

Why is tap water milky white?

(Cantonese dialogue with English subtitles)

Woman A: Done.

Woman B: Wash my cup, please.

Woman A: Okay, I'll do it just for you.
Woosh!
Why is the tap water milky white?

Woman B: Are you seeing things?

Woman A: Don't believe me? Let's compare it with bottled water.
They are clearly different.

Woman B: Looks like there really is something wrong with the tap water.

Woman C: Don't worry.
I tried letting the water sit for a while before,
and it became clear.

Woman A: How strange!

Super: Dr. CHAN On-yee
Waterworks Chemist, WSD

Dr. CHAN On-yee: What you see now is a glass of water full of air bubbles.
When there are many tiny bubbles in the water,
the bubbles refract light,
making the water appear milky white.
Simply let the water sit for a while,
until the bubbles disappear,
the water will become clear.

Woman B: How does air get into the water?

Dr. CHAN On-yee: Drinking water needs to be pressurized to be delivered to users.

During the pressurization process, if air gets into our water pipes, for example, due to repair works at plumbing system, the air will dissolve in the water.

When we open the tap, water pressure drops, causing the dissolved air to release, and form tiny air bubbles.

Woman A: No wonder the tap water turned milky white after last water outage.

I thought there was something wrong with the water quality.

Woman C: So the drinking water is safe for consumption. We're all reassured now.

Dr. CHAN On-yee: Yes. Air bubbles won't affect drinking water quality. It is safe for consumption.

Super: 
