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Some Observations on Gastric Emptying in the Black Sea Whiting, *Merlangius merlangus* euxinus, (N. 1840) Fed on Natural Prey

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**Abstract:** In this study a new perspective on the feeding physiology of whiting, *Merlangius merlangus* euxinus, N. 1840 was investigated. The effects of the skin of the prey, double feeding and prey type on the gastric emptying rate (GER) of whiting fed on natural prey, namely anchovy (*Engraulis encrasicolus*) and mussels (*Mytilus galloprovincialis*), were investigated. Return of appetite was also studied. It was found that in laboratory conditions, whiting ( $48.0 \pm 8.30$  g,  $n=12$ ) had consumed about 10.2% of its body weight in mussels and return of appetite was found to be approximately 30 h. The effect of the skin of the anchovy on the gastric emptying rate (GER) in whiting was found to be significant. Skinned anchovy was emptied from the stomach in 30 h whilst unskinned anchovy was emptied in 34 h. It was observed that the effect of the prey type, namely anchovy and mussels, was significant such that the gastric emptying rate of anchovy was 0.063 g/h whilst that of mussels was found to be 0.075 g/h. The reason was thought to be due to the different biochemical composition of the prey items used. In the double feeding experiments, it was found that the mussels given 4 h after the first meal of anchovy, slowed down the emptying process of the first meal. On the other hand, the emptying of the prey items used in double feeding experiments was slower than those used in the single feeding.

 [Keywords](#)  
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**Key Words:** Black Sea, Whiting, Return of Appetite, Gastric Emptying Time (GET).

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