

3 Results

3.1 Growth performance

The growth performance of the fish in all of the treatment groups was assessed by measuring the total biomass gain (TBG), weight gain (WG), and feed conversion ratio (FCR).

3.1.1 Total biomass gain

The total biomass gain after 1 month of feeding with different immunostimulant-supplemented feeds such as vitamin C, vitamin E, chitin, chitosan, and levamisole under exposure to *Aeromonas hydrophila* was shown in Table 1 and Figure 1. From these results, it was observed that the fish fed with vitamin E mixed feed exhibited greater biomass gain, whereas fish fed with chitin mixed feed exhibited lowest biomass gain. The fish fed with control diet showed the biomass gain of 2.53 kg m⁻³, while the fish which are infected with *A. hydrophila* and fed with control diet exhibited the total biomass gain of 2.13 kg m⁻³.

Table 1 Growth performance of *Catla catla* with different immunostimulant-supplemented feeds under healthy and *Aeromonas hydrophila* infected conditions

S. No.	Treatment group	TBG (kgm ⁻³)	WG (g)	FCR
1	Fed with control feed	2.53	18.7	9.62
2	Aeromonas + Control feed	2.13	15.58	11.55
3	Fed with vitamin C mixed feed	3.33	24.8	7.25
4	Aeromonas + vitamin C mixed feed	2.93	21.9	8.82
5	Fed with vitamin E mixed feed	6.27	47.5	3.78
6	Aeromonas + vitamin E mixed feed	3.23	15.6	11.53
7	Fed with chitin mixed feed	2.8	20.5	8.78
8	Aeromonas + chitin mixed feed	2.66	20.2	8.91
9	Fed with chitosan mixed feed	3.73	28.1	6.41
10	Aeromonas + chitosan mixed feed	3.06	22.8	7.89
11	Fed with levamisole mixed feed	4.1	30.8	5.84
12	Aeromonas + levamisole mixed feed	3.46	26	6.92

Table notes: TBG – total biomass gain, WG – weight, FCR – feed conversion ratio

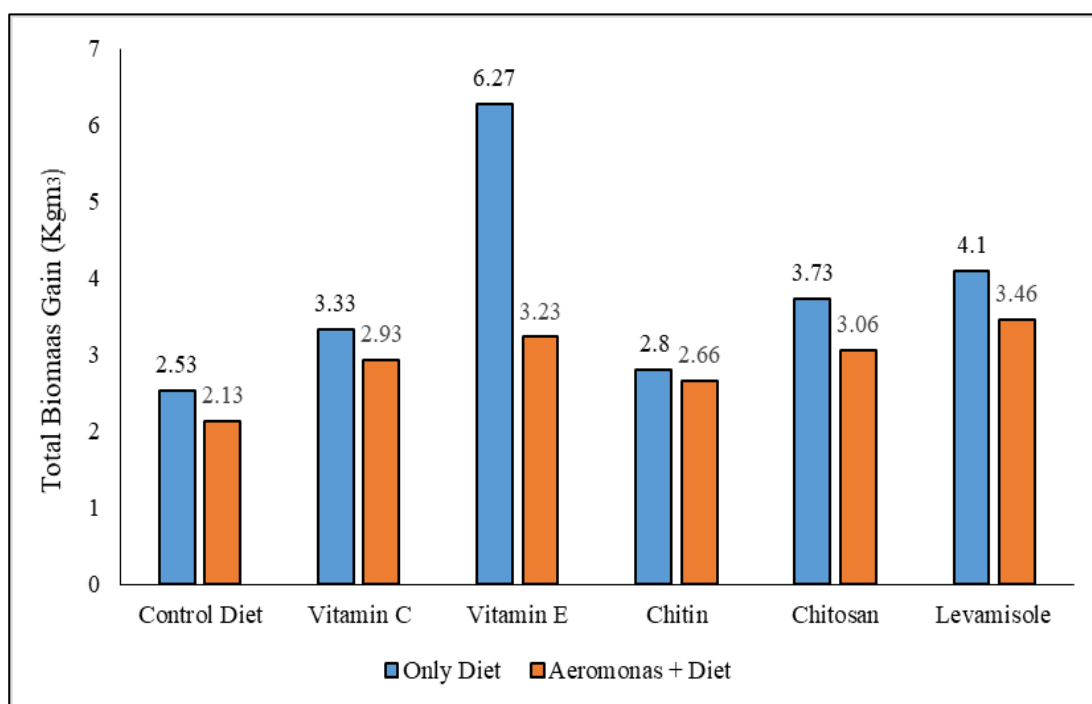


Figure 1 The total biomass gain with different immunostimulant-supplemented feeds under normal and *Aeromonas hydrophila* infected conditions