

Sodium

The threshold taste for sodium is about 500 mg/l for sodium chloride, 700 mg/l for sodium nitrate, and 1000 mg/l for sodium sulfate. Sodium restricted diets are often used for persons with diseases where fluid retention is a problem, treating congestive cardiac failure, hypertension, cirrhosis of the liver, toxemias of pregnancy, and with other similar type diseases. Person on a sodium restricted diet have a total sodium limitation of 500 mg and sodium concentration in the water should not exceed 20 mg/l. Basically, there are three sodium restricted type diets: Strict, 500 mg of sodium; moderate, 1000 mg of sodium; and mild, 2400 to 4500 mg of sodium. Sodium concentration of water should be less than the 20 mg/l for both the strict and moderate diets. However, a sodium content in drinking water of 270 mg/l* would be considered reasonable for persons on a mildly sodium restricted diet. Note that a human diet must contain approximately 400 mg of sodium per day to be nutritionally adequate and that many foods naturally contain sodium in addition to the various salts added during processing.

The use of sodium chloride for salt seasoning in American's diets is the factor that has the most influence on sodium intake and it is estimated that Americans use about 10 grams (10,000 mg) of salt per day.

Sodium					
Quality (1)	Concentration (2)	Effect* (3)	Significance (4)	Treatment (5)	Disclosure
Good	0-270 mg/l	Not a health risk in general population. Certain patients on strict sodium intake diet should limit sodium intake. Seldom any objectionable taste. No noticeable corrosion.	Low sodium diets restricted to sodium levels of less than 20 mg/l	Usually not indicated.	1, 2, 3, 4

Marginal	270-500 mg/l	Health risks more likely to susceptible population. Taste may be evident and corrosion possible.	270 mg/l reasonable upper level for mildly restricted sodium diet.	Usually not indicated.	1, 2, 4, 5
Poor	> 500 mg/l	Health risks possible for some individuals. Saline taste and corrosion is probable.	Levels too high for person medically restricted in sodium intake.	Possible but general application limited. For small amounts, reverse osmosis and distillation can be used.	1, 2, 3, 4, 5

