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Ж δ ѽ υ δ
ɜ 1 1.0 mL/L ɜ 0.5 mL/L 1 ɞ
2% ѡ 10%
ɞ 14 d δ
Glucose, Glu ɜ Total cholesterol, TC ɜ Cortisol, Cor ѽ υ δ
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Χ ↕ ℊ TS201.4 A ℊ 1673-9159 2019 01-0084-06
Doi 10.3969/j.issn.1673-9159.2019.01.013

Effect of Sea Cucumber Hydrolysis Extract on Depression-like Behavior of Zebrafish Induced by Diabete

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Abstract: ɬ Objective ɬ To explore the effect of sea cucumber enzymatic hydrolysate SCEH on the depression-like behavior in the diabetic model of zebrafish induced by high sugar and high fat. ɬ Methods ɬ Zebrafish were randomly divided into the control group, model group, model plus sea cucumber high 1.0 mL/L and low dose 0.5 mL/L treatment groups. The fish was systemically soaked in high concentration glucose (2%), and was fed by high cholesterol 10% to induce a diabetic mode. Then, high and low doses of SCEH were used for treatment by soaking. After 14 days, behavioral tests in Novel Tank Test NTT were carried out. The fish body was used to detect the biochemical indicators, including concentrations of glucose Glu , total cholesterol TC , and cortisol Cor . ɬ Results ɬ

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Key words: Sea cucumber hydrolysis solution; Diabetes; Depression-like behavior

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Ж ɜ- A111-1 ELISA

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10%
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0.5 mL 2 1 L
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1.2.3 2 12
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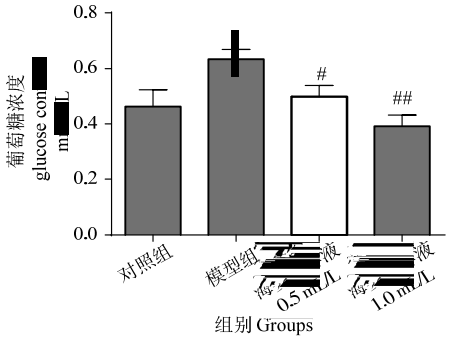
1.2.4 ELISA
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(3, 34) = 4.817 < 0.01
(3, 41) = 3.140 < 0.05 ɞ ‟
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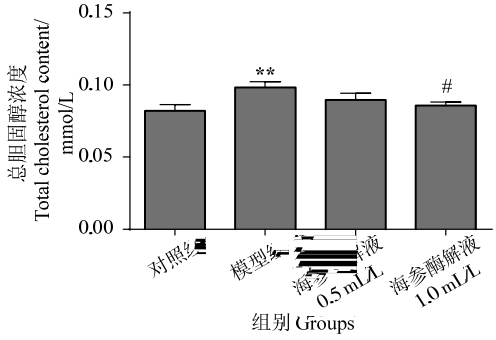
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* < 0.05 vs # < 0.05 vs ## < 0.01 vs
*, < 0.05 vs control group. #, < 0.05 vs model group. ##, < 0.01 vs model group

1

Fig. 1 Effects of sea cucumber hydrolysis on in zebrafish



* < 0.05 vs # < 0.05 vs ## < 0.01 vs
*, < 0.05 vs.control group #, < 0.05 vs model group
##, < 0.01 vs model group

2

Fig. 2 Effects of sea cucumber hydrolysis on total cholesterol in zebrafish

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= 12.53 0.01 0.01 Kruskal-Wallis

0.05 = 14.10 0.01 ,

0.05 0.05

Kruskal-Wallis = 14.80 0.01

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[J]. ┘ , 2016, 18(4): 125-127.

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[J]. , 2010 (32): 236-236.