching method for insulin injection. Methods: Samples included diabetes patients, who were taught the first insulin injection at the diabetes clinic, Ramathibodi Hospital. They were divided into 2 groups (35 patients in each group): the experimental group was taught by the abdomen model for injections, and the control group was instructed by a traditional lecture style. Three evaluation forms were used: 1) injection observation sheet; 2) self-evaluation sheet of understanding and injection skill of the diabetes patients; and 3) evaluate efficiency form of teaching insulin injection model. Results: The study revealed that the experimental group understood injection methods both in terms of injection skills and confidence in self-injection at more than 97% except for fear. The study found that trypanophobia decreased 70.2% and fear of pain reduced 82.8%. The abdomen model teaching method yielded effective results to increase injection skills, knowledge, and understanding of self-injection. Conclusions: This abdomen model is now used to teach insulin injection as a commercial product sold at the Center of Excellent Innovation, Faculty of Medicine, Ramathibodi Hospital, Mahidol University. This model is currently used as one of the medical tools for teaching insulin injection at the diabetes mellitus clinic of the medical outpatient unit of Ramathibodi Hospital. Keywords: Diabetes mellitus, Insulin, Injection teaching model, Abdomen model