The aim of this study was to determine the effects of dietary lactoferrin (LF) on digestive enzymes activity, body composition and intestine bacterial flora of sobaity (Sparidentex hasta) with an average weight of 7.64 ± 0.3 g. This study was carried out in a completely randomized design with three treatments and replications in fiberglass tanks with 300 liters volume. Fish were fed with feed containing 0, 400 and 800 mg lactoferrin per kg feed for 42 days. At the end of the experiment, body composition and intestine samples were collected. The obtained results indicated that dietary lactoferrin did not change sobaity digestive enzymes activity, including protease, amylase and lipase (P > 0.05). In this study, weak, positive and no significant correlation were observed between dietary lactoferrin and protease activity, amylase activity, and lipase activity (P > 0.05). The results indicated that different levels of lactoferrin did not affect body composition including protein, ash and moisture and intestine bacterial flora (P > 0.05) but fat content in fish fed on 400 mg lactoferrin per kg feed was significantly higher that control group (P < 0.05). Overall, this study showed that digestive enzymes activity was not affected by dietary lactoferrin. Moreover, it can be concluded that feeding of sobaity on the diet supplemented with 400 and 800 mg lactoferrin per kg feed for a period of 6 weeks do not improve the body composition and intestine bacterial flora.

Keyword: Lactoferrin, digestive enzymes, body composition, intestine bacterial flora, Sparidentex hasta