

# Health impact is the main reason for increased interest for raw milk kefir

Ton Baars<sup>1,2</sup>, Andre Mulder<sup>1</sup>, Koen Mulder<sup>1</sup>

<sup>1</sup>Raw Milk Company, De Lutte, The Netherlands; <sup>2</sup> Utrecht University, Dpt. Immunopharmacology, The Netherlands

**Introduction.** More than 10 years ago, the Raw Milk Company started producing raw milk kefir from organic cow milk. Five years ago a new dairy plant was built, and specialized in the sale of raw fermented kefir, yoghurt, fresh cheese, and raw milk butter. Sales go across organic retailers in The Netherlands and Flanders (Belgium) as well as conventional retail. There is a steady growth in sales, however, since the Covid19 crisis and lock-down, sales growth exponentially (Fig 2).

Increased interest is present due to improvement of health, for instance in skin complaints (see photo series 1-3). An online questionnaire was used to evaluate the retrospective changes in health of adults after introduction of raw milk kefir in their diet (around 200 ml/day) (Baars et al., 2019). Due to the training of the raw milk producers (hygiene), the short chain (twice a day transport over less than 15 km) and the freshness of the raw milk (raw milk of one milking processed within 2 hours), no zoonotic problems are present in the raw milk kefir.

**Results.** Based on a retrospective questionnaire study among >400 adults (age: 54Y), the impact on human health after raw milk kefir consumption was evaluated. After at least two months raw milk kefir consumption, consumers report significant, relevant clinical improvement in overall health and perceived immune functioning and a reduction in diarrhoea, constipation, skin and mood complaints (Fig. 1). The largest improvement was reported by subjects with poor health (either being immune depressed or suffering from a chronic disease) (Fig. 1 green bars). The effects were more pronounced in women compared to men.

Supportive research showed differences in the kefir microbiome, the bio-active peptides as well as the immunological response in pre-clinical studies between kefir made from raw milk compared to kefir based on heated milk (Baars, Van Esch et al., 2023).



Photo 1-3. Case of eczema reduction in a male: before, after 2 weeks and after 7-8 weeks of raw milk kefir consumption

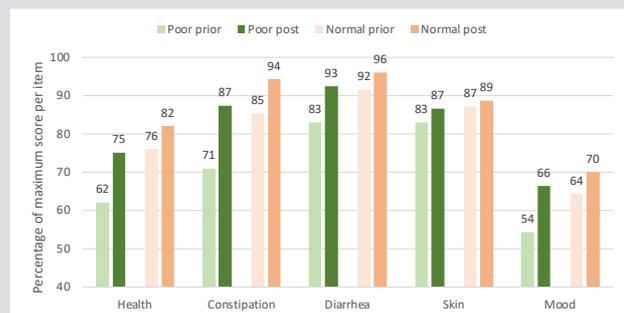


Fig. 1. Five areas of scoring in women with a poor (green) and normal (red) overall health status; prior (light colour) and post (dark colour) raw milk kefir consumption.

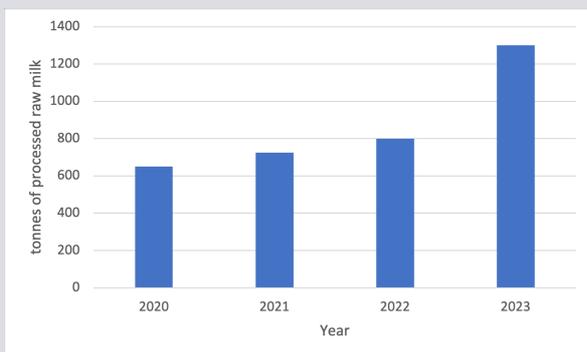


Fig. 2. Exponential increase of raw fermented milk production by the Raw Milk Company after the Corona crisis and lock-down. Prognosed milk processing for 2023 is around 1,300 tonnes

**Conclusion.** Kefir made from raw milk (organic, grass-based, free of antibiotics) showed a positive impact on health in adults.

## Literature.

Baars, T., Berge, C., Garssen, J., & Verster, J. (2019). The impact of raw fermented milk products on perceived health and mood among Dutch adults. *Nutrition & Food Science*, 49(6), 1195-1206.

Baars, T., van Esch, B., van Ooijen, L., Zhang, Z., Dekker, P., Boeren, S., ... & Kort, R. (2023). Raw milk kefir: microbiota, bioactive peptides, and immune modulation. *Food & Function*, 14(3), 1648-1661.

