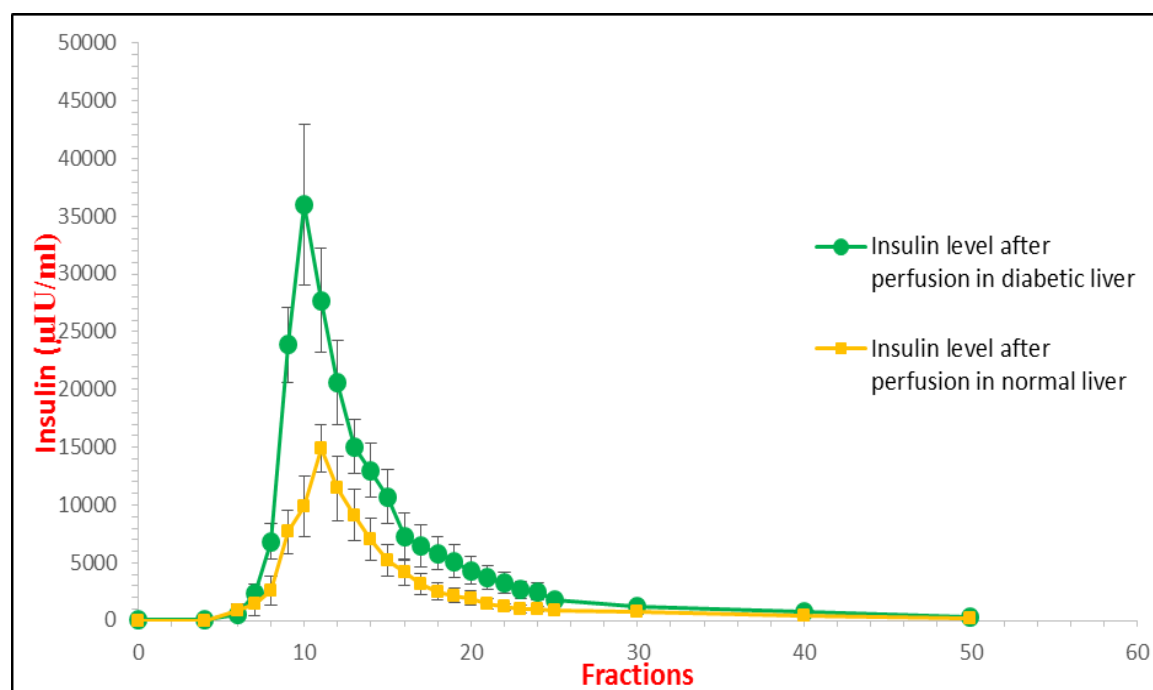


3.6. Evaluation of hepatic first pass metabolism of insulin by *in situ* liver

perfusion method

The insulin level ($\mu\text{IU/ml}$) profile for insulin (2 IU) obtained after bolus administration into the portal vein (PV) under 13 ml/min flow rate is displayed in (Figure 3.21).

Normal rat liver degraded more insulin than diabetic liver. As shown in (Figure 3.21) over 3500 $\mu\text{IU/ml}$ of insulin eluted from diabetic liver after the end of the pulse infusion, while 1500 $\mu\text{IU/ml}$ of insulin eluted only from the normal liver in the same conditions. From fraction 9 to fraction 11 significant amount of insulin was obtained in diabetic liver compared to normal one ($p < 0.05$).



(Figure 3.21): Semilogarithmic plot showing the insulin level ($\mu\text{IU/ml}$) obtained after bolus injection of insulin into the portal vein. Data are as mean of 8 rats \pm SEM.