

GOVERNMENT OF INDIA  
MINISTRY OF JAL SHAKTI  
DEPARTMENT OF DRINKING WATER AND SANITATION

**RAJYA SABHA**  
**STARRED QUESTION NO. \*78**  
ANSWERED ON 25.07.2022

**LOSS OF MINERALS IN RO WATER FILTERATION**

\*78 #. SHRI VIVEK THAKUR

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether it is a fact that minerals are filtered out in Reverse Osmosis(RO) water due to which the filtered water cannot provide the complete health benefits and it is also harmful for the body; and
- (b) if so, the details of the steps being taken by Government in this regard?

**ANSWER**

THE MINISTER FOR JAL SHAKTI  
(SHRI GAJENDRA SINGH SHEKHAWAT)

- (a) & (b) A Statement of reply is laid on the Table of the House.

**Statement referred to in the reply to Rajya Sabha Starred Question No. \*78 # due for reply on 25.07.2022**

To make provision of potable tap water supply in adequate quantity, of prescribed quality and on regular & long-term basis to every rural household by 2024, since August, 2019, Government of India in partnership with States, is implementing Jal Jeevan Mission (JJM) – Har Ghar Jal. Under Jal Jeevan Mission, as per operational guidelines, quality of water should conform to Bureau of Indian Standards (BIS) IS 10500, which specifies ‘acceptable limit’ and ‘permissible limit in the absence of alternate source’ for various physio-chemical and bacteriological parameters for drinking water quality.

Rural drinking water supply is a State subject. Planning, approval and implementation of water supply schemes including system for treatment of water is vested with States. The States may take up appropriate water treatment system depending upon techno-economic feasibility.

As per information available, the BIS has formulated following Indian Standards on water for drinking purpose:

- i.) IS 10500: 2012 Drinking Water – Specification;
- ii.) IS 14543: 2016 Packaged Drinking Water (other than Packaged Natural Mineral Water) – Specification;
- iii.) IS 13428: 2005 Packaged Natural Mineral Water – Specification; and
- iv.) IS 16240:2015 ‘Reverse Osmosis (RO) Based Point-of-Use (PoU) Water Treatment System for Drinking Purposes.

IS 13428:2005 Packaged Natural Mineral Water specifies minimum limit of TDS (Total Dissolved Solids) as 150 mg/l. No minimum levels of TDS/any minerals are specified in case of the Indian Standards on Drinking Water (IS 10500:2012) and Packaged Drinking Water (IS 14543:2016). Also, Indian Standard, IS 16240:2015 ‘Reverse Osmosis (RO) Based Point-of-Use (PoU) Water Treatment System for Drinking Purposes — Specification’ does not stipulate any minimum levels of minerals to be retained in the water after the usage of this system.

As per the latest WHO Guidelines for Drinking-water Quality: Fourth Edition incorporating the first and second addenda, para 6.15, page 122 (2022) “*Some consumers believe that certain natural mineral waters have medicinal properties or offer other health benefits. Some such waters have higher mineral content, sometimes significantly higher than concentrations normally accepted in drinking water. They often have a long tradition of use and are often accepted on the basis that they are considered foods rather than drinking-water per se. Although certain mineral waters may be useful in providing essential micronutrients, such as calcium and magnesium, these Guidelines do not make recommendations regarding minimum concentrations of essential elements because of the uncertainties surrounding mineral nutrition from drinking-water. Packaged waters with very low mineral content, such as distilled or demineralized waters, are also consumed. There is insufficient scientific information on the benefits or hazards of long-term consumption of very low mineral waters to allow any recommendations to be made*”.

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