

Furthermore, all the immunostimulant mixed feed significantly increases the total biomass gain when compared to the control groups. The total biomass gain in the fish fed with selected immunostimulant feeds such as vitamin C, vitamin E, chitin, chitosan, and levamisole were found to be 3.33, 6.27, 2.8, 3.73, and 4.1 kg m⁻³ respectively.

Whereas total biomass gain in the *A. hydrophila* infected fish fed with immunostimulant feeds such as vitamin C, vitamin E, chitin, chitosan, and levamisole were found to be 2.93, 3.23, 2.66, 3.06, and 3.46 kg m⁻³ respectively.

According to these results, vitamin E has a greater growth promoting properties than the other immunostimulant feeds, whereas under *Aeromonas* exposure, levamisole shows greater biomass gain. Furthermore, when compared to the *Aeromonas* infected fish with control diets, the fish fed with immunostimulant mixed feeds exhibited greater biomass gain.

3.1.2 Weight gain

The weight gain after 1 month of feeding with different immunostimulant-supplemented feeds such as vitamin C, vitamin E, chitin, chitosan, and levamisole under exposure to *A. hydrophila* was shown in Figure 2 and Table 1. From these results, it was observed that the fish fed with immunostimulant mixed feed exhibited greater weight gain than the fish fed with control feed.

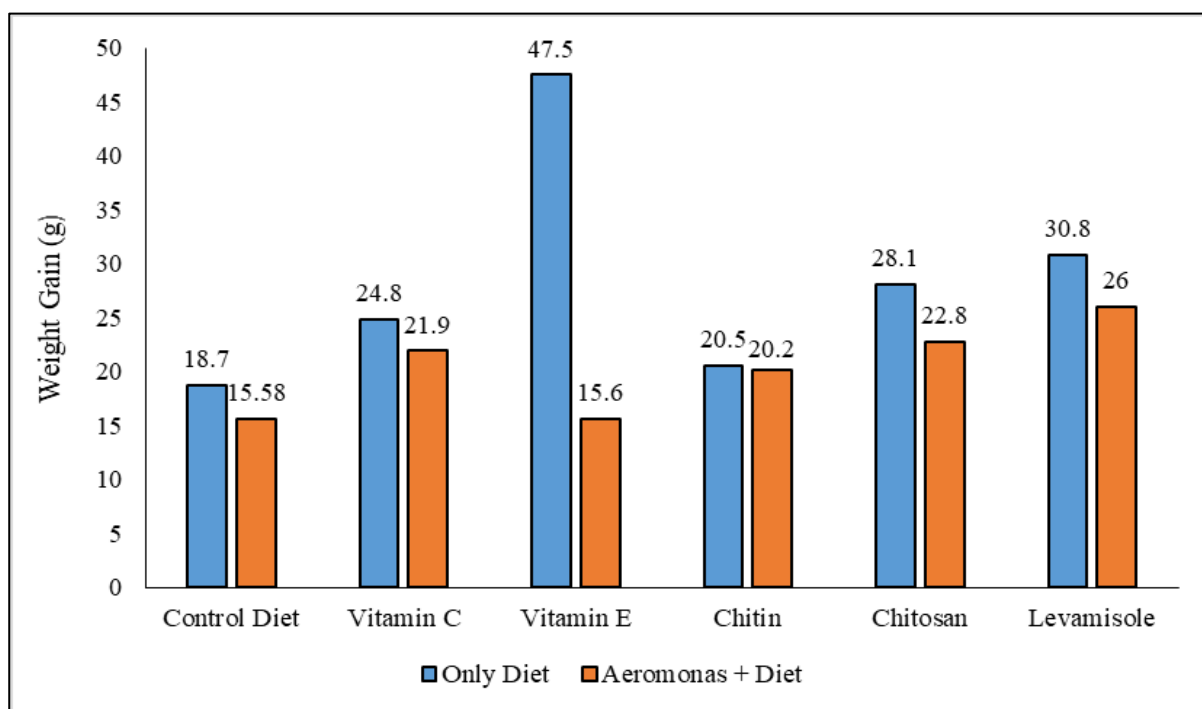


Figure 2 Weight gain with different immunostimulant-supplemented feeds under normal and *Aeromonas hydrophila* infected conditions

Furthermore, among all the tested immunostimulants, fish fed with vitamin E mixed feed exhibited greater weight gain. However, lowest weight gain was observed in *Aeromonas* infected fish fed with vitamin E. The fish fed with control diet shows the weight gain of 18.7 g, while the fish which are infected with and *A. hydrophila* and fed with control diet exhibited the weight gain of 15.58 g.

Furthermore, all the immunostimulant mixed feed significantly increased the weight gain when compared to the control groups. The weight gain in the fish fed with selected immunostimulant feeds such as vitamin C, vitamin E, chitin, chitosan, and levamisole were found to be 24.8, 47.5, 20.5, 28.1, and 30.8 g respectively.

Whereas, weight gain in the *A. hydrophila* infected fish fed with immunostimulant feeds such as vitamin C, vitamin E, chitin, chitosan, and levamisole were found to be 21.9, 15.6, 20.2, 22.8, and 26 g respectively. According to these results, vitamin E has a greater growth promoting properties than the other immunostimulant