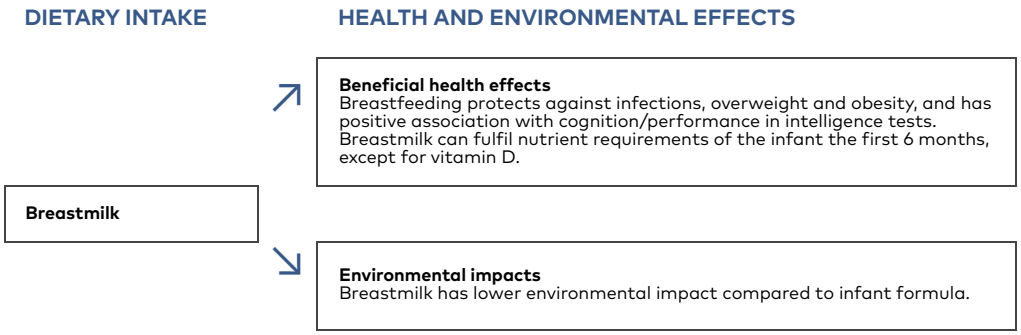
Breastfeeding



Science advice: It is recommended to protect early initiation of exclusive breastfeeding continued for about 6 months and continued breastfeeding combined with complementary feeding for the first 12 months, or for a longer time if it suits both mother and child and is balanced with complementary feeding. If breastfeeding and exclusive breastfeeding is not possible, infant formula is recommended before 4 month, and infant formula together with complementary foods after 4 months.

For more information about the health effects, please refer to the background paper by Agneta Hörnell and Hanna Lagström (Hörnell & Lagström, 2023). For more information about the environmental impacts, please refer to the following background papers (Harwatt et al., 2024; Trolle et al., 2024).

Food and nutrient intake. The Nordic and Baltic countries have relatively high breastfeeding (BF) rates (Hörnell & Lagström, 2023). Almost all mothers BF their infants (Hörnell & Lagström, 2023). Exclusive BF (EBF) rates at 4 months of age is 40-50 % and decline rapidly thereafter. BF is commonly continued together with the addition of solids and other fluids than breastmilk, i.e., complementary foods. About 60–80 % of infants are still breastfed at 6 months, and 30–60 % at 12 months. BF rates seem similar in the Baltic countries with 50–70 % of infants breastfed at 6 months.

Health effects. Several recent qSRs have been published on BF and several health outcomes both for the mother and the child, as discussed by Hörnell and Lagström (2023). Overall, these qSRs found strong evidence for a lower risk of breast cancer for the mother (WCRF/AICR, 2018c), lower risk of

diarrhoea, overall infections, acute otitis media, and respiratory infections for the child (Victora et al., 2016), lower risk of overweight and obesity for the child (Dewey et al., 2020a; WCRF/AICR, 2018b) and childhood asthma (Güngör et al., 2019b). However, these studies did not compare EBF for 4 months vs 6 months, and the relationship between these outcomes and the duration of exclusive breastfeeding is limited or insufficient.

As discussed in Hörnell and Lagström (2023), some studies also suggest that BF has positive effects on cognition and performance in intelligence tests, decreased mortality and malnutrition. Breastmilk contains water, protein, lipids, carbohydrates, vitamins, minerals as well as non-nutritive bioactive factors, such as hormones, growth factors, antibodies, human milk oligosaccharides and bacteria with metabolites. Breastmilk gives the newborn essential nutrients in an efficiently absorbed combination. Breastfeeding protects against too high protein intake too early in childhood and is most often sufficient as the only form of nutrition for the first 6 months, except for vitamin D which needs to be given as supplement (Hörnell & Lagström, 2023).

Too long EBF, i.e., longer than 6 months, increases the risk of food allergies, leads to insufficient nutrient intake and may lead to difficulties in learning to eat a variable diet (Hörnell & Lagström, 2023). In addition, too long EBF, i.e., more than 6 months, may increase the risk of iron deficiency.

Environmental impacts. Recent papers demonstrate lower climate and other environmental impacts of BF compared to formula feeding in many countries. The environmental impact of 4 months exclusive feeding with infant formula was 35–72% higher than that of 4 months exclusive breastfeeding, depending on the impact category, i.e., global warming potential, terrestrial acidification, marine and freshwater eutrophication, or land use (Harwatt et al., 2024). The FAO/WHO guidelines for sustainable diets recommend early initiation of BF, EBF until six months of age, and continued BF, combined with appropriate complementary feeding, as long as it suits mother and child (FAO/WHO, 2019).

Main data gaps. More knowledge about varying duration of EBF and partial BF is needed, as is knowledge about complementary feeding and foods for young children. Further, evidence for associations between infant nutrition and health effects, such as risk of food allergies and asthma, and the optimal duration of EBF, is needed.

Risk groups. Limited possibilities for maternity leave may influence breastfeeding. Social inequalities in breastfeeding are observed in all Nordic countries. For some ethnic minority groups exclusive breastfeeding is much shorter than recommended.

Science advice:

- **Based on health outcomes:** From a health perspective, it is important to protect, support and promote breastfeeding. For most full-term, normal weight infants, breast milk is sufficient as the only form of nutrition for the first 6 months, except for vitamin D which needs to be given as supplement. International authorities recommend EBF for the first 6 months of life, or for the first 4–6 months (EFSA, 2019a; ESPHGAN Committee on Nutrition, 2009; NASEM, 2020; SACN, 2018; USDA/USDHHS, 2020; Victora et al., 2016; WCRF/AICR, 2018c). For nutritional reasons, most infants need complementary feeding from about 6 months of age.
- **Based on environmental impacts**: BF in accordance with the recommendations has been shown to decrease the environmental impact from the consumption of other foods. Breastmilk has low environmental impact as compared to formula and industrially made foods for infants.
- **Overall science advice**: It is recommended to protect early initiation of EBF continued for about 6 months and continued BF combined with complementary feeding for the first 12 months, or for a longer time if it suits both mother and child and is balanced with complementary feeding. If EBF and BF is not possible, infant formula is recommended before 4 month, and infant formula together with complementary foods after 4 months.