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Sommario/riassunto	"The word "eutrophic" originates from a word eutrophy, from Greek eutrophia meaning nutrition and eutrophos which means well-fed. Eutrophication has many different definitions depending on whether they describe solely the process of nutrient enrichment or whether they also include impacts and problems caused by such enrichment. In its simplest form eutrophication is defined as the over enrichment of receiving waters with mineral nutrients, phosphorus, and nitrogen. It results in excessive production and growth of autotrophs, in particular algae, cyanobacteria (Box 1) and aquatic macrophytes (Correll, 1998; Ansari et al, 2011; van Ginkel, 2011). The increased bacterial populations and vegetation abundance result in high respiration rates leading to hypoxia (oxygen depletion). Hypoxia and algal blooms (Figure 1) are the two most acute symptoms of eutrophication (Ansari et al, 2011; UNEP, 2017). Hypoxia or oxygen depletion in a water body often leads to 'dead zones'-regions where levels of oxygen in the water are reduced to a point that can no longer support living aquatic organisms (Figure 1). Hypoxia in the northern Gulf of Mexico is defined as a concentration of dissolved oxygen less than 2 mg/L (2 ppm). In

other oceans of the world, the upper limit for hypoxia may be as high as 3-5 mg/L. The new knowledge on oxygen depletion (hypoxia) and related phenomena in aquatic systems has been recently reviewed by Friedrich et al (2014)"--

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