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Commentary

A brief note on drinking water

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DESCRIPTION

Water that is safe to drink or use for food preparation is referred to as drinking water. The amount of drinking water needed to stay healthy varies, depending on physical activity, age, health-related disorders, and environmental factors. Working in a hot region may necessitate up to 16 litres (4.2 US gal) of water each day. American households use 300 gallons of water each day on average.

Even while only a small fraction of tap water is consumed or used in food preparation, it usually meets drinking water quality standards in developed countries. In the United States, all public water providers are required to maintain a specific level of water quality. Americans can consume their local tap water if the standards are met. Washing, toilets, and irrigation are all common applications for tap water. Grey water can also be used for irrigation or toilets. Its usage for irrigation, on the other hand, may be risky. Toxic or suspended solids levels in the water might also make it unfit to drink.

By 2015, 89% of the world's population had access to water from a source that is safe to drink, known as an upgraded water source. In Sub-Saharan Africa, 40% to 80% of the population had access to drinkable water. Around the world, about 4.2 billion people had access to piped water, while another 2.4 billion relied on wells or public taps. Access to safe drinking water is considered a basic human right by the World Health Organization. Between 1 and 2 billion people do not have access to safe drinking water. In 2010, then-United Nations Secretary-General Ban Ki-moon stated that unclean water kills more people than war. Lack of water, flooding, and poor water quality are the most severe problems in third-world countries. Inadequate water and sanitation are directly responsible for up to 80% of infections in impoverished countries.

REQUIREMENTS FOR DRINKING

The amount of drinking water required per day is variable. It depends on physical activity, age, health, and environmental conditions. In the United States, the Adequate Intake for total water, based on median intakes, is 3.7 litres per day for human males older than 18, and 2.7 litres per day for human females older than 18 which includes about 80% from beverages and 20% from food. The European Food Safety Authority recommends 2.0 litres of total water per day for adult women and 2.5 litres per day for adult men. The common advice to drink 8 glasses of plain water per day is not based on science, and an individual's thirst provides a better guide for how much water they require rather than a specific, fixed quantity. Americans age 21 and older, on average, drink 1,043 mL of drinking water a day and 95% drink less than 2,958 mL per day. Physical exercise and heat exposure cause loss of water and therefore may induce thirst and greater water intake. Physically active individuals in hot climates may have total daily water needs of 6 or more.

The contribution of drinking water to mineral nutrient consumption is also unknown. Storm water runoff or the Earth's crusts are the most common ways inorganic minerals reach surface and ground water. Minerals are also present as a result of the treatment procedure. Calcium, zinc, manganese, phosphate, fluoride, and sodium compounds are examples. For some arthropods and desert animals, water generated via biochemical food metabolism provides a large amount of their daily water requirements, but it only provides a small fraction of a human's required consumption. Almost all potable water contains a variety of trace elements, some of which play a function in metabolism. Sodium, potassium, and chloride, for example, are ubiquitous compounds found in modest amounts in most fluids and play a role in body metabolism. Other elements, such as fluoride, are useful at low amounts but can cause tooth difficulties and other problems at large ones.

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