The theme of this year’s World Water Day is “Nature for Water”, a challenge to the world to find more nature-based solutions to the water challenges we face in the 21st century. 2.1 billion people currently lack access to safely managed drinking water services whilst approximately 1.8 billion use an unimproved source of drinking water with no protection against contamination from human feces. With our current water crisis, the sizeable gap between poor and wealthier countries have become more apparent in regard to access to clean water and sanitation. The UN advises planting more trees, restoring wetlands, and reconnecting rivers to floodplains; but that is not as easy to do in more arid regions, who must look to further alternatives to secure safe drinking water.

Studies from last year noted that tap water and bottled water have been found to have microplastics in 93-4% of those sampled and the health effects are being researched, but do not look promising. Other ways of obtaining water are being developed.

There is a new device that can harvest water from arid desert air. The device uses metal-organic frameworks, which will use less energy that the current water-harvesting devices. It is made from water-attracting materials and pulls in water vapor from the air and causes the vapor to condense and drip down into a collection component. And the device is only powered by sunlight. This is just one of many water-harvesting devices in the development stage that could help the more arid regions of the world.

60% of people, about 844 million, live in areas of water stress where the water supply cannot or will not continue to meet demand. And the solution is not as simple as drink water from a local river. In Nigeria locals were getting their water from the Niger river, which exposed them to numerous potentially fatal diseases. Recently a borehole for drinking water was drilled in one village with a pump, and they are currently working on latrines. They have a limited water supply due to a drought, but they are working as a community to improve water sanitation. Village committees manage the water point, monitor hygiene and sanitation and prepare for local disasters, developing prevention strategies in case of problems.

Cape Town, a city in South Africa, has been battling a severe drought since 2015. Climate change is partially to blame for this drought. Cape Town’s only access to water is reservoirs that are replenished by rainwater, and soon the city will be forced to turn off taps in their homes and rely on communal taps for running water. If no actions are preemptively taken in areas that experience water stress, these areas can become another Cape Town.
“For the first time in history, more people are dying of non-communicable diseases, such as heart disease and diabetes, than infectious diseases. This loss of human life spares no one — rich or poor, young or old — and it imposes heavy economic costs on nations.”

The obesity epidemic poses a threat to the well-being of the global community. Developed and developing countries have felt the impact of a shifting diets and larger portions coupled with a decrease in physical activity.

Children are gaining weight at hazardous levels. In developing nations, the past 30 years brought an increased accessibility to clean water and food supplies. Despite the benefits received from these advancements, a double burden is being placed on governments and families; children are still battling malnutrition while being exposed to obesity at much higher rates. Globally the transition to bigger portions, cheap access to unhealthy foods, and an increase of added sugars have collectively contributed to the economic burdens that NCD pose globally.

For developing countries, the dual burden poses a greater danger to the unstable economic systems. NCD associated with obesity require extensive government support. Obesity among children comes with higher risks of getting diabetes, asthma, and so forth. Each health risk requires a lifetime support of medical attention and hospital visits.

By 2030 it is predicted that the total healthcare cost in America could range from $861 to $957 billion. In China, healthcare cost has double that of the United States and India.

Currently, the Pacific Islands are showing the highest percentage of obese people within their population. Governments in both developed and developing nations are sustaining great economic losses with the rising number of obese children that will most likely transition into becoming obese adults. NCD become chronic diseases that families, communities, hospitals, and countries must combat.

Obesity has surpassed country borders threatening the development of children around the world, depleting global resources, and further straining the quality of human life.

Special points of interest:

- What shifts can be made in both developed and developing countries to encourage the decrease of excessive fat that threatens the overall well-being of children?
- What recommendations can governments implement that would better inform the public of the risks associated with overeating unnecessary calories?
- How can the innovations within the 21st century help engage children and parents to incorporate healthier habits into their lives?
- How can government and social policies help combat the disease that is obesity?
- How can developing countries incorporate cost efficient remedies in order to alleviate the burden of switching to healthier options for their citizens?

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