Supporting Information

Effect of a Novel Compound as Dietary Supplement on Growth of Decapod Crustaceans

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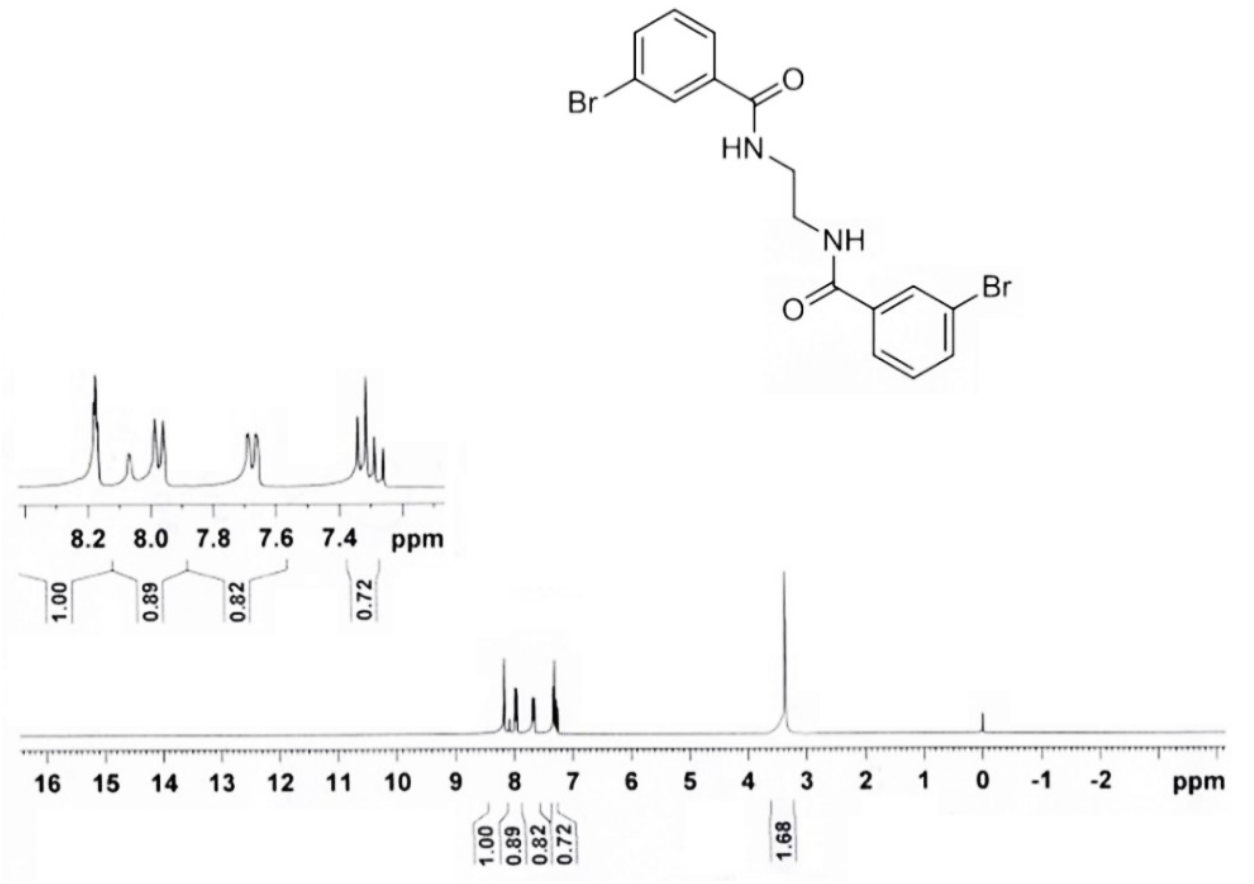

Fig. S1. Characterization of CGE-1 using ^{1}HNMR Spectra. The distribution of characteristic aromatic and aliphatic protons according to their occurrence in those regions was confirmed with proton NMR.

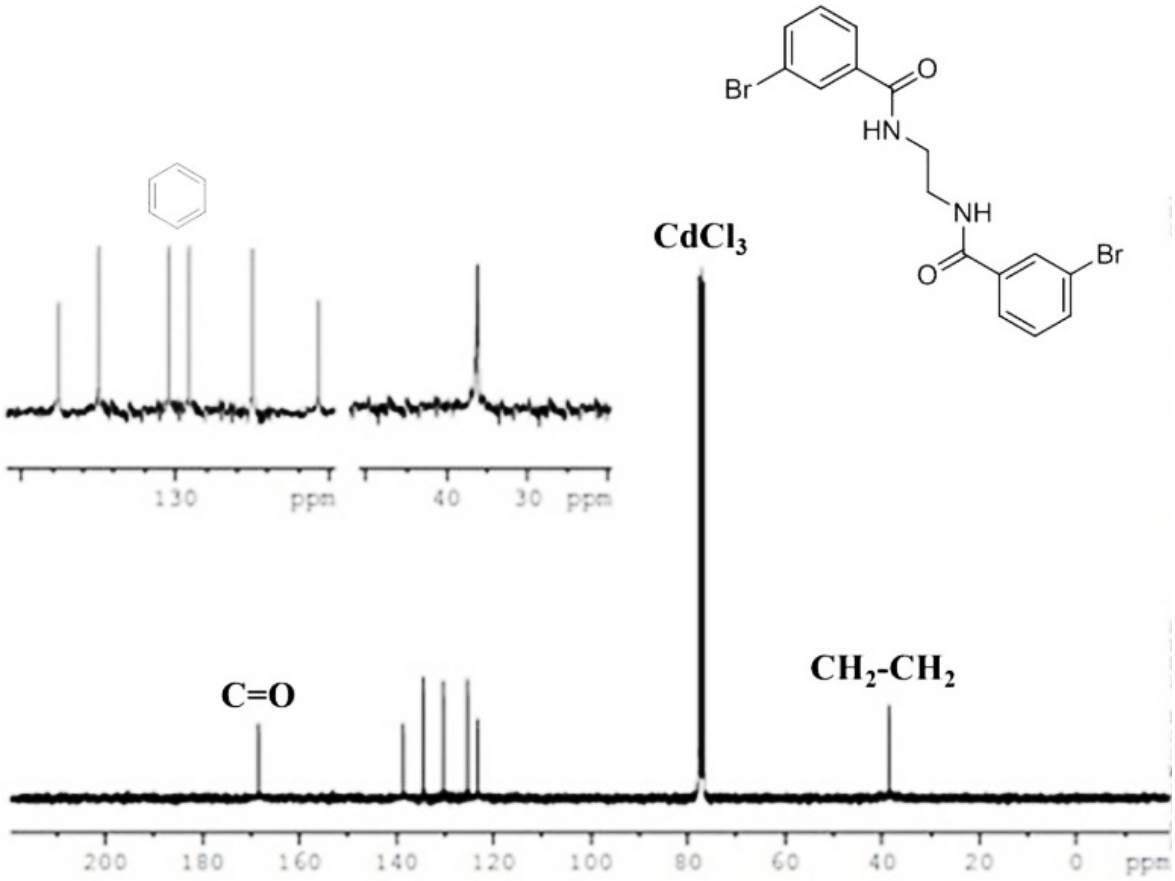

Fig. S2. ^{13}C NMR Spectra of CGE-1. The carbon NMR spectrum was used to confirm the two benzene rings along with the diamine aliphatic region according to their prediction space in the spectra.

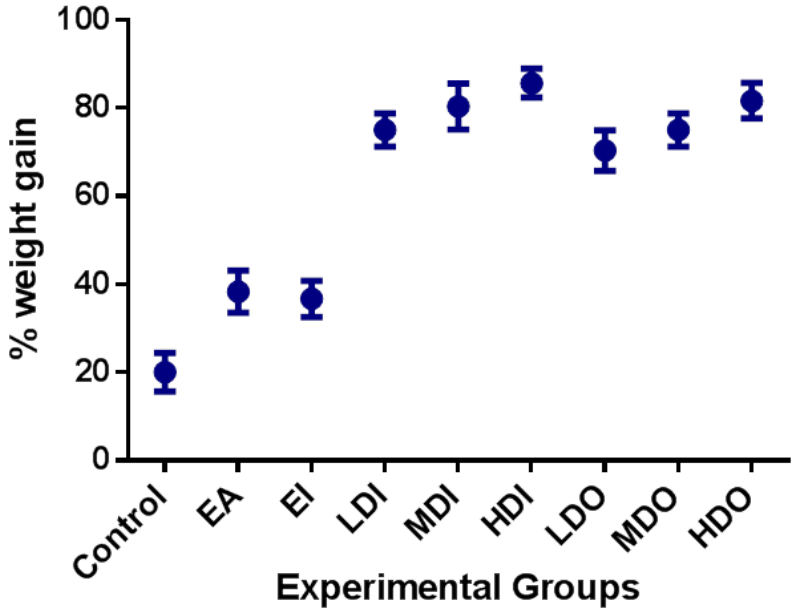

Fig. S3. The changes in mean weight gain (%) for the experimental groups of *P. homarus*. Both sets of treated groups gained significantly more weight than the respective sets of control groups (data represented as mean ± SEM where $P<0.001$and $n=10$ for both 'oral' and 'injected' groups).

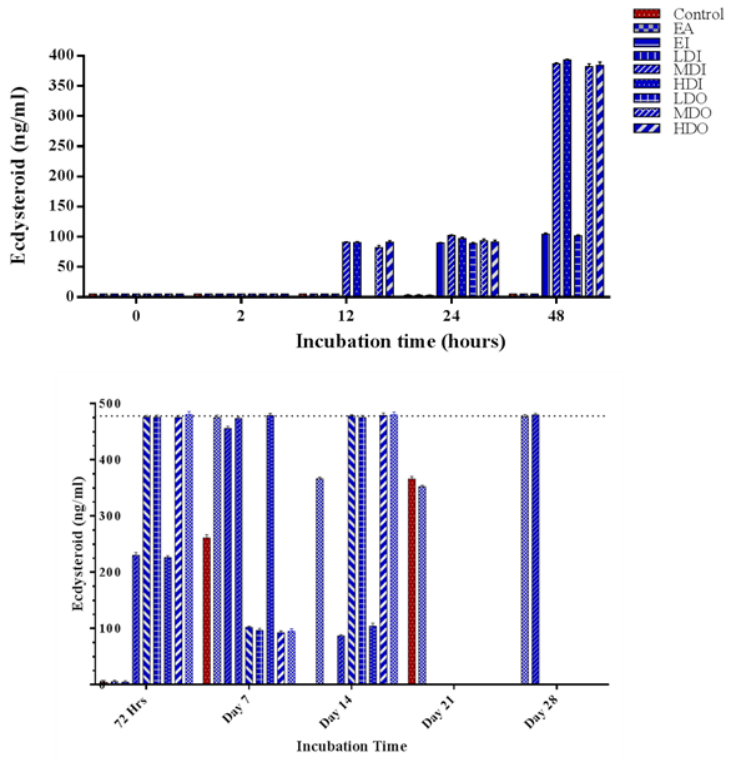

Fig. S4. Changes in hemolymph ecdysteroid concentration (20E) titer during different molting stages. 20E, Growth enhancer and eyestalk ablation (EA) caused a large, ephemeral increase in ecdysteroid concentration in the hemolymph (values are represented as mean ± SEM, n=10). Lobsters were sampled at various time intervals and ecdysteroid was quantified by enzyme-immunoassay (EIA). The dotted line represents the significant increase in the ecdysteroid titer before Ecdysis.

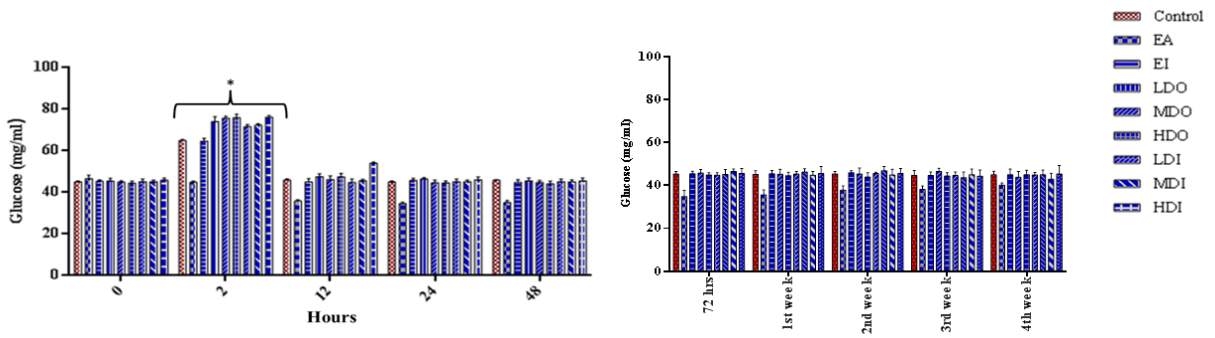

Fig. S5. Time course activity of CGE-1, 20E and eyestalk ablation on hemolymph glucose titers in *Panulirus homarus* in relation to controls. Values are expressed as means ± SD. The level of hemolymph glucose in the eyestalk ablated group was significantly lower compared to eyestalk intact lobsters ($p < 0.001$). Asterisk represents a maximum hemolymph glucose level was observed at 2h after initiating the experiment.

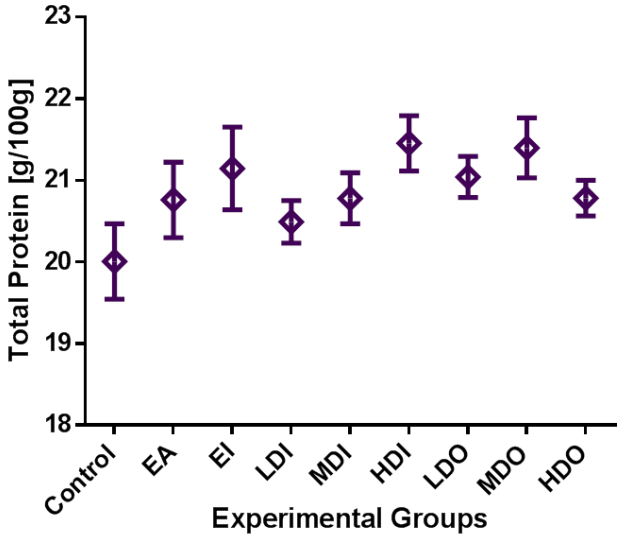

Fig. S6. Relative changes in total protein from muscle. The treatment of CGE-1 led to an enhanced protein synthesis capacity as compared to control. Increased muscle protein content under CGE-1 administration suggests an affinity growth of tail muscle without causing damage in its structure. Results are expressed as the standard error of the mean, where n=10 ($P<0.001$).

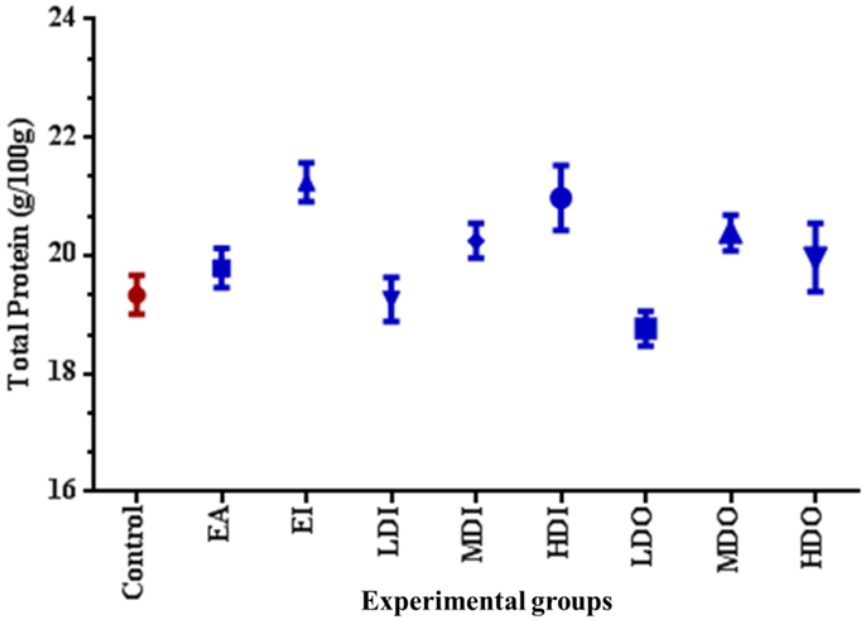

Fig. S7. A group based differences of hepatopancreas protein concentration (g/100g) in *P. homarus*. Muscle protein concentration differed significantly among the experimental groups (data represented as mean ± SEM, n=10, P<0.0001).

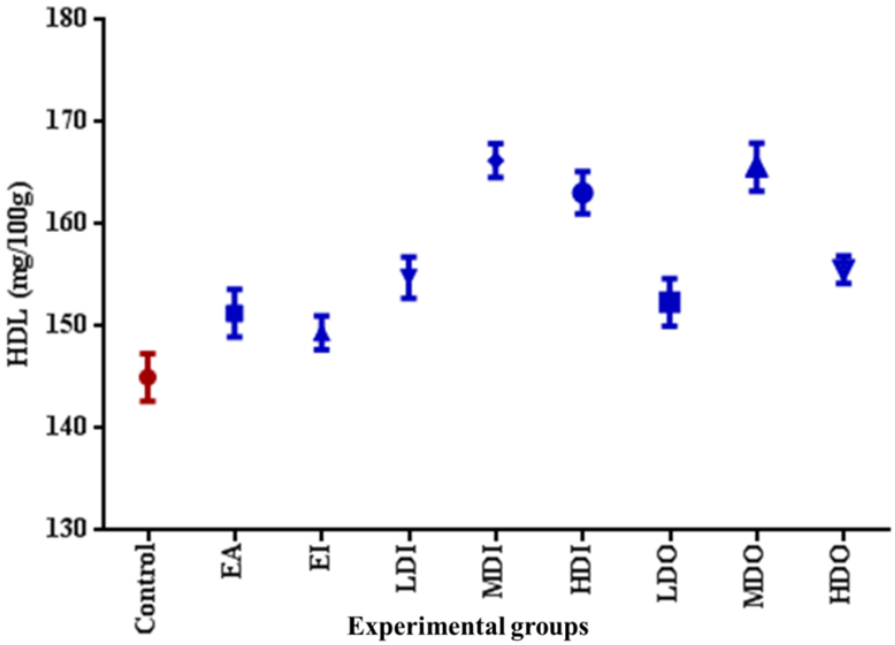

Fig. S8. Post experimental HDL quantification from hepatopancreas of *P. homarus*. There was a marked increase in the amount of lipoproteins when compared to control group HDL content. Such a difference was observed in both oral and injected groups. Results are expressed as the mean ± SEM (n=10, P<0.001).