

Adjusting Water Balance	
To raise pH	add soda ash
To lower pH	add muriatic acid
To raise alkalinity	add sodium bicarbonate or soda ash
To lower alkalinity	add muriatic acid
To raise calcium hardness	add calcium chloride
To lower calcium hardness	add trisodium phosphate or drain off some pool water and dilute with fresh make up water
To raise chlorine	add chlorine
To lower chlorine	add sodium thiosulfate

Problems Associated with Improper Water Balance	
Low pH	Chlorine dissipates more rapidly, more eye irritation, possible corrosion of pool fixtures and plumbing
High pH	Scaling, slows chlorine activity, can cloud water, detrimental to filters
Low alkalinity	Will not provide buffer for pH
High alkalinity	Can lead to high pH that is difficult to change
Low calcium hardness	Corrosive to plaster and concrete surfaces
High calcium hardness	Scaling, cloudy water, crystals forming on the inside walls of the pool
Low chlorine	Bacterial and algae growth
High chlorine	Eye irritation, pH hard to manage, possible corrosion to plumbing

Please refer to the Pool Water Quality Section of the Swimming Facilities Regulation for additional information.