



Support breastfeeding for a healthier planet



WABA | WORLD BREASTFEEDING WEEK 2020

ONE FOR ALL, ALL FOR ONE

World Breastfeeding Week 2020 (#WBW2020) highlights the links between breastfeeding and planetary health. We present a framework for understanding these links, outline some of the challenges and present some possible solutions.

“ We need to acknowledge that ‘our house is on fire’ and that the next generation requires us to act quickly to reduce carbon footprints in every sphere of life... Breastfeeding is a part of this jigsaw, and [urgent investment](#) is needed across the sector. Joffe, Webster & Shenker. (2019) ¹ ”



OBJECTIVES OF #WBW2020



INFORM

people about the links between breastfeeding and the environment/climate change



ANCHOR

breastfeeding as a climate-smart decision



ENGAGE

with individuals and organisations for greater impact



GALVANISE

action on improving the health of the planet and people through breastfeeding

Breastfeeding and planetary health

The concept of [planetary health](#) has been defined as ‘the health of human civilisation and the state of the natural systems on which it depends’². The interconnected nature of people and the planet requires that we find sustainable solutions that benefit both.

Sustainable development meets the needs of the current generation without compromising future generations. Breastfeeding is key to all of the United Nations’ [Sustainable Development Goals \(SDGs\)](#)³.

Food and feeding matter

Climate change and environmental degradation are some of the most urgent challenges facing our world today. [Emissions of greenhouse gases](#) (GHG) – carbon dioxide, nitrous oxide, methane and others due to human activity – have increased global temperatures by over 1°C since pre-industrial times⁴. Interestingly, GHG emissions appear to have dropped due to the impact of our responses to another urgent challenge, the more immediate COVID-19 pandemic. Several lessons can be learned from that and applied to the challenge of climate change. [Environmental degradation](#) resulting from pollutants in the air, water or food supply, the over-utilisation of scarce resources, excessive waste and the destruction of habitats is often caused by human activity⁵. Our [food production systems](#) and consumption patterns are significant contributors to climate change and environmental degradation⁶. The COVID-19 pandemic has taught us that we are all affected and an immediate coordinated societal response is required. We can all do something to reduce our [carbon footprint \(CFP\)](#)⁷ and [ecological](#)

[footprint](#)⁸ starting with how we feed our babies. Ongoing health emergencies such as COVID-19 also pose challenges that affect infant feeding.

WHO and UNICEF Recommendation for Optimal Infant and Young Child Feeding (IYCF) Practices

- Early initiation of breastfeeding within one hour of birth
- Exclusive breastfeeding for the first six months of life
- Continued breastfeeding up to two years of age or beyond, with the introduction of nutritionally-adequate and safe complementary (solid) foods at six months

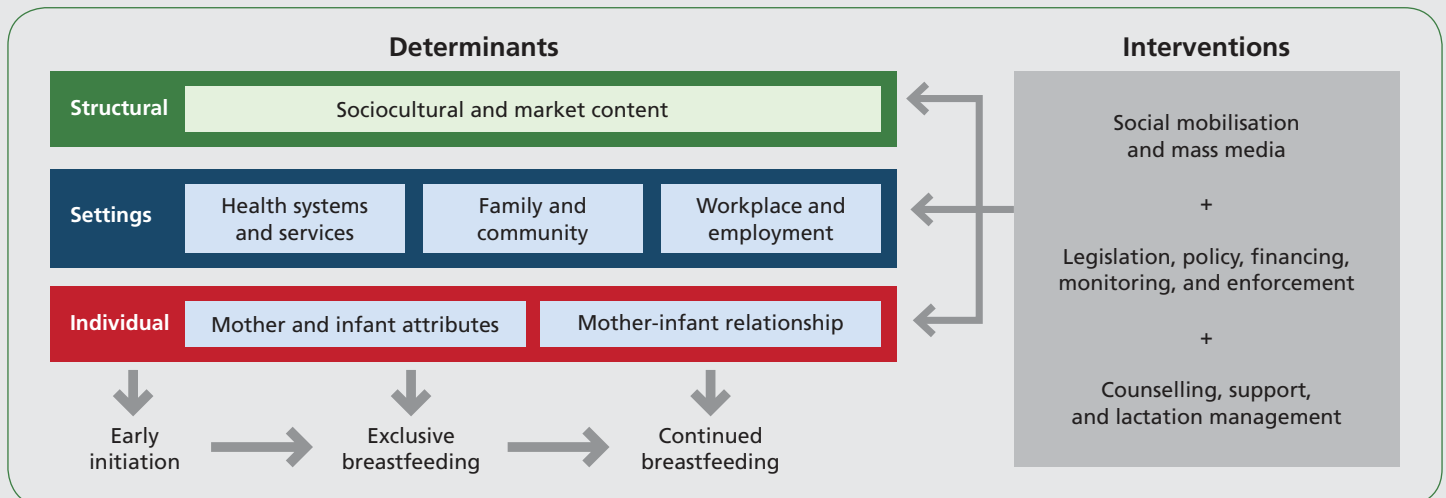
Investing in support for breastfeeding

Breastfeeding is one of the [best investments](#) for saving infant lives and improving the health, social and economic development of individuals and nations. Creating an enabling environment for optimal infant and young child feeding patterns is a societal imperative.

So, what is needed to create an enabling environment and improve breastfeeding practices? Protection, promotion and support of breastfeeding are all important strategies at structural, settings and individual levels (see diagram below). Coordinated actions for optimal infant feeding during normal times and in emergencies are essential to ensure that the nutritional needs of all babies are met.

Supporting breastfeeding has short- and long-term impact on planetary health. It is an urgent imperative and we must intensify the conversations, call for more robust research and engage all relevant sectors to take action. As urgent as the COVID-19 crisis and responses are, there is an ongoing need to advocate for breastfeeding as a public health intervention that saves lives and prevents infections and illnesses in the population at large. It is our duty as global citizens to act.

#WBW2020 matters now more than ever!



From “Why invest, and what it will take to improve breastfeeding practices?” by [Rollins et al. \(2016\)](#).

Breastfeeding may look like an unlikely soldier in the war against climate change but can contribute to altering the scoreboard.

[Dr. Taru Jindal, 2020](#)

CHALLENGES



Planetary health needs sustainable action

Over time, the scale of human impact on the natural world is massive. Depletion and destruction of natural resources and an increase in the emission of major GHG are at their highest levels for at least the past [800 000 years](#)⁹. We need to protect our planet and our own health by (i) using resources such as land, water and energy sources responsibly, (ii) conserving biodiversity and (iii) consuming with care. Several of the [SDGs](#)¹⁰ provide guidance for specific actions to combat environmental degradation and the climate crisis. [Breastfeeding](#) is linked to all of these SDGs and is key to achieving sustainable development¹¹.



Sustainable food systems include breastfeeding

[Food production](#) is responsible for about 26% of GHG emission. It also contributes to about 32% of the global soil acidification rate and 78% of the over-mineralisation of water bodies¹². Our current food production and consumption practices are degrading land and water ecosystems and driving climate change. Every step taken across our life-cycle to mitigate environmental degradation and the climate crisis counts. Breastmilk is the first food that we consume and is a critical part of a sustainable food system. On the other hand, feeding with breastmilk substitutes (BMS) contributes to the problem and is a growing phenomenon. We need to better understand the impact of different feeding methods on planetary health in both normal and emergency situations.



Emerging trends in global health and nutrition

Although there have been many advances in global health in the past few decades, there are several emerging challenges for example natural disasters, infectious disease outbreaks such as the ongoing COVID-19 pandemic as well as a lack of adequate health systems. A number of countries are facing the [double burden of over- and under-nutrition](#). Noncommunicable diseases are also on the rise. [Food insecurity](#) affects millions of people especially in conflict and disaster-prone areas. Our diets and food consumption patterns are underlying factors to these issues. Breastfeeding can contribute to [short- and long-term health](#), good nutrition and food security in normal and emergency situations. The protection, promotion and support of breastfeeding before, during and after emergencies can pose additional challenges that we must all step up to.



Infant feeding method matters

Feeding with BMS from farm-to-table affects the environment and climate due to its production, packaging, distribution and preparation methods. On the other hand, breastmilk production only requires the additional food that a mother needs to consume, therefore using fewer natural resources and resulting in almost no waste. Scaling up optimal breastfeeding could prevent more than 823 000 child and 20 000 maternal deaths each year. Not breastfeeding is associated with lower intelligence and results in economic losses of about [\\$302 billion annually](#)¹³.

Lifelong Positive Health Effects of Optimal Breastfeeding

- Women/Parents: helps with birth spacing, reduces risk of breast and ovarian cancers and lowers the risk of hypertension
- Children: combats infectious diseases, decreases incidence and severity of diarrhoea, lowers respiratory infections and acute otitis media, prevents dental caries and malocclusion and increases intelligence



Slow progress on improving breastfeeding

Only about 40% of all babies born annually are [exclusively breastfed](#) until six months of age and only 45% continue any breastfeeding for up to two years¹⁴. Often, there is a lack of support to breastfeed, whether in the health system, workplace or community. For example, the lack of maternity/parental leave and workplace support make optimal breastfeeding additionally challenging. In emergency situations, breastfeeding practices may be compromised and for those infants needing an alternative, donated human milk may not be readily available and the supply chain for BMS may often be broken. In 2019, the total market value of milk formula was about [US\\$71 billion](#)¹⁵ with sales growth particularly strong in low- and middle-income countries. In addition to infant formula, there is a growing market of follow-up formulas and toddler milks, which are deemed [unnecessary according to WHO](#)¹⁶. The unethical marketing practices of the BMS industry continue to worsen the situation.



Ecological footprint of BMS

Dairy farming and the carbon trap

The main ingredient of most BMS is cows' milk. Dairy farming typically releases substantial amounts of methane and other GHG. Furthermore, feed rations or grazing areas needed by dairy cattle can lead to deforestation. This in turn increases the amount of carbon dioxide, as trees are no longer available to absorb it and provide the carbon trap to prevent climate change. [Feed rations](#) for dairy cows are derived from cereals and soybeans grown with intensive use of pesticides and fertilisers. This leaves behind another major ecological footprint¹⁷.

Energy sources and carbon emissions

The production, packaging, distribution and preparation processes of BMS, as with most food production, requires energy. If the source of [energy](#) is fossil fuels, the CFP will be higher¹⁸. The [Paris Agreement](#) on climate change encourages governments and industries to work towards reducing carbon emissions and increasing renewable energy to meet global climate goals¹⁹. There are fortunately some [ongoing efforts](#) to follow this recommendation²⁰.

Waste in our environment

Waste is another factor to consider in terms of ecological footprint. Feeding [one million babies with formula](#)²¹ for two years requires, on average, approximately 150 million cans of formula. Metal cans, if not recycled, are likely to end up in landfill sites, while plastic, aluminium and paper waste often end up in our oceans.

Water footprint of BMS

[Water footprint](#) refers to the total volume of fresh water used to produce the goods and services consumed by an individual or community or which are produced by a business²². BMS production and preparation require water. Fresh water is a scarce natural resource and commodity and therefore needs to be protected. Calculating the water footprint of milk products is complex as it depends on the [geographical location](#), dairy farming system and other factors²³. However, all efforts to conserve, recycle and replenish our water sources are essential.



Ecological footprint of breastfeeding

Breastfeeding for six months after birth requires, on average, an additional [500 kcal of energy a day](#)²⁴. Although breastfeeding may require an additional intake of water depending on factors such as weather and activity levels, there is no evidence of the amount needed beyond meeting [physiological requirements](#)²⁵. Different types of food have varying CFPs, with predominantly plant-based diets being generally considered [healthier](#) for the planet²⁶. All parents should be supported to make healthy nutritional and planetary choices especially throughout the reproductive continuum, which includes breastfeeding. Depending on our diets, the CFP will differ. Direct breastfeeding and hand expression of breastmilk are efficient in terms of reducing waste and saving energy and other resources. Although using a breast pump to express milk does require additional equipment, most of these are reusable and thus better for the environment compared to BMS feeding.



Comparing carbon footprints

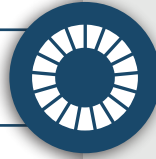
Accurately calculating and comparing the CFP of BMS and breastfeeding are complex tasks and only a few studies have been carried out. The most common methodology used is the [life cycle assessment](#) (LCA), which takes into account carbon dioxide equivalent emissions from farm-to-table processes and involves many variables, factors and assumptions. Two studies that have focused on the CFP of BMS and breastfeeding are presented here:

- [A comparative model](#)²⁷ using data from Brazil, China, UK and Vietnam showed the CFP associated with breastfeeding (including additional energy required by breastfeeding mothers) was 43%, 53%, 40% and 46% lower than the CFP associated with BMS production and use. Differences principally reflected BMS production methods and diets of breastfeeding mothers in the respective countries. Methods for calculating CFP including whether bottle sterilisation was included were also important.
- A report of [case studies](#)²⁸ from six countries in the South- and Asia-Pacific region shows how much GHG emissions arise from milk formula sold. The report revealed that milk formula production is emerging as an important source of GHG emissions. The increasing use of unnecessary follow-on and toddler milk formulas in all study countries is of great concern.

SOLUTIONS

Support for all

SDGs as a framework for planetary health



The SDGs are about people, the planet, prosperity and peace. Breastfeeding is one of many sustainable solutions to planetary health. The SDGs provide a framework for addressing several of the current challenges to [planetary health](#)²⁹. Ensuring wellbeing includes ending poverty, hunger and malnutrition, promoting good health as well as ensuring the right to decent work, gender equality, inclusiveness and peace. An enabling environment for breastfeeding requires an essential package of interventions: maternity/parental protection, training of health professionals and community workers, the Baby-Friendly Hospital Initiative (BFHI), access to breastfeeding counselling as well as implementation and monitoring of the International Code of Marketing of Breastmilk Substitutes and relevant World Health Assembly (WHA) resolutions.

- Align national and international policies and guidance on breastfeeding and IYCF with the SDG agenda and other environment/climate initiatives.
- Ensure that a public health perspective is taken to strengthen BFHI and breastfeeding counselling among the general population including during emergencies.
- Raise awareness among decision-makers to recognise the contribution of breastfeeding to food security and environmental sustainability.
- Advocate for policies aimed at reducing carbon emissions from the BMS industry.
- Ensure that the [International Code of Marketing of Breastmilk Substitutes and relevant World Health Assembly \(WHA\) resolutions](#) are fully implemented and [monitored](#).
- Enact paid family leave and workplace breastfeeding policies based on the International Labour Organization (ILO) [Maternity Protection Convention C183](#) as the minimum standard.

Societal support



All women/parents have the right to be supported by society to breastfeed optimally. They can benefit from many different kinds of support depending on their sociocultural context. Support can come from their families, communities, health systems and [workplaces](#).³⁰ [Breastfeeding counselling](#) is a type of support delivered directly to women/parents and infants by [health workers and counsellors](#) trained specifically to help them^{31,32}. When breastfeeding counselling is available and accessible to women/parents, the duration and exclusivity of breastfeeding is increased.

- Advocate for [increased financing](#), monitoring and implementation of better policies and interventions to provide families the support for breastfeeding that they need, especially breastfeeding counselling.
- Inform communities about the impact of formula feeding on the environment using a variety of [communication techniques](#) and influencers.
- Sensitise [journalists and the media](#) to stimulate public debate on the links between breastfeeding and the environment/climate change.
- Allocate resources for additional research on the climate/environmental impact of BMS.
- Collect systematic data on the impact of different IYCF policies and programmes in emergency situations.

Breastfeeding counselling is essential



[Breastfeeding counselling](#) is essential for increasing breastfeeding rates³³. According to WHO, all counselling can be considered support but not all support interventions involve counselling. Counselling is a process and interaction between counsellors and women/parents and is therefore not intended to be a 'top-down' intervention of 'telling them what to do'. The [aim](#) of breastfeeding counselling is to empower women/parents to breastfeed, while respecting their personal situations and wishes³⁴. It may be offered by either professional or lay/peer counsellors, or a [combination of both](#)³⁵. Breastfeeding counselling includes listening, empathising, building confidence, giving information and suggestions and letting women/parents decide what is best for them. It also includes giving practical help and demonstrating how to position and attach a baby at the breast and [manage common problems](#)³⁶.

- Advocate for all women/parents with young children to have access to skilled breastfeeding counselling from health facilities and communities.
- Implement the [revised BFHI 2018](#)³⁷ guidelines in all health facilities including private hospitals.
- Allocate resources for community groups to be able to provide basic breastfeeding counselling and other forms of support close to women/parents.

Support for all

Ongoing support across the first 1000 days



Breastfeeding counselling should be organised, predictable, scheduled and ongoing to be most effective. All women/parents should be offered planned contact sessions during the antenatal and [postnatal periods](#)³⁸. Contact should be frequent in the early months, with a total of at least six contacts and support continued until the child is two years old.

- Advocate for ongoing antenatal and postnatal breastfeeding counselling contact to sustain optimal breastfeeding.
- Create a [warm chain of support for breastfeeding](#) by identifying key actors and their roles in the first [1000 days](#) and linking them to each other.
- Engage [fathers/partners](#) and family support to share domestic responsibilities and care for the [breastfeeding dyad](#).
- Join a mother/parent support group and share experiences with others in the community to normalise breastfeeding.
- Develop creative ideas for [virtual](#) and online activities to engage target audiences in #WBW 2020.

Building knowledge and skills at all levels



Lay and peer supporters need basic training in breastfeeding counselling and practical skills. Health and allied professionals need breastfeeding counselling skills and additional clinical skills to manage and overcome problems. It is also essential to have [expert resource people](#) to act as academic teachers, trainers, program managers and supervisors. Their role is to ensure effective capacity building and skills development at all levels, and to maintain and update healthcare standards. The development of consistent competencies throughout different levels requires investment that has corresponding [benefits and economic returns](#)³⁹.

- Invest in consistent training programmes for different levels of health professionals, [lactation consultants](#), community health workers and lay/peer supporters.
- Advocate for placement of appropriately-trained and skilled staff at various levels: peer supporters, health professionals, lactation consultants and resource persons.
- Promote scaling up of existing [breastfeeding training tools and programmes](#) including online, digital and e-learning methods, as well as face-to-face clinical and other practical teaching.
- Engage [school children](#), [students](#), [youth](#) and [social media influencers](#) to spread awareness of the importance of breastfeeding for planetary health.

Leaving no one behind



Some families may be more vulnerable and require [additional breastfeeding support](#)⁴⁰. Vulnerable situations include emergencies, special needs or other medical conditions affecting the breastfeeding dyad. The increase in [climate](#)⁴¹ and [environment-related](#) disasters⁴² are a growing concern as the risks of under-nutrition and child mortality are much higher than during normal times. The ongoing COVID-19 pandemic is another emergency that leaves families with children in an extremely vulnerable position. In every emergency, it is necessary to assess and act to protect and [support](#) the nutritional needs and care of both breastfed and non-breastfed infants and young children. It is vital that national and international [evidence-based guidelines](#)⁴³ are aligned to ensure that consistent messages reach the public.

Donations and [non-targeted distributions of BMS](#) can interfere and undermine breastfeeding. Unreliable supply chains of BMS and the unhygienic conditions that commonly prevail in emergency situations make breastfeeding the safest option. In the case of COVID-19, [WHO](#) and [UNICEF](#) recommend breastfeeding with necessary hygienic precautions. This may be revised as [further evidence](#) becomes available. [The Operational Guidance on Infant Feeding in Emergencies \(OG-IFE\)](#)⁴⁴ explains the key actions to protect and support optimal IYCF in emergencies.

- Promote the use of evidence-based international [IYCF guidelines](#) to develop national action plans and communication messages.
- Ensure that breastfeeding protection, promotion and support is specifically included in national emergency-preparedness and response plans.
- Inform all health workers, community groups and the public about the importance of breastfeeding in [national- and community preparedness](#) plans.
- Reinforce support for breastfeeding families that targets all members of the family and the community by developing appropriate and consistent communication messages.
- Emphasise [hand expression of breastmilk](#), [appropriate use of breastpumps where safe](#), [correct breastmilk storage and preparation](#), [cup feeding](#), [techniques to maintain breastmilk supply](#), [relactation](#) and [wet nursing](#).
- Ensure that donor human milk is available for babies who need it through [human milk banks](#) or other appropriate community initiatives.

The Green Feeding Advocacy Campaign

[Green Feeding](#) is an advocacy campaign to protect, promote and support breastfeeding, and to safeguard parents against commercial pressures and misleading claims by formula companies. It includes community support for exclusive breastfeeding for six months and the addition of appropriate complementary foods for older babies. Families should be allowed to make feeding decisions free from commercial pressures: for babies, toddlers and young children. Sustained breastfeeding needs support for

as long as the family wants. Home-prepared family foods are minimally processed and so offer value for money. Sustainable local agriculture provides foods that are biodiverse, reliable and culturally appropriate. Community support can be undermined by marketing and promotion of ultra-processed foods. The Green Feeding campaign includes both the carbon footprint (CFP) to assess the climate impact of production and consumption and also the ecological footprint to assess the environmental impact.

A SUSTAINABLE SOLUTION FOR THE PLANET AND ITS PEOPLE



In conclusion, ensuring planetary health is an urgent task for all of us. Much advocacy is needed to accelerate the achievement of the 2015-2030 SDGs, the Paris Agreement targets and the World Health Assembly 2025 breastfeeding target. Sustainable production and consumption patterns will safeguard our natural resources, our environment and help mitigate climate change. Breastfeeding contributes positively towards planetary health in several ways - it is sustainable, ecological and good for human health. The current global scenario with slow progress in improving breastfeeding rates, a growing BMS industry and ongoing emergencies is a real concern. Strategies to protect, promote and support breastfeeding are well-known and need to be implemented and monitored. Breastfeeding counselling is known to be effective and should be offered as a key feature of support to all breastfeeding families. The [WABA Warm Chain of Support for Breastfeeding campaign](#) places the breastfeeding dyad at the core and follows the first 1000 days

timeline. It adopts a public health approach and strives to link different stakeholders by coordinating efforts across settings to provide a continuum of care, consistent messages and referral systems, leaving no one behind. A warm chain of support creates an enabling environment that empowers all women/parents to breastfeed optimally. Together, we can achieve a win-win situation for humanity and the planet.



We need to see the whole of society as responsible and accountable for low breastfeeding rates, as one of several indicators, demonstrating whether we are orientated to planet health as well as human health.

Dr. Nigel Rollins, 2020



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World Alliance for Breastfeeding Action (WABA) is a global network of individuals and organisations dedicated to the protection, promotion and support of breastfeeding worldwide based on the Innocenti Declarations, the Ten Links for Nurturing the Future and the WHO/UNICEF Global Strategy for Infant and Young Child Feeding. WABA is in consultative status with UNICEF and an NGO in Special Consultative Status with the Economic and Social Council of the United Nations (ECOSOC). WABA coordinates the annual World Breastfeeding Week campaign.

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