## Analyze the types and methods suitable nutrition in introducing a variety of fish cages in the southern part of Caspian Sea

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Inadequate resources with low quality or energy consumption within food, reduced the growth performance and increased the excretion of nitrogen in the environment. Food must be designed so that the balance of minerals in food will help maintain osmotic pressure within the body of fish in salty water. Food requirements and efficiency of food conversion ratio (FCR) is variable by changing environmental conditions (dissolved oxygen, temperature, water quality, flow rate, light intensity, day length). The fish of cages are feeding by floating pellets which have the ability to stand in the water column. The floating pellets allows the fish to have sufficient time and opportunity for finding food. But sinking pellets pass rapidly from the cage and are inaccessible to fish. According to the Caspian sea conditions is better the extruded food equipped with hygenizer to be used that a portion of it remains on the water surface and part of it moves gently down with an immersion mode in the water column (Softly deposited) for fish consumption. The amount, number and time of feeding are important factors to assess the nutritional activities. In general, fish feed from dry food between 2 to 3 percent of their body weight. Food consumption was also varied due to the quality of the food and fish physiological factors such as age, size, and stage of life and stress level. Fish food distribution being fed manually or by means of demand, launcher and automatic feeding. The farm managers should pay attention to the things like water flows in the cage, wind, and fish appetite, consolidated flows in the cage during food distribution as well as food storage in dry places with proper ventilation system to prevent the growth of fungi and insects activities to prevent loss of food. Also, adding antioxidants to the 100-150 ppm when storing dry foods including the important cases particularly in prevention of fish liver lipoidosis disease is considered.

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