# Simple Water Filter is Saving Millions of Lives

# Set your timer. Look at your watch. Let about 20 seconds pass. Done? Someone, somewhere, died during your count from lack of clean water. She may have been a pretty little girl not yet 5 years old, or a beloved boy child, possibly younger. Odds are one in four that she, or he, was just a child.

# Water water everywhere?

# I have never worried about water. I don’t think about it too much at all, really. It’s plentiful. It’s free. It falls from the sky, and I stick out my tongue and catch it for fun. Water is always a source of pleasure for me, a gift, joy from the sky. It makes my tomatoes grow fat and juicy. Even the well water I drink is plentiful, shot through with a UV light before it passes an assortment of filters to arrive at my tap, clean and cool. My world is so water-rich I do my dishes and bathe in filtered water. No water? It’s just not something I have ever had to consider. But as you reach these words, someone else has just died because they don’t have this same privilege. That person likely lived in a developing country. And the rarely available, dirty water they drank, killed them. But it was risk and drink, or die for certainty.

**First world riches**

We don’t think much about water resources. We just turn on the tap. In most of our communities, it’s delivered through a tidy collection of pipes located underground and already put through some kind of industrial water filtration and sanitation system. It arrives clean, clear, and ready to use. Even our dirty water is thoughtlessly flushed out and away from our homes, processed through yet another industrial water purifier system, and sent somewhere that won’t inconvenience our daily lives or get mixed up with our pure clean drinking water.

**Third world woes**

But imagine a world where that doesn’t happen. Imagine that in this world you get up each day, already parched and dizzy with the urgent need to drink. Imagine that first you must walk 5 km to get the water. Imagine you are five years old, and that’s your job each day. You have no time to go to school. No time to play. Your walk will exhaust your little legs before you complete the journey. But you cannot stop. If you do, you die.

**The night sky**

Do you ever look up at the stars at night and wonder, if someone were gazing back down at our earth what would they see? The tell tale blue reveals liquid water, the elixir of life, a rich endowment. We search for it in our own outer orbital roaming as the harbinger of life beyond earth. About 70 percent of our planet is covered by the wet stuff, most of it held in the oceans, and salty. Another two percent stands frozen at the poles, enough to raise sea levels at least 17 inches were it to melt. Only about one percent of earth’s water is available for us to use and far less than that amount is potable. Many parts of the earth remain parched and dry. The clean groundwater far below the surface is too deep to reach or too expensive to access. As a result, as many as three billion people, about 40 percent of the population on this water-soaked planet, cannot get access to clean drinking water. It is a problem we must solve. Indeed, we have.

**A new dawn**

For a simple filter so small you can slip it in your pocket and so light you can wear it around your neck, we can bring clean water to the world. We can bring it one sip at a time, through a straw, or a bucket-sized filter, enough to sustain a household, or an entire village for a year or longer using a system not much larger than a beer keg. The technology today to provide clean water is cheap, nearly free really, even measured against the starvation wages of third world nations. It doesn’t require electricity to work, or boiled water, which uses scarce energy resources. Through a combination of non-chemical filtration measures, small enough to carry with you, a little girl can stop to drink through the light straw hanging from her neck from a mud puddle filled with cow droppings. It’s safe. She’s safe. She’s safe from typhoid, diarrhea, and the myriad other water-borne illnesses that could otherwise possibly kill her or, at least, cause her to become very sick.

This little girl no longer needs to walk for hours to find a clean water source. She can use her straw filter and her family and community can use the larger passive filter system. Either way, this little girl can go to school today to learn and play with her friends.

About eleven people died from drinking unclean water as you read this article, three or four of them probably kids, just like this little girl.