

Bottled water

The requirements for the quality and safety of **bottled water** and the method of its treatment are laid down in **Decree No. 275/2004 Coll.** This Decree lays down *microbiological, chemical and physical* requirements for bottled water in accordance with European Community law.

Basic division

- Bottled natural mineral water.
- Bottled natural spring water.
- Bottled baby water.
- Bottled drinking water.
- *(Natural healing waters)*'.

Natural mineral water

We may encounter artificially carbonated waters using CO₂ or, alternatively, waters that naturally contain CO₂. They are divided according to the amount of mineral content as follows:

- Waters with **very low** mineral content (**up to 50 mg/l**).
- Waters with **low** mineral content (**up to 500 mg/l**).
- Waters **rich** in mineral salts (**more than 1500 mg/l**).

Natural mineral water does not have any healing effect, it is rather a psychological effect under the influence of media and advertising campaigns. It can be recommended to consume it occasionally, rotating between producers (changing the composition). The optimum is about 1 litre per day for an adult.



Natural mineral water

Natural spring water

It is on the market in both carbonated and non-carbonated form. We should prefer the non-carbonated version. This water is *allowed to be treated by physical and chemical processes*. The total mineralisation should not exceed 500 mg of minerals per litre. If it can be used to prepare infant formula, the still water must be labelled as such.

Baby water

This is bottled water which must not be treated in any way or by any means (except UV radiation). It comes from a protected underground source. The water shall be only slightly mineralised (up to 500 mg/l), as low as possible in CO₂ and the pH shall not be less than 5.

Bottled drinking water

It is the only packaged beverage that **may undergo chlorination**. Again, this can be a carbonated or non-carbonated variant. The composition is very similar to tap water. In many cases, the water treated and supplied to the distribution network is of higher quality. Only the indication Bottled drinking water is mandatory on the label. It can be obtained from any water supply source. It has its place in various emergency situations and in areas affected by flooding.

Natural healing waters

Natural healing waters **do not** belong in bottled water. They have demonstrable **healing effects**. The dissolved solids content is *greater than 3,5 g/l*. Very often they contain some minerals in excess. Consumption of more than 1 week requires consultation with a physician or trained nutritionist. The chemical composition changes during storage. There are no quality requirements for natural medicinal waters, only microbiological indicators are regulated.

Artificially carbonated beverages

- CO₂ content in the range of 4000-6000 mg/l.
- Mostly **acidic pH** (3.5-6).
- Increase blood flow to the mucous membranes in the oral cavity.
- They cause hyperemia of the gastric mucosa, increase secretion of gastric juices, and accelerate intestinal peristalsis.
- Increase appetite.
- Increase diuresis.

Recommendations

It is recommended to consume beverages that are stored appropriately, of the right composition and in an unsweetened version. We alternate mineral waters. Opened drinks should be consumed within 24 hours. Unflavoured drinks are preferred.

Links

Related articles

- Drinking water quality requirements

Literature used

- Česká republika. Vyhláška o požadavcích na jakost a zdravotní nezávadnost balených vod a o způsobu jejich úpravy. In 275/2004. 2004. Available from <[1] (
- BENCKO, Vladimír. *Hygiena : Učební texty k seminářům a praktickým cvičením*. 2. přepracované a doplněné vydání edition. Praha : Karolinum, 2002. 205 pp. pp. 54-61. ISBN 80-7184-551-5.