Table 1 Stereological Counting in the Hippocampus of control rats

Rats number	P(total)	P(myelinated fibers)	P(myelin sheath)	Number of fiber sections	Diameter(µm)
15h	14397	1188	631	222	0.594157412
18h	9578	778	482	171	0.692431193
17h	11194	1122	581	259	0.605253727
40h	19200	1473	765	420	0.583040837
45h	12765	1078	541	300	0.586238532

Table 2 Stereological Counting in the Hippocampus of diabetic rats

Rats number	P(total)	P(myelinated fibers)	P(myelin sheath)	Number of fiber sections	Diameter(µm)
54h	14397	765	419	200	0.590830196
57h	14342	1136	635	234	0.63200378
64h	14390	926	492	219	0.579280298
66h	11177	668	385	133	0.580533904
67h	12800	1008	517	221	0.581742293

Table 3 Coefficient Error of Stereological Test (%)

	Total hippocampus volume	Total myelin sheath volume	Total myelinated fiber length	Thickness of myelin sheath	Diameter of Fibers
Control rats	5.43%	4.37%	11.93%	14.18%	11.93%
Dabetic rats	4.91%	5.84%	6.78%	6.78%	8.49%

	Before i	njection	Buffer injection			
	Male rats	Female rats	Male rats	Female rats		
	5.3	5.6	5.2	5.5		
control	4.9	5.8	5.7	5.3		
group	4.9	5.3	4.7	4.6		
	4.9	5.2	4.5	4.8		
	5.8	4.6	4.8	4.7		
	4.9	5.6	4.6	5.4		
Mean±SD	5.12±0.37	5.35±0.43	4.92±0.45	5.05±0.39		
P(t-test)	0.337 (P>0.05)		0.598 (P>0.05)			
	Before i	njection	STZ injection			
	Male rats	Female rats	Male rats	Female rats		
	5.8	5.7	24	27.3		
Diabetes	7.9	5.1	20.1	26.1		
group	5.6	6.8	18.1	20.2		
	4.7	6.2	26.2	24.2		
	7.4	6.1	23.4	18.7		
	6.3	6.5	21.1	18.8		
Mean±SD	6.28±1.19	6.07±0.60	22.15±2.94	22.55±3.80		
P(t-test)	0.699 (P>0.05)		0.040	<i>P</i> >0.05)		

It shows that the fasting-blood glucose levels of the male and female rats in the control group and the diabetes group. Whether before injection or after STZ injection, there were no gender differences in blood glucose in the two groups (p > 0.05). The data are presented as the mean±SD and were analyzed using two-tailed t tests in independent samples.

		visible platform test			
Groups	Day 1	Day 2	Day 3	Day 4	Day 5
Control	32.8±28.28	13.45±5.75	8.05±4.78	6.75±5.11	3.3±1.09
Diabetes	120.75±59.88*	78.05±55.04*	52.9±32.24*	34.25±24.49*	8.2±4.82
P(* <i>p</i> < 0.05)	0.018 (* <i>p</i> < 0.05)	0.031 (* <i>p</i> < 0.05)	0.011 (* <i>p</i> < 0.05)	0.039 (* <i>p</i> < 0.05)	0.057 (* <i>p</i> > 0.5)

Table 5 Escape latency in the Morris Water Maze (t/s, Mean±SD)

It shows that for the hidden platform on days 1-4, the escape latency of diabetic rats was significantly extended compared with that of the control group (*p < 0.05). For the visible platform on day 5, the escape latency of the control group (3.3 ±1.09 s) and the diabetes group (8.2±4.82 s) was not significantly different (p > 0.05). The data are presented as the mean±SD and were analyzed using two-tailed t tests in independent samples.