

## **A new method for presenting nutritionally defined food sources to marine organisms**

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To study nutritional ecology in aquatic and marine ecosystems, it is important to be able to perform feeding trials enabling feeding and nutrient selection behavior of organisms to be observed in situ. Current studies in marine nutritional ecology are limited to laboratory and shallow water studies using food sources of undefined nutrient concentration. Here we describe a technique for delivering standardized nutrient sources in situ to both pelagic and benthic organisms as a feeding choice array, in a way that allows the amounts eaten of different foods and nutrients to be quantified and correlated with precise descriptions of the feeding behavior of individual organisms. A pilot study proved that this feeding choice array can be successfully deployed in marine environments. It will also be possible to use this technique to explore patterns of nutrient limitation and to investigate the nutritional regulatory response of marine and aquatic organisms.