

Raw milk and raw-milk products affect our health

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Differences between raw milk and heat-treated milk

The primary aim of heating milk is to reduce its bacterial content and ensure microbiological food safety. As a side effect of the heating process, however, heat-sensitive components of the milk are altered in a variety of ways. Because of the reduced microbial diversity and changes in the heat-sensitive components, various positive health effects of the raw milk, such as protection from allergies, are weakened or even completely lost. Production-related differences such as, e.g. the higher omega-3 fatty-acid content are also significant.

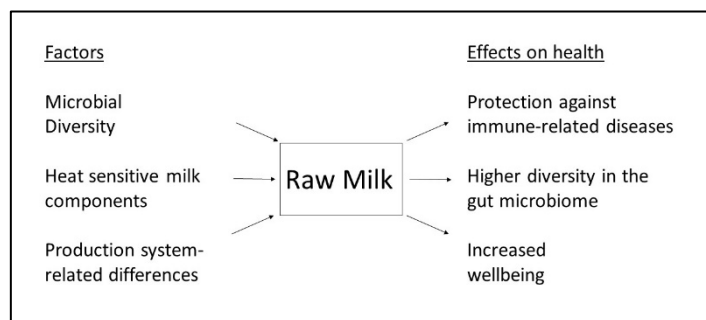


Fig.1: Factors and health effects of raw milk

Weighing up risks and benefits

The effects on our health are long-term and multifactorial in nature, making them very difficult to document and quantify. The risks, however, often involve rather short-term effects with an obvious cause, such as, e.g. microbial food poisoning. It is important not to overestimate the negative effects and not to underestimate the positive effects.

The sale and consumption of raw milk are regulated by law

Pursuant to Swiss food legislation, raw milk may not be advertised or offered for direct consumption. The point of sale (Fig. 2) is required to provide information on the shelf-life, storage conditions and treatment of raw milk:

- Store at 5 °C or less
- Heat to at least 70 °C before consuming
- Consume within 3 days

In Switzerland, the heat treatment after dispensing is therefore the personal responsibility of the consumer.



Fig.2: There are around 400 raw-milk vending machines scattered throughout Switzerland. Here, consumers can purchase raw milk round-the-clock at the push of a button. (Photo Agroscope)



Fig.3: The production of raw milk and raw-milk products are complex system requiring inter alia well-trained professionals, healthy, infection-free herds, a trustworthy HACCP concept, validated hurdle technology, and strict inspections carried out by the government or the private sector. (Photo J. Eberle, Muolen)

Reference: Bachmann H.-P., Fröhlich M.-T., Bisig W. (2020) Rohmilch und Rohmilchprodukte beeinflussen unsere Gesundheit. *Agrarforschung Schweiz* (11) 124–130. <https://doi.org/10.34776/afs11-124>