

{rokbox title=|Map of fishing grounds of the albacore recreational fishery :: Image: Authors| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-csic-diet-feeding-behaviour-albacore-thunnus-alalunga-mediterranean-during-spawning-period-valls-et-al-2021-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-csic-diet-feeding-behaviour-albacore-thunnus-alalunga-mediterranean-during-spawning-period-valls-et-al-2021.jpg{/rokbox}

Maria Valls, Sámar Saber, María José Gómez, **Patricia Reglero**, Salvatore Mele, 2021. [Diet and feeding behaviour of albacore *Thunnus alalunga* in the western Mediterranean Sea during the spawning period.](#)

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Abstract: Mature albacore tuna (*Thunnus alalunga*) are expected to have high energy requirements at the time of breeding. However, there are no descriptions of the diet of albacore in the Mediterranean Sea that can help us to understand if such requirements can be obtained from feeding during reproduction. In this study, we analysed the stomach contents of reproductively active albacore captured from 2010 to 2015 in the oligotrophic waters of the western Mediterranean Sea, one of their main spawning grounds. Estimates of stomach fullness revealed intense feeding activity, and prey composition indicated important consumption of mesopelagic fish, including barracudinas, myctophids and small pelagic crustaceans. Plastic debris occurred in 25%–53% of the stomachs sampled across all years. Prey composition was not different between males and females. However, females fed at higher rates and had higher hepatosomatic index values than males, suggesting that increased feeding could contribute to meet their higher energy demand associated with offspring production. We observed a diet shift from small crustaceans to fish prey along fish size. During the spawning period, albacore showed a specialist feeding behaviour by preying on aggregations of vertically migrating myctophids and small crustaceans, probably when they were near the surface. This study provides information and biological data to support ecosystem modelling and to increase the understanding of albacore ecology.

Keywords: condition, prey, stomach contents, stomach fullness, tuna