

Q&A

12Q1: When we checked some tap waters, we found a few *Coccomyxa*, *Nematoda* and *Amoeba* in the sampling water. Can we say it drinkable water?

(Mr. P.K, Cambodia)

A: There are no safety standards for drinking water for algae and small animals. Algae and small animals go through out the filtration of the water treatment plant and enter the water distribution network, or, they enter the distribution network from the end of the pipe.

-Small animals-

Nematoda

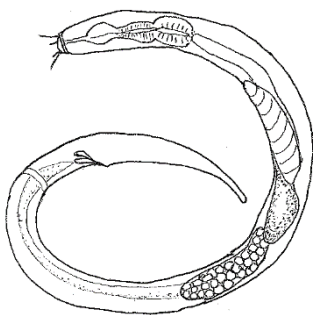
In most countries, 3~4 cells of *Nematoda* in 10 liter-sampling water (tap water) are accepted experientially. Several institutes examined that *Nematoda* has bad influence to human health or not. And they have not found the bad influence so far.

Amoeba

Amoeba can be also regarded as above. But *Entamoeba histolytica*, kind of amoeba causes amoebic dysentery. They have no resistance to chlorine. And they cannot alive in the water which contains residual chlorine. So, it is very important to keep residual chlorine in the tap water.

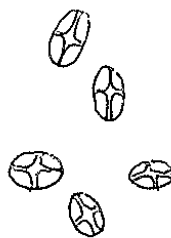
Coccomyxa

Coccomyxa is green algae. It has resistance to chlorine. It however does not affect human health.



Length 1~3mm

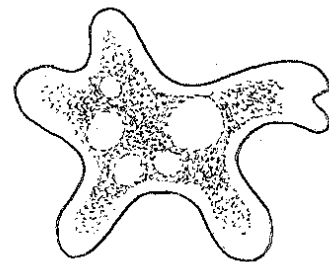
Nematoda



Length 4~10 μm

Width 3~5 μm

Coccomyxa



Length 0.02~0.5mm

Amoeba

-Algae-

5~6 cells of algae in 10 milliliter-sampling water (tap water) are accepted experientially.

Microcystis

Microcystine are produced by some of *microcystis* genus, Myrocystine is toxic substance. It is a parameter to be considered in Japan Water Quality Standard for Drinking Water. Its target level is less than 0.0008 mg/L.

It is so difficult and costly to remove a few algae and small animals.

Therefore it is quite important to control number of algae and small animals, and to monitor residual chlorine.

(Answerer: Mr. SASAKI Shinichi, Yokohama Waterworks Bureau O.B, 2008)