

# **Studies and Observations on a “Functional” Water, Ionized Alkaline Water**

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Municipal drinking water, prefiltered and then treated by partial electrolysis over platinum-coated electrodes, followed by collecting the cathodic water that is alkaline (pH 8.5 to 9.5), shows a negative oxidative reductive potential (ORP= -150 to -250 mV) compared to untreated tap water (ORP = +150 mV). A review of the published literature on this functional water will be presented, focusing on the health effects, which show various beneficial effects from drinking this water, especially by patients with diabetes and kidney disease who show improved outcomes and fewer medical complications, with no toxic effects seen. Some studies suggest that this water increases the activity of a key detoxifying enzyme in the body, superoxide dismutase, which is central to protecting against oxidative stress (free radical damage) in aging and chronic degenerative disease. Evidence from live blood analysis from case studies suggests that drinking reduced alkaline water reduces blood cell stickiness, blood cell aggregation, and prevents early clotting. Overall, results suggest that long term consumption of this water may slow down the effects of aging; improve the peripheral circulation; serve as an adjunct therapy for diabetes and kidney disorders; and help prevent cardiovascular and other chronic diseases. Finally, exclusion zone phenomena for Nafion membrane interfaces with ionized alkaline water will be discussed.