

# COUNSELLING TO IMPROVE MATERNAL NUTRITION

Considerations for programming  
with quality, equity and scale

A TECHNICAL BRIEF



# Acknowledgements

**This publication was prepared by the Nutrition and Child Development Section at the UNICEF Programme Group in New York.**

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**This report was funded by contributions from the Bill & Melinda Gates Foundation through the Regional Initiatives for Sustained Improvements in Nutrition and Growth (RISING) partnership.**

**Suggested citation:** United Nations Children's Fund. *UNICEF Technical Brief. Counselling to Improve Maternal Nutrition. Considerations for programming with quality, equity and scale.* New York: UNICEF, 2021.

January 2022

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# COUNSELLING TO IMPROVE MATERNAL NUTRITION

## Considerations for programming with quality, equity and scale

### Summary

Women's nutritional status is important for their health and well-being and for the birthweight, growth and development of their infants. Nutritious diets, essential nutrition services and optimal nutrition practices are essential to prevent all forms of malnutrition before and during pregnancy and while breastfeeding.

Maternal nutrition counselling helps a woman and her family members make decisions and take action to improve nutrition. This includes decisions and actions on the types, diversity and amounts of food a woman should eat to meet her dietary requirements, the amount of physical activity she needs, and her consumption of dietary supplements.

Many women do not receive quality nutrition counselling, even though this service is a recommended component of health care. This programme brief aims to provide UNICEF country offices and their partners with guidance on how to improve the coverage, quality and equity of maternal nutrition counselling in low- and middle-income countries. It covers adolescent girls and women aged 15–49 years during three periods: preconception (for those planning a pregnancy); pregnancy; and postnatal (at least six months after delivery).

This programme brief describes a set of approaches to strengthen maternal nutrition counselling. This begins with an understanding of the context, including the barriers and enablers to maternal nutrition counselling services and the adoption of optimal nutrition practices.

It then outlines: approaches to improve the enabling environment for maternal nutrition counselling; key considerations for the design of counselling services; strategies for strengthening service delivery platforms and building the capacity of health workers and community health workers; complementary actions to improve women's access to dietary supplements and nutritious and affordable diets; strategies for delivering maternal nutrition counselling services in humanitarian contexts; and approaches to monitoring maternal nutrition counselling services.

The evidence base on how to improve the coverage, quality and equity of maternal nutrition counselling is still developing, so this programme guidance should be considered a living document. Countries should invest in research to further build the evidence of how to strengthen the coverage, quality and equity of counselling in different settings.

## 1. Introduction

Women's nutritional status is important for their health and well-being, especially before and during pregnancy and while breastfeeding. Women are more likely to experience a healthy pregnancy and are less likely to experience life-threatening complications if they are free from all forms of malnutrition when they become pregnant, and if they have nutritious diets, access essential nutrition services and adopt optimal dietary practices during pregnancy. In addition, infants of well-nourished mothers are more likely to be born with an adequate birthweight and to grow and develop to their potential in early childhood. Following delivery, good nutritional care is essential to meet women's nutrient requirements – which are highest among breastfeeding mothers – and to restore their body nutrient stores.

In recognition of the crucial role of maternal nutrition, the World Health Assembly set targets to reduce the prevalence of anaemia in women of reproductive age by 50 per cent and to reduce the prevalence of low birthweight by 30 per cent by 2025. Because maternal nutrition directly impacts the nutritional status of children, progress towards these targets can contribute to global efforts to achieve the Sustainable Development Goal targets to reduce child stunting, wasting and overweight.

Progress is currently too slow to meet the World Health Assembly targets on maternal anaemia and low birthweight.<sup>1</sup> In 2019, anaemia affected an estimated 571 million women of reproductive age (30 per cent),<sup>2</sup> while the prevalence of low birthweight remained at 15 per cent between 2012 and 2015.<sup>3</sup> Maternal underweight (thinness) also continues to be a public health problem, affecting 170 million women (9 per cent) in 2016.<sup>2</sup> Poor quality diets, insufficient access to essential nutritious services and suboptimal practices continue to hold back progress.

At the same time, overweight and obesity are rising among women in many settings, including in low- and middle-income countries, and affect about 610 million women of reproductive age (33 per cent) according to the most recent 2016 estimates.<sup>2</sup> The rise in overweight and obesity reflects broader changes in dietary patterns, as communities leave behind more healthy, traditional diets in favour of modern diets that are frequently high in energy, sugar, salt and fat, low in essential micronutrients and often highly processed.<sup>4</sup>

## Maternal nutrition counselling

The achievement of all global targets on maternal and child nutrition are unlikely to be met unless greater attention is given to improving maternal nutrition.

The UNICEF Nutrition Strategy 2020–2030 describes UNICEF's programmatic priorities to prevent all forms of malnutrition during pregnancy and breastfeeding (underweight, micronutrient deficiencies and overweight) and prevent low birthweight in newborns.<sup>5</sup> UNICEF works with partners to improve women's access to nutritious diets and essential nutrition services and promote the uptake of positive nutrition practices.

One of UNICEF's programmatic priorities is to improve the coverage and quality of nutrition counselling before and during pregnancy and while breastfeeding. Counselling is a form of interpersonal communication that helps to influence individuals to adopt and maintain positive practices. The word 'counselling' is often used interchangeably with 'information' and 'education'. However, counselling should do more than inform and educate. Counselling for maternal nutrition is an interactive process between a service provider and a woman and her family during which information is exchanged and support is provided so that the woman and her family can make decisions and take action to improve her nutrition.

Maternal nutrition counselling is included in the World Health Organization (WHO) *Preconception Care Policy Brief* (2013),<sup>6</sup> *Recommendations on Antenatal Care for a Positive Pregnancy* (2016 and 2020)<sup>7-8</sup> and *Recommendations on the Postnatal Care of the Mother and Newborn* (2013).<sup>9</sup> These recommendations cover counselling on dietary intake, physical activity, adherence with micronutrient and energy-protein supplements and restriction of caffeine intake (*see Box 1*). In addition, the WHO guidelines on iron supplementation and iron and folic acid supplementation in non-pregnant adolescent girls and women refer to the need for behaviour change communication to improve the acceptability of and adherence to supplementation.<sup>10-11</sup>

While maternal nutrition counselling is a recommended component of health care, many women do not receive quality nutrition counselling services. The barriers to maternal nutrition counselling vary according to the context, but there are several common issues in low- and middle-income countries.<sup>7,12-14</sup> First, maternal nutrition counselling is often not adequately integrated into primary health care services due to a lack of policy

commitment or financial resources. Second, women's access to health services is suboptimal, particularly in settings that are underserved for primary health care services and where community-based delivery platforms are absent or weak. Third, health workers and community health workers have insufficient knowledge, competencies, motivation or time to provide quality counselling on maternal nutrition, often due to gaps in their numbers, distribution, training and supervision. Fourth, counselling approaches, materials and messages are not adapted to the local setting – including the economic context, social norms and sociocultural practices that influence maternal nutrition practices.

Fifth, programmes often lack clear counselling targets and are not monitored to measure progress and hold managers, health workers and community health workers to account.

The evidence base on how to address these barriers and improve the coverage and quality of maternal nutrition counselling is developing, but gaps remain.<sup>14</sup> Nevertheless, it is essential to act now to strengthen maternal nutrition counselling, whilst continuing to invest in research to further build the evidence.

### Box 1: WHO recommendations on preconception, antenatal and postnatal care related to maternal nutrition counselling

#### Policy brief. Preconception care: maximizing the gains for maternal and child health<sup>6</sup>

A preconception care package for women should include **information, education and counselling on nutrition, promotion of exercise, iron and folic acid supplementation, and energy- and nutrient-dense food supplementation.**

#### Recommendations on antenatal care for a positive pregnancy<sup>7-8</sup>

**Counselling about healthy eating and keeping physically active** is recommended for pregnant women to stay healthy and to prevent excessive weight gain during pregnancy in all contexts. A healthy diet during pregnancy contains adequate energy, protein, vitamins and minerals, obtained through the consumption of a variety of locally available nutritious foods, including green and orange vegetables, meat, fish, beans, nuts, pasteurized dairy products, fruit and fortified foods. Counselling should be women-centred and delivered in a non-judgmental manner.

In undernourished populations,\* **nutrition education on increasing daily energy and protein intake** is recommended to reduce the risk of low birthweight newborns, and **balanced energy and protein dietary supplementation** is recommended to reduce the risk of stillbirths and small-for-gestational-age newborns.

**Daily oral iron and folic acid supplementation** with 30–60 mg of elemental iron and 400 µg of folic acid is recommended in all contexts to prevent maternal anaemia, puerperal sepsis, low birthweight and preterm birth.

**Intermittent oral iron and folic acid supplementation** with 120 mg of elemental iron and 2800 µg of folic acid once weekly is recommended to improve maternal and neonatal outcomes if daily iron is not acceptable due to side-effects, and in populations with an anaemia prevalence among pregnant women of <20 per cent.

**Antenatal multiple micronutrient supplements that include iron and folic acid** are recommended in the context of rigorous research and during emergencies where access to nutritious foods is in jeopardy.

**Daily calcium supplementation** (1.5–2.0 g oral elemental calcium) is recommended to reduce the risk of pre-eclampsia in populations with low dietary calcium intake.

**Vitamin A supplementation** is only recommended to prevent night blindness in areas where vitamin A deficiency is a severe public health problem.

**Lowering daily caffeine intake** is recommended for pregnant women with high daily caffeine intake (>300 mg per day) to reduce the risk of pregnancy loss and low birthweight newborns.

#### Recommendations on the postnatal care of the mother and newborn<sup>9</sup>

All women should be **counselled on nutrition** as part of postnatal care.

**Iron and folic acid supplementation** should be provided for at least three months postpartum.

\* Undernourished populations are usually defined by the prevalence of underweight (body mass index <18.5 kg/m<sup>2</sup>). An underweight prevalence of 20 to 39 per cent in non-pregnant women is considered high, and an underweight prevalence of ≥40 per cent is considered very high.

## Objective and scope of the brief

The objective of this brief is to provide UNICEF country offices and their partners with guidance on how to improve the coverage, quality and equity of maternal nutrition counselling in low- and middle-income countries. It draws on global recommendations and guidelines, published research, and the programme experiences of low- and middle-income countries on maternal nutrition counselling. It also applies evidence from other areas of nutrition counselling, including counselling on infant and young child feeding.

The scope of the brief covers adolescent girls and women aged 15-49 years (hereafter referred to as 'women' for brevity) during three periods: preconception (women planning a pregnancy), pregnancy and postnatal (at least six months after delivery). The focus is primarily on maternal nutrition counselling provided by health workers and community health workers\* in health facilities and in the community. A list of key resource documents is provided in Annex 1.

## 2. Approaches to strengthen maternal nutrition counselling

### 2.1 Understanding the context

Efforts to design or strengthen maternal nutrition counselling services should be grounded in a context-specific understanding of the status of maternal malnutrition, and the barriers and enablers to nutritious diets, maternal nutrition counselling services and adoption of positive nutrition practices. This may involve the primary collection of data and/or secondary analysis of existing data.

#### **Key considerations:**

- + **Assess the nutritional status and causes of malnutrition in women and the population groups at greater risk.** The nutritional characteristics of populations are changing, so data on the nutritional status of women should be collected every five years to ensure that counselling interventions remain relevant. For example, mean body mass index is rising among women in many countries, and counselling to increase energy and protein intake during pregnancy may no longer be justified in some settings.

- + **Compile and review evidence on maternal nutrition practices, including barriers, enablers and key influencers.** Literature reviews and formative research should be conducted to identify the priority maternal nutrition practices to change and the context-specific barriers and enablers to positive practices – such as household access to nutritious and affordable foods, social and gender norms and sociocultural practices. This information can strengthen the design and effectiveness of counselling interventions.
- + **Identify barriers to the development and implementation of policies on maternal nutrition counselling services.** Bottleneck analyses can help identify the barriers that prevent quality nutrition counselling services from reaching women at scale and with equity. These analyses should examine barriers that affect leadership, adoption of policies, financing, supplies, the counselling workforce, information systems, service delivery packages and platforms, and the availability and quality of services, including at community level.

### 2.2. Enabling environment

Actions to improve the coverage and quality of maternal nutrition counselling are more likely to be effective and sustained if the enabling environment (policies, plans, budgets and coordination structures) are supportive.

#### **Key considerations**

- + **Ensure maternal nutrition counselling is identified as a key component of primary health care services, and that policies, strategies and implementation guidance are aligned with relevant global recommendations.** Maternal nutrition counselling should be fully integrated into maternal, newborn and child health and nutrition services, and included in the benefit package for universal health coverage schemes, where they exist.
- + **Formulate targets, plans and budgets to expand the coverage, quality and equity of maternal nutrition counselling services.** These targets, plans and budgets should be based on a realistic assessment of the financial and human resources that are available and/or can be mobilized to support scale-up.

\* In this document, community health workers are defined as health and/or nutrition workers who have received some training but do not possess a formal professional certificate. It encompasses a wide range of health and nutrition workers, paid and unpaid, including village health or nutrition workers, lay workers, peer supporters, community volunteers and extension workers. Community health workers are often from and live in the communities they serve.

**+ Establish and maintain coordination mechanisms to maximize opportunities to build synergies and harmonize services for women.** Where possible, utilize existing coordination mechanisms to support the integration of maternal nutrition counselling with other relevant health and nutrition services within the health sector (e.g., between the departments responsible for preconception, antenatal, postnatal and child health within ministries of health). In addition, coordination mechanisms are needed to support coordination between sectors (e.g., between health and social protection); between national and subnational levels; and between stakeholders (e.g., government, development partners, civil society and the private sector).

### 2.3. Counselling design

This section describes key considerations for strengthening the design of maternal nutrition counselling services, including target audiences, counselling content and materials, and the modes, timing and frequency of counselling.

#### **Target audiences**

The primary target audiences for maternal nutrition counselling are women planning to conceive, pregnant women and postpartum women (between birth and at least six months after delivery). While all women should have access to counselling services, it is important for countries to identify nutritionally-at-risk women who may require more intensive support, as well as the contexts in which the woman's family members or other community members should also be targeted for counselling.

Reaching women during the preconception period is a challenge because about 40 per cent of pregnancies are unplanned<sup>15</sup> and non-pregnant women are less likely to be in regular contact with health services. In most contexts, it is not practical to counsel all non-pregnant women of reproductive age; moreover, those who are not planning a pregnancy may be less receptive to maternal nutrition counselling. A rational approach is to target preconception counselling to women who are planning a pregnancy and those at a high likelihood of becoming pregnant for the first time, such as premarital or newlywed couples. Other women can be reached through mass communication efforts.

#### **Key considerations:**

- + Prioritize women at higher risk of poor nutrition and new or inexperienced mothers for more intensive counselling support.** Women at higher risk are those with any form of malnutrition (e.g., short stature, underweight, overweight, obesity and anaemia), all pregnant or breastfeeding adolescent girls (<20 years of age) and women who are pregnant or breastfeeding for the first time. Other at-risk groups include women with disabilities, chronic diseases (e.g., HIV and tuberculosis), mental health problems, and those affected by the harmful use of drugs or alcohol. Depending on the context, these women may require more frequent individual counselling support, including home visits, and/or referral for appropriate care.
- + Target family members in contexts where they influence decisions about women's diets, use of essential nutrition services and nutrition practices.** This includes contexts where women do not have full autonomy to take these decisions and/or need the encouragement and support of other family members such as their husbands and partners, mothers, mothers-in-law and household heads.

#### **Counselling content and materials**

Women need information and counselling on dietary intake, physical activity, dietary supplementation (micronutrient and food supplements) and hygiene practices (see Table 1). While not a focus of this brief, women also need advice and counselling on appropriate breastfeeding practices during the third trimester of pregnancy and the postnatal period.

#### **Key considerations:**

- + Ensure that the content of counselling materials reflects locally prevalent forms of malnutrition, the causes of malnutrition, and the barriers and enablers to positive maternal nutrition practices.** Countries should review and update the content of counselling messages and materials to ensure they focus on locally prevalent forms of malnutrition and align with recommended dietary supplementation interventions. If the forms and causes of malnutrition vary substantially within a country, these messages and materials may need to be adapted to the local context. Barriers and enablers include social norms, sociocultural beliefs and practices, access to nutritious and affordable foods, physical activity and adherence to dietary supplementation. It may be necessary to develop specific messages and counselling materials to target other family members in contexts where they influence women's access to health services and nutritious diets.

**+ Include maternal nutrition in counselling materials or packages that target women before and during pregnancy and while breastfeeding.** These may include counselling materials or packages on reproductive health, preconception care, antenatal care, postnatal care, newborn and child health, infant and young child feeding, and mental health and psychosocial support.

**+ At the individual level, tailor counselling content to a woman’s nutritional status and her circumstances.** Counselling should anticipate and address important challenges that may affect a woman’s capacity to adopt positive practices, including her age, experience, and sociocultural and economic context.

**+ Focus on small doable actions that a woman and her family members can take:** Health workers and community health workers should not try to change too many practices at once. Instead, they should focus on small doable actions that a woman can take, as well as concrete actions that other individuals (e.g., husbands/partners, grandmothers, etc.) can take to support the woman’s actions.

**Table 1:** Key content for the nutritional counselling of women and adolescent girls during preconception, pregnancy and postnatal care <sup>6-7,9,16</sup>

Content	Preconception	Pregnancy	Postnatal
<b>Dietary intake</b>			
Healthy eating and physical activity to stay healthy, attain or maintain a healthy weight and/or prevent excessive weight gain	*	*	*
Increase daily energy and protein intake to increase body mass index and/or reduce the risk of low birthweight infants in undernourished populations	*	*	*
Diverse diet, including locally available and affordable nutritious foods and fortified foods (iodized salt and fortified foods)	*	*	*
Avoid drinking tea or coffee with meals and limit the amount of coffee during pregnancy in contexts where tea or coffee are commonly consumed	*	*	*
Adequate rest and reducing heavy workloads		*	*
<b>Dietary supplementation</b>			
Continued and consistent use of iron-containing supplements, including how to take supplements and manage side-effects	*	*	*
Continued and consistent use of calcium supplements in countries with low calcium intake, including how to take supplements and manage side-effects		*	
Continued and consistent use of balanced energy-protein supplements in undernourished populations	*	*	*
<b>Breastfeeding</b>			
Breastfeeding (initiation immediately after delivery, providing colostrum, not giving prelacteal feeds, exclusive breastfeeding, continued breastfeeding, managing breastfeeding problems)		*	*
<b>Hygiene</b>			
Handwashing practices at critical times and food hygiene practices (safe handling, preparation and storage of food)	*	*	*



## Counselling modes

There are two main modes of counselling – individual and group counselling – and each has advantages and disadvantages (*see Box 2*). In recent years, remote approaches to counselling have gained popularity, including the use of telephone helplines and digital media (e.g., websites, social media, text messages).

### Key considerations:

- + **Provide both individual and group counselling modalities.** Individual counselling is better suited to an individual's counselling needs but is time-intensive for health providers. In resource-constrained settings, individual counselling may need to be prioritized to women at nutritional risk (e.g., women with underweight or obesity); women who are pregnant for the first time; women attending their first preconception, antenatal or postnatal care contact; and other women deemed in need by the health worker or community health worker. Group counselling can be provided to those at lower risk of nutrition challenges.
- + **Use remote counselling modalities to complement rather than replace face-to-face counselling.** Remote approaches, such as telephone helplines and digital media, can help increase coverage in

contexts where face-to-face counselling capacity or access is limited or absent. However, these modes should complement rather than replace face-to-face counselling because they are not available to all women and more evidence is needed on their effectiveness in different contexts.

## Timing, frequency and duration of counselling

The timeliness, frequency and duration of counselling are all important considerations, however, there are a lack of standards and evidence to guide countries on what is appropriate in different settings. Timeliness encompasses both when counselling begins (e.g., gestational age of the first counselling session during pregnancy) and the relevance of the content according to the woman's physiological status (e.g., pre-pregnant versus pregnant) or trimester of pregnancy. Counselling should begin at least three months before a woman is planning a pregnancy and as early as possible in pregnancy; this is because the earlier counselling begins, the longer the period to adopt positive practices and for these practices to translate into a meaningful improvement in maternal nutritional status. Better counselling outcomes are also expected with higher frequency and longer duration counselling contacts. However, decisions on the frequency and

### Box 2: Individual and group counselling

## Individual counselling

Individual counselling allows a health worker or community health worker to focus on the specific problems and needs of a woman and is generally considered the most effective form of counselling. It is usually delivered face-to-face at a health facility, in the community or at the client's home. Individual counselling can be time-consuming and, in some settings, it is challenging to provide the physical space and privacy needed.

In recent years, remote approaches have gained popularity, including the use of telephone helplines, mobile phones and internet telephony. These approaches can help in contexts where face-to-face counselling capacity or access may be limited or absent. However, they are not available and accessible to all women and more research is needed to understand their effectiveness in different contexts. WHO recommends that individual face-to-face counselling on breastfeeding may be complemented but not replaced by telephone counselling and/or other technologies,<sup>17</sup> and it is reasonable to apply this to maternal nutrition counselling, unless and until new evidence suggests otherwise.

## Group counselling

Group counselling is facilitated by a health worker, a community health worker or lay person (e.g., mother support group member) at the facility or community level. Group counselling is most effective when group members have similar issues, problems and sociocultural backgrounds. It may increase efficiency because it allows interaction with multiple clients simultaneously.<sup>18</sup> The participants can benefit from sharing their experiences with one another and building socially supportive relationships.<sup>19</sup> However, group counselling may not cater to the specific needs of individuals (including women at nutritional risk), or provide an environment in which all adolescent girls and women feel comfortable sharing their problems – especially in settings where there are perceived differences between group members, such as age, ethnicity, caste or sociocultural background.

duration of counselling are ultimately a trade-off between what is desirable and what is feasible, given the delivery platforms available and the numbers and workload of health providers.

**Key considerations:**

- + **Commence maternal nutrition counselling as soon as a woman plans a pregnancy.** Women should be encouraged to seek preconception care at least three months before trying to conceive so that problems and needs are identified early and there is sufficient time to improve nutritional status before becoming pregnant. Because it can be challenging to reach women during this short window before pregnancy, premarital or newlywed couples should be targeted for counselling in contexts where it is common for women to have their first pregnancy within one or two years of marriage.
- + **Provide maternal nutrition counselling at all antenatal care contacts, beginning in the first trimester.** WHO recommends a minimum of eight antenatal care contacts\* during pregnancy: one in the first trimester (12 weeks), two in the second trimester (20 and 26 weeks) and five in the third trimester (30, 34, 36, 38 and 40 weeks). Antenatal care contacts up to the start of the third trimester should be used to influence dietary intake, physical activity, adherence to supplementation regimens and hygiene to maximize the time for these practices to take effect. Contacts towards the end of pregnancy should be prioritized for breastfeeding counselling, in preparation for the birth. Counselling contacts should be used to follow-up on agreed actions during earlier contacts, as well as to discuss new challenges and actions.
- + **Continue maternal nutrition counselling at all contacts with health workers and community health workers for at least six months following the birth.** WHO recommends a minimum of four postnatal care contacts in the first six weeks postpartum (within 24 hours, 48–72 hours, days 7–13 and 6 weeks after birth). Beyond this period, maternal nutrition counselling can be linked with nutrition and health services for infants and young children (e.g., immunization contacts, monthly growth monitoring and promotion, sick child visits and other community-based nutrition platforms). Each contact with a health worker or community health worker should be used to counsel on healthy dietary intake and adherence with dietary supplements to replenish nutrient stores following pregnancy, meet nutrient requirements during breastfeeding, and attain and maintain a healthy weight.

## + 2.4. Service delivery platforms and expanding reach

The health system has delivery platforms for pregnant and postnatal women, including antenatal care contacts for pregnant women, and postnatal, child immunization and child growth monitoring services for women during the postnatal period (see Box 3). However, these platforms are often not used optimally to support the delivery of maternal nutrition counselling. Service delivery platforms are not as well established for women during the preconception period; however, women planning to become pregnant should be encouraged to seek preconception care. In addition, women who are likely to become pregnant for the first time should be identified, where possible. For example, in some contexts, premarital or newlywed couples can be identified through faith-based organizations.<sup>16,21</sup> Women who are not planning a pregnancy can be targeted through other communication channels, as described below.

**Key considerations:**

- + **Ensure that counselling services make use of existing health delivery platforms at facility and community level that are nationwide in coverage or have the potential to reach scale.** Community-based services tend to offer better opportunities to reach women and close equity gaps in coverage because they are located closer to households and are usually delivered by community-based health workers who are often known and trusted members of the community. Where needed, advocate for the expansion of the community health workforce, and for appropriate remuneration, incentives and support. Identify how to integrate maternal nutrition counselling into existing workflows for preconception, antenatal and postnatal care at facility and community levels.
- + **Develop strategies to identify, sensitize and mobilize women from hard-to-reach, marginalized and vulnerable families.** These women may not be willing or able to participate regularly in preconception, antenatal or postnatal care services due to a lack of family support, work, remote location or low demand. To encourage the utilization of services by these women, strategies such as outreach services, flexible appointment systems, and engagement with family members and other key influencers in the community may be needed.

\* Countries are at various stages of transitioning from the prior recommendation of at least four antenatal care visits to the new recommendation of at least eight antenatal care contacts. The number of possible contacts for maternal nutrition counselling may therefore be less than eight in some countries. These contacts may be with health worker or community health worker at a healthy facility or in the community.

**+ Establish referral linkages for women to other health and nutrition services and to complementary services delivered by other systems.** Counselling services should be used to identify and refer women to health and nutrition services to address underlying conditions (e.g., underweight, disease and mental health problems). Referrals may also be made to other services needed to address barriers to the adoption of positive nutrition practices (e.g., social protection programmes for very low-income households).

**+ Use other communication channels and platforms to reinforce messages on positive maternal nutrition practices for all women and their families.**

The use of multiple communication channels and platforms increases opportunities to influence nutrition practices. Communication channels include mass media (radio, television, websites and social media); mobile text messaging; community mobilization and community media (e.g., local theatre); and information and education through social protection programmes, agricultural extension programmes and workplace programmes. Countries can also consider creating a ‘social movement’ that appeals to people’s positive emotions to improve women’s dietary intake before, during and after pregnancy.<sup>22</sup>

**Box 3:** Delivery platforms for counselling of women and adolescent girls before, during and after pregnancy

<b>Preconception</b>
<ul style="list-style-type: none"> <li>• Pre-pregnancy iron and/or folic acid supplementation programmes</li> <li>• Family planning contacts</li> <li>• Premarital or newlywed couples counselling</li> </ul>
<b>During pregnancy</b>
<ul style="list-style-type: none"> <li>• Antenatal care contacts</li> </ul>
<b>Postnatal</b>
<ul style="list-style-type: none"> <li>• Postnatal care contacts</li> <li>• Child immunization services</li> <li>• Child growth monitoring services</li> <li>• Sick child visits, including treatment of childhood illnesses and severe wasting</li> </ul>

## 2.5. Capacity to counsel women

Health workers and community health workers should be assigned the responsibility to counsel on maternal nutrition, given the necessary resources (knowledge, skills, competencies, job aids and time), and be motivated to do so. WHO recommends task shifting the promotion of nutrition practices to a range of health worker cadres,<sup>7</sup> according to the context and national health care system.<sup>17</sup> Many low- and middle-income countries have shortages of doctors, midwives and nurses, and rely on community health workers to increase access to primary

health care services, particularly at community level. These community health workers have been shown to successfully provide counselling on maternal nutrition, increase the coverage and consumption of micronutrient supplements, and encourage antenatal care attendance in a range of settings.<sup>14,23-25</sup> However, it is important to be realistic about the capacity of community health workers, especially volunteers. Community health workers should be integrated into the health workforce and work together with other health workers in a team approach, with clearly defined responsibilities, training and supervision for each cadre.

### Key considerations:

**+ Include responsibilities for the provision and supportive supervision of maternal nutrition counselling in the job descriptions of relevant health workers, community health workers and supervisors at all levels.** Where possible, shift responsibilities for counselling services to a lower level of health care (e.g., community health workers) to reduce the workload burden on health facility staff and to improve coverage.

**+ Develop and/or update competency frameworks, training curricula and job aids on maternal nutrition counselling for health workers and community health workers.** Education and training programmes should build the skills and competencies to counsel mothers effectively, as well as improve knowledge on maternal nutrition practices. The curricula and training packages should also address common social norms and sociocultural beliefs that community members (including health workers and community health workers) may hold regarding maternal dietary intake.

**+ Integrate maternal nutrition counselling into pre-service training and continuing education programmes for health workers and community health workers and/or provide training to those already in service.** Cascade training models for in-service training remain common in most countries – it is important to ensure quality training at all levels. It is also crucial to allow time during training to practice these skills and competencies, preferably in a community setting.

**+ Strengthen supportive supervision and mentoring to boost the knowledge and performance of health workers and community health workers on maternal nutrition counselling.** Supportive supervision should focus on improving performance and solving problems that health workers and community health workers may be experiencing. Supervisors should observe health workers and community health workers providing counselling to women, help them

to review and interpret data on service coverage, and jointly identify corrective actions.

## 2.6. Access to nutritious and affordable diets and dietary supplements

In low- and middle-income countries, many poor households struggle with poverty and household food insecurity. In these contexts, counselling on dietary practices and adherence to dietary supplements is unlikely to be effective if women struggle to afford nutritious foods or do not have access to free dietary supplements. These barriers need to be addressed to close equity gaps in the adoption of positive maternal nutrition practices.

### Key considerations:

- + **Provide micronutrient supplements and other dietary supplements at no cost.** In countries with universal health care coverage, these supplements should be included in the benefit package for women before and during pregnancy and while breastfeeding.
- + **Advocate for the expansion of social protection programmes among low-income families with women of reproductive age to alleviate the financial barriers to nutritious and diverse foods.** Social protection programmes can improve families' physical or financial access to nutritious diets by providing social transfers (food, cash and/or vouchers). Social transfers should be combined with nutrition education and counselling, either through the social protection programme or by health services, to increase the likelihood that transfers are used to improve women's access to nutritious diets.
- + **Coordinate and collaborate with other programmes that aim to increase household access to nutritious and diverse foods and promote women's empowerment.** For example, homestead food production, income generation, and savings and loan programmes can improve household food security and women's empowerment, provided they are gender-responsive and do not overwhelm women with additional responsibilities. Where nutrient-poor diets and micronutrient deficiencies are common, support for the mandatory fortification of staple foods is also important.

## 2.7. Maternal nutrition counselling in humanitarian contexts

In humanitarian contexts, adolescent girls and women are particularly vulnerable to undernutrition because access to nutritious and affordable foods, safe water, sanitary facilities, and functioning health, education and social protection services are often disrupted. The UNICEF Core Commitments for Children in Humanitarian Action include the *"prevention of undernutrition, micronutrient deficiencies and anaemia in pregnant women and breastfeeding mothers"*.<sup>25</sup> Pregnant women and breastfeeding mothers should have access to a package of interventions that includes nutrition counselling, weight gain monitoring, iron and folic acid supplementation or multiple micronutrient supplementation, and balanced energy-protein supplementation, according to the context.

### Key considerations:

- + **Include maternal nutrition counselling as a core nutrition intervention in all emergencies.** Countries should include maternal nutrition counselling in emergency preparedness plans and actions, develop capacities to manage and deliver maternal nutrition counselling services in emergencies, and ensure maternal nutrition counselling is prioritized from the onset of emergency response actions. Alternative approaches to providing counselling and advice can be considered where restrictions on movement interrupt routine services, such as telephone and online counselling and advice. Special attention should be given to pregnant adolescent girls and other nutritionally at-risk mothers.
- + **Coordinate and collaborate with other clusters and sectors to provide pregnant and breastfeeding women with services to improve their access to nutritious, safe and affordable diets.** Counselling and advice will be insufficient unless they are combined with interventions to increase women's physical and financial access to safe and nutritious food. Households with pregnant and breastfeeding women should be prioritized for social transfers (food, cash and/or vouchers), water, sanitation and hygiene interventions, mental health and psychosocial support and other supportive interventions.

## 2.8. Monitoring

Programme managers need data to assess the quality and coverage of maternal nutrition counselling services in order to take corrective action. While the monitoring of maternal nutrition counselling services has lagged behind other maternal health and nutrition interventions, there have been several important developments.

Global partners are examining how to integrate maternal nutrition services into global frameworks and standards for quality improvement of maternal and newborn care. A set of standardized indicators on maternal counselling for routine health information systems is currently under development and is expected to be finalized in 2022.\*

Health facility Service Provision Assessment surveys include indicators on whether a pregnant woman has discussed nutrition (the quantity or quality of food to eat) and iron supplements (their purpose, potential side-effects and how to take them) with a health worker. The questionnaires are available online;<sup>26</sup> however, the indicators are in the process of being identified and field tested.<sup>5</sup>

The Demographic and Health Survey (Phase-8) questionnaires<sup>27</sup> include questions to assess the coverage of antenatal counselling on dietary intake, breastfeeding and women's minimum dietary diversity (*see Box 4*). These indicators can be integrated into other facility or household surveys.

### Box 4: Demographic and Health Survey (Phase-8) indicators on maternal nutrition services

- Percentage of women who received counselling on which foods to eat during their most recent pregnancy in the last five years
- Percentage of women with the minimum dietary diversity

### Key considerations:

- + **Include maternal nutrition counselling in national standards for assessing, monitoring and improving the quality of maternal care.** Standards should explicitly define what is required to achieve high-quality counselling on maternal nutrition for women.
- + **Integrate indicators on the provision of maternal nutrition counselling into routine health information systems and periodic population surveys.** These data should be regularly reviewed and used to track progress and take corrective action.

## 3. Knowledge agenda on maternal nutrition counselling

The evidence on approaches to strengthen maternal nutrition counselling is currently limited. It is therefore essential that countries invest in research to better understand how to strengthen the coverage, quality and equity of counselling in different settings.

Each country should identify its evidence gaps and research priorities on maternal nutrition counselling; mobilize resources and partnerships to conduct research; disseminate new evidence both within the country and with international audiences; and utilize the evidence to strengthen the design and implementation of national policies and programmes on maternal nutrition counselling.

Research gaps include – but are not limited to – the following:

- Modes, timing, frequency and duration of maternal nutrition counselling that best support specific population groups, including women at nutritional risk.
- Approaches to prioritize individual counselling to women in greatest need, and to reach lower-risk women with information and education through other communication channels.
- Effects, feasibility and acceptability of counselling on healthy eating and exercise interventions to prevent excessive weight gain, including in contexts where maternal underweight remains a public health concern.
- Effectiveness of innovative approaches to counsel women, including the use of digital media
- Approaches to build and sustain the knowledge, skills and competencies of health workers and community health workers to counsel women.

\* Contact the UNICEF Headquarters Nutrition and Child Development Programme Group for updates on the process.

## Annex 1: Resource documents

### Maternal nutrition

Preconception care: Maximizing gains for maternal and child health. Policy brief. Geneva: World Health Organization; 2013. <https://apps.who.int/iris/handle/10665/340533>

Meeting to develop a global consensus on preconception care to reduce maternal and childhood mortality and morbidity. Geneva: World Health Organization; 2013. <https://apps.who.int/iris/handle/10665/78067>

WHO recommendations on antenatal care for positive pregnancy experience. Geneva: World Health Organization, 2016. <https://apps.who.int/iris/handle/10665/250796>

WHO recommendations on antenatal care for positive pregnancy experience. Nutritional interventions update: Multiple micronutrient supplements during pregnancy. Geneva: World Health Organization, 2020. <https://apps.who.int/iris/handle/10665/333561>

Recommendations on postnatal care for the mother and newborn. Geneva: World Health Organization; 2013. <https://apps.who.int/iris/handle/10665/97603>

Intermittent iron and folic acid supplementation in menstruating women. Guideline. Geneva: World Health Organization; 2011. <https://apps.who.int/iris/handle/10665/44649>

Daily iron supplementation in adult women and adolescent girls. Guideline. Geneva: World Health Organization; 2016. <https://apps.who.int/iris/handle/10665/204761>

Recommendations on community mobilization through facilitated participatory learning and action cycles with women's groups for maternal and newborn health. Geneva: World Health Organization; 2014. <https://apps.who.int/iris/handle/10665/127939>

Healthy Diet Fact Sheet. Geneva: World Health Organization; April 2020. <https://www.who.int/news-room/fact-sheets/detail/healthy-diet>

How to scale up maternal nutrition: A successful operational approach based on WHO's antenatal care guidelines and Alive & Thrive's Implementation Framework. Alive & Thrive; 2017. <https://www.aliveandthrive.org/wp-content/uploads/2018/07/How-to-scale-up-maternal-nutrition-brief.pdf>

Maternal depression: The potential role of nutrition in prevention and treatment. Technical brief. Washington, DC: Alive & Thrive; 2020. [https://www.aliveandthrive.org/sites/default/files/attachments/Maternal-Depression-Technical-Brief\\_v12.pdf](https://www.aliveandthrive.org/sites/default/files/attachments/Maternal-Depression-Technical-Brief_v12.pdf)

### Infant and young child feeding counselling

Counselling of women to improve breastfeeding practices. Guideline. Geneva: World Health Organization; 2018. <https://apps.who.int/iris/handle/10665/280133>

Community Infant and Young Child Feeding Counselling Package. Facilitator's Guide. New York: UNICEF, 2012.

Community Infant and Young Child Feeding Counselling Package. Planner's Guide. New York: UNICEF, 2013.

Infant and young child feeding counselling: an integrated course: director's guide, 2nd edition. Geneva: World Health Organization; 2021. <https://apps.who.int/iris/handle/10665/343572>.

Small doable actions in Ethiopia. Alive & Thrive; 2015. [https://www.aliveandthrive.org/sites/default/files/attachments/Small-doable-actions\\_Ethiopia1.pdf](https://www.aliveandthrive.org/sites/default/files/attachments/Small-doable-actions_Ethiopia1.pdf)

### Humanitarian action

Core commitments for children in humanitarian action. New York: United Nations Children's Fund; 2020. <https://www.unicef.org/emergencies/core-commitments-children>

Maternal nutrition: Programming in emergencies. Short online course. <https://agora.unicef.org/course/info.php?id=28650>

Operational guidance: Breastfeeding counselling in emergencies. Emergency Nutrition Network, Infant Feeding in Emergencies Core Group; 2021. [https://www.enonline.net/attachments/4024/Breastfeeding-In-Emergencies\\_.pdf](https://www.enonline.net/attachments/4024/Breastfeeding-In-Emergencies_.pdf)

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January 2022

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Published by:  
UNICEF  
Nutrition and Child Development Section, Programme Group  
3 United Nations Plaza  
New York, NY 10017  
USA

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