Water Consumption

Water must be available to broilers at all times. Inadequate water supply, either in volume or less drinker space, will reduce growth rate. Monitoring of water consumption by birds is a well accepted practice in a poultry farm. The volume of water consumed by birds is influenced by a number of differing and even cumulative factors. It is vital to measure water consumption daily. A reduction of water consumption gives an advanced warning of possible health and production issues. There should be adequate water storage on the farm, in case the main supply fails. Ideally, there should be sufficient storage to provide 24 hours of water at maximum consumption.

Monitor the ratio of water to feed consumption to ensure that the flock is receiving sufficient water. At 21°C (70°F), the ratio of water to feed should be close to:

- 1.8:1 for bell drinkers.
- 1.6:1 for nipple drinkers without cups.
- 1.7:1 for nipple drinkers with cups.

Reasons of variation of water consumption

- Water requirement will vary with feed consumption.
- Seasons and stocking density influence water consumption.
- Drinker space influences water consumption.
- Water quality influences consumption.
- Birds will drink more water at higher ambient temperatures. Water requirement increases by approximately 6.5% per degree Celsius (2 degrees Fahrenheit) over 21°C (70°F). In tropical areas prolonged high temperatures will double daily water consumption.
- Very cold or very warm water will reduce water intake. In hot weather, it is good practice to flush the drinker lines at regular intervals to ensure that the water is as cool as possible.

Table - Typical water consumption by broilers at 21°C (70°F) in liters and imperial gallons per 1,000 birds per day. (M = males, F = females, SRC = Straight Run Chicks)

Age of birds (days)	Nipple drinkers without cups Liters/1000 birds			Nipple drinkers with cups Liters/1000 birds			Bell drinkers Liters/1000 birds		
	M	F	SRC	M	F	SRC	M	F	SRC
7	54	54	54	58	58	58	61	61	61
14	112	102	107	119	109	114	126	115	121
21	182	163	173	194	173	184	205	184	194
28	254	222	237	270	236	252	286	250	266
35	312	277	293	332	294	311	351	311	329
42	349	318	333	371	338	354	392	358	374
49	366	347	357	389	369	379	412	391	401
56	370	365	368	393	388	391	416	410	414