SUMMARY REPORT

Formative research study on nutrition of young women in Sidoarjo and Malang districts, East Java
Malnutrition is a significant problem in Indonesia, especially amongst women of reproductive age (WRA); studies show that more than a third of WRA are anemic and that their diet is deficient in many nutrients, including iron and calcium. During pregnancy, these nutritional problems are passed on to their fetuses, creating a cycle of nutritional problems.

The Indonesian government has been trying to deal with these maternal nutritional challenges for more than 40 years. While neighbouring countries have seen their rates of stunting decline, Indonesia’s rate of stunting has still remained higher than the regional average. As a result, the Government of Indonesia has a keen interest in prioritising nutrition improvement programs.

The Global Alliance for Improved Nutrition (GAIN) commissioned the London School of Hygiene and Tropical Medicine (LSHTM), in collaboration with research partner PT Kadence International, to conduct a formative research study in two areas in East Java Province—two sub-districts of Malang and two sub-districts in Sidoarjo.

Malang is East Java’s second largest district. Its population as of the 2010 census was 820,243 (Statistic Bureau of Malang, 2010), and the two selected sub-districts were populated mainly by rural farmers. Sidoarjo borders Surabaya city, Indonesia’s second largest metropolis, and includes many of its sprawling, densely populated suburbs. In 2012, Sidoarjo’s population was 2,053,467, most of whom were industrial workers in the city’s many factories (Statistic Bureau of Sidoarjo, 2012).

**Study objective**
The research aims to provide an in-depth, contextualised understanding of the nutrition and dietary practices of WRA to inform the development of interventions to reduce malnutrition in the province. LSHTM investigated:

- Behaviour settings within which food is consumed, such as mealtimes
- Local beliefs and attitudes related to food during pregnancy and post-partum
- The role of society’s influencers and institutions on the nutritional and dietary behaviour of WRA
- The availability of products targeted at the nutritional needs of WRA
- The influence of financial constraints that commonly affect dietary choices
- How the self-perception and identity of WRA affect their nutritional behaviour

**The approach**
Researchers used the ‘Evo-Eco’ approach to emphasise behaviour as a dynamic interaction between bodies and environments. The approach divides the factors that influence behaviour into three main categories: body, brain, and environment. The relevance and impact of these factors constantly change, so understanding the behaviours that they influence requires recognising the human socio-cultural environment. The approach focuses on the need to move away from giving health messages only when delivering public health campaigns.

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2 East Java was chosen because of the large number of malnourished pregnant women found there.
3 Data were collected from 42 in-depth interviews, 2 group discussions, 30 observations, and 2 videos.
Data analysis of the lives of WRA revealed several issues related to eating: snacking, the size of their babies, and money.

**Snacks vs. meals**

The majority of young adult women do not eat regular meals; instead, they have snacks (jajanan) to fill their stomach. Snacks are perceived as more exciting, as they are something not frequently prepared at home. Interviewed women believe that snacks provide different tastes, and can satisfy the need for more delicious food than the typical rice-based meals.

On the other hand, home-cooked meals are perceived as undesirable, because they ‘make me feel bloated’, ‘don’t taste as good as snacks’, ‘are forced on me’, and ‘are the same every day’.

As a result, many WRA end up eating a lot of snacks, drinking a lot of water and sugary drinks, and eating little ‘real food’. Anemia, dizziness, fainting, and a lack of energy are frequent amongst women. Unfortunately, anemia has been normalised and few people see it as a problem: young girls faint regularly.

This heavy reliance on snacks seems to be associated with other issues as well, in particular concerns about body image. Most young women considered that an ideal body would be associated with a body mass index (BMI) less than 18.5, which is thin by international standards.

**Not big on big**

One of the biggest problems young pregnant women face is their fear that a bigger baby results in more pain during normal delivery or that a C-section may be required if the baby is large (which is indeed a possibility). In addition, most families want to avoid C-sections because they are very expensive. Further, there is a perception that a woman will not feel like a ‘true woman’ if she does not deliver naturally. These fears are reinforced by bidans and some doctors who have a vested interest in making sure that a woman delivers at their clinic instead of a hospital.

Many bidans and nutritionists also do not seem to know that a child cannot compensate for an underweight birth through later improved feeding practices. Many young pregnant women also believe that small babies can ‘catch up’ later in life.

The conflation of these factors tends to result in young pregnant women being uncertain and fearful of having a baby that is too big. Therefore, they restrict their intake of food while pregnant, with the potential consequence of an underweight baby at birth.

**The cost of food**

People save a large portion of their income for many reasons: life events, marriage and pregnancy ceremonies, and helping their extended families so that income variability is reduced. Unfortunately, spending money on food, especially healthy food, is way down on the list of priorities. Food is considered ephemeral: you eat it, and it is gone. If someone is fortunate enough to have some extra money, it is often spent on something that lasts, like the house or a child’s education, or on products that show a woman’s wealth: make-up, hijabs, or clothes.

Women reported getting a food allowance of roughly IDR 10,000 per day from their husband or father; IDR 9,000 is typically spent on the basics: rice, tempe, and sambal. A small amount of vegetables might be purchased; fish and chicken are usually too expensive.
The food purchased with this money typically lasts until lunch; if there is no food left after lunch, the family simply does not eat later. Most women do not have the luxury of splurging on expensive, but healthier, foods; only the rich eat such foods in any quantity. Unfortunately, a family often spends more on cigarettes than on food.

There is also a major value placed on frugality and self-sacrifice for the extended family and saving for the future. Even amongst the very poor, a major portion of income is saved for future obligations.

**Conclusions**

From these data, researchers identified several cultural norms that lead to poor nutrition in the target populations:

- The body image issue, which leads young women to skip meals and instead eat only snacks
- The need to pay back other family members before helping one’s own family, which means that very little money is spent on food, so dietary quality is poor
- The fear of large babies at birth, which stops women from eating sufficiently during pregnancy
- The primary sources of protein in the Indonesian diet are plant based (soya), which is generally not as bio-available as animal-based sources. On the other hand, in Indonesia, it is easy to satisfy a meat taste need with a meatball made predominantly of flour or to satisfy a fruit craving with flavoured fruit sweets. But these foods do not provide the nutrition that young women need.

These factors lead to poor dietary intake in young women, including during pregnancy, which, in turn, contributes to poor fetal growth and, hence, the greater likelihood of low birth weight babies. This cycle of poor nutrition is repeated generation after generation.

These circumstances are exacerbated by the fact that the diet of WRA is low in animal protein; they eat poor-quality foods that taste good but that are nutritionally inadequate. The primary sources of protein in the Indonesian diet are plant based (soya), which is generally not as bio-available as animal-based sources. On the other hand, in Indonesia, it is easy to satisfy a meat taste need with a meatball made predominantly of flour or to satisfy a fruit craving with flavoured fruit sweets. But these foods do not provide the nutrition that young women need.