

IMPROVING CHILDHOOD NUTRITION BY CHANGING INFANT FEEDING PRACTICES IN SIDOARJO, EAST JAVA:

A GAIN FORMATIVE RESEARCH AND DESIGN CASE STUDY



ABOUT GAIN

The Global Alliance for Improved Nutrition (GAIN) is an international organization that was launched at the UN in 2002 to tackle the human suffering caused by malnutrition.

GAIN is driven by the vision of a world without malnutrition. We act as a catalyst — building alliances between governments, business and civil society — to find and deliver solutions to the complex problem of malnutrition. Today our programs are on track to reach over a billion people with improved nutrition by 2015.

CREDITS

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EXECUTIVE SUMMARY

Sidoarjo in East Java is a region of Indonesia with particularly poor child nutrition, distinguished by their largely rice-based diet and predominantly rural population.

The Global Alliance for Improved Nutrition, in partnership with behavior change researchers at the London School of Hygiene and Tropical Medicine, carried out formative research to explore infant and young child feeding behavior in the region, and to understand its underlying motivations. These insights were used to develop an innovative program focused on changing behavior linked to breastfeeding, complementary feeding and snacking.

We used a combination of established and innovative research methodologies together with a creative process and worked closely with the Indonesian Health Department and a local advertising agency to ensure that the insights from the formative research were translated into an innovative, effective television advertising campaign.

This case study describes the methodology and the outcomes of the formative research, as well as the creative process of translating the formative research into television commercials and community activation. Although social, cultural and behavioral circumstances are unique to different countries, regions and localities, the conclusions we have drawn may contain some universal truth, and we hope will inform behavior change programs in other high burden contexts.



WHY BEHAVIOUR CHANGE?

Tackling malnutrition in Indonesia – and undoubtedly in other contexts – is not possible without addressing **behavior change**. Programs focusing primarily on factors like access to food or education and knowledge are simply not enough.

Those who influence infant feeding practices in the region need a **better understanding of nutritional needs of mother and child**, including when and how a child should be **breast-fed**, the nutritional needs of a breast-feeding woman, weaning best-practice and how to motivate or trigger **effective behavior among families**. This might involve building a mother's confidence, targeting grandmothers and other peers to **influence social norms**, tackling the dilemma between convenience and a quiet baby, or teaching patience and what constitutes healthy-eating for a young child.

Two of the primary objectives of this program were to **increase exclusive breastfeeding** by decreasing formula feeding between birth and 6 months, and to lengthen the transition from breastfeeding to family foods with more diverse and nutritious complementary feeding. Program outcomes include a **mass-media campaign** through television commercials; **community activation** through fun interaction with women groups; and **interpersonal communication** through health care facilities and outreach services.

Key insights:

A) Knowledge about nutrition: important but insufficient

We found that generally mothers in Sidoarjo are aware of nutrition, but there is room for improvement. For example, all mothers know that “breast is best”, but many think that adding formula is the perfect accompaniment to breast milk and some do not realize that using formula milk interferes with the production of their breast milk. Likewise, parents do not realize what their babies require for their development, and will often feed them bulky carbohydrate-rich mashed versions of adult food (such as rice or bananas) from a very early age, rather than giving babies a diversity of energy-dense and nutrient-rich complementary foods.

Our research suggests that even where knowledge about nutrition is relatively good, this is insufficient to ensure healthy feeding practices. All of those we interviewed knew that breastfeeding is best for babies but rates of exclusive breastfeeding were still low. Everyone knows but no one believes that exclusive breastfeeding is enough for their child.

B) Confidence is crucial

Lack of confidence seems a far bigger problem than lack of knowledge. Many mothers do not feel confident in their ability to breastfeed, or the quality or quantity of their breast milk. Mothers told us they are worried that their own milk is not good enough for the healthy growth and development of their babies – particularly if they were unable to afford to eat as the midwife advised; “if she was not eating enough foods that are good for her, how could she feed her child properly?”.

Healthcare centres and midwives may inadvertently worsen this confidence crisis. Although professionals provide mothers with guidance on how to feed, the outcomes are sometimes counterproductive. While midwives promote breastfeeding, they also mention infant formula as an alternative in case the mother experiences difficulties with breastfeeding. This merely exacerbates the doubts of a new mother about her body’s ability to nourish her baby. Professionals thus unconsciously support the heavy-handed marketing by formula companies, which lead women to introduce formula at a very early age. We found that healthcare workers provide limited support or guidance on infant feeding and care to parents after birth, and they often do not accurately record the growing baby’s height or weight, nor do they discuss these with parents.

C) Belief that baby knows best

Our research indicated that this lack of confidence also leads to child-led feeding behaviour. Parents often interpret crying of children as a sign of hunger or dislike of the food offered. To avoid this, parents seek to satisfy every need immediately; consequently the child is to a large degree in control over what it consumes. Often it is a bottle of formula milk or deep-fried or sugary snacks that are being used as pacifiers. To make matters worse, these are given just before meals when children start feeling hungry, interfering with their intake of a proper meal at mealtime. Feeding is a means to keep the baby quiet and happy, and not only for providing the right nutrition for growth and development.

D) Peer pressure – the role of family, friends and neighbours

Child feeding is affected by more than just the behaviour of mother and child. It extends to the family, neighbours, friends and the community at large. Mothers prefer calm and quiet babies so they can go about their everyday chores, and avoid negative judgment from her environment. When a baby is not

growing or behaving in a way acceptable to the community – i.e. thin, restless – family members and neighbours are likely to provide recommendations on how to fix the problem, whether mothers seek their advice or not. Authority figures such as grandparents, neighbors, midwives, or religious leaders play an important role in child feeding.

Even though exclusive breastfeeding is deemed right for the baby, in reality parents try to pacify a crying child by all means to avoid judgment about their quality as a mother or father. Influencing child feeding behaviour is therefore unlikely to be effective unless it addresses social norms and the influence of key authority figures on mothers and care-givers.



INTRODUCTION

The problem of malnutrition

In total around 3.5 billion people – half the people on the planet today – are malnourished in some way. Currently 805 million people are hungry¹ and 2 billion lack the essential vitamins and minerals they need to be healthy and lead an active life.² The problem exerts a massive toll on the world's poorest children, killing a staggering 3.5 million children before they reach their fifth birthday and leaving 162 million more stunted.³

The damage lasts a lifetime. Childhood malnutrition traps entire generations in poverty and lives of unfulfilled potential. Achievements in education are reduced, and countries may lose two to three percent of their Gross Domestic Product (GDP) as a result of iron, iodine, and zinc deficiencies.⁴

Targeting nutrition from the start of a woman's pregnancy until her child's second birthday – the first 1,000 days – is critical. Providing the right nutrition during childhood requires that pregnant mothers are well-nourished, that they breastfeed exclusively for the first 6 months of their baby's life, and that from 6 to 24 months babies breastfeeding continues alongside a variety of nutritious, high-quality complementary foods.

GAIN supports major international initiatives in the fight against maternal, infant and young child malnutrition. We work to improve the nutritional quality of food alongside changing behavior interventions, to improve infant feeding practices, with a particular focus on breastfeeding, and maternal eating habits.

We were also founding partners of the 1,000 Days Partnership - an advocacy hub that promotes action to improve maternal and young child nutrition. 5 6

These initiatives – and a series of high-level events over 2013-2014 – shone a spotlight on the importance of malnutrition. An unprecedented upsurge in support and investment in nutrition was pledged by global actors – government, business, scientists, the United Nations (UN) and civil society. But we need to ensure this support is utilized effectively. Nutrition interventions must be based on a sound understanding of what is causing childhood malnutrition and how to combat it. Designing programs and projects that have sustainable impact at scale needs to start from these core considerations.

¹ FAO, IFAD, WFP. The State of Food Insecurity in the World, 2014

² IFPRI, Global Hunger Index, 2014

³ WHO Fact Sheet No.342 Infant and Young Child Feeding, Updated Feb 2014

⁴ <http://www.who.int/mediacentre/factsheets/fs342/en/>

⁵ Horton, Alderman, Rivera. Copenhagen Consensus Challenge Paper: Hunger and Malnutrition, 2008

⁶ <http://www.thousanddays.org/>

⁶ www.scalingupnutrition.org/

Malnutrition and feeding behavior

The immediate cause of malnutrition is inadequate intake and absorption of nutrients. This is influenced by a range of underlying factors, such as access to the right foods, education levels and sanitation. Many of these causes are relatively well understood – with evidence-based solutions which address them, including targeted food fortification programs for example. But these causes cannot account for all types of malnutrition. Where the problem affects even middle-class, urban sectors of countries which experiencing rapid economic growth, clearly the cause is not rooted in poverty or poor access to food. Other factors are to blame and these are often not as well understood.

Child feeding behavior is frequently being addressed in many debates about malnutrition in international development – both as a cause and a potential solution to the problem. Breastfeeding promotion was ranked as one of the most cost-effective interventions by the Copenhagen Consensus in both 2008 and 2012. Yet changing child feeding behaviour is one of the most difficult interventions to implement. This is due to the fact that food, diets and behaviour are deeply cultural; how we eat, what we eat and when we eat are all determined by practices, ideas and behavior's instilled since birth. Infant feeding practices are not just based on rational decisions but rooted in existing cultural norms, emotional connections with food and nutrition, and subconscious motives.



THE EVO-ECO APPROACH TO UNDERSTANDING BEHAVIOURAL MOTIVATION

Changing behaviour is extremely difficult. Experts continue to struggle to find effective interventions, for example to encourage people to drink less alcohol, eat less fat and sugar, smoke less or be more physically active.

Understanding the motivations underlying behaviour is critical. The London School of Hygiene and Tropical Medicine (LSHTM) researchers involved in this study devised a wholly new approach to behaviour-change that is rooted in evolutionary biology and ecological psychology, called 'Evo-Eco'. The foundation of this approach is that our brains evolved adaptive behavioural responses to our environmental conditions.

There are fifteen basic motives for all human behaviour, each driven by different parts of our brains: fear, disgust, hunger, comfort, lust, create and curiosity (reptile brain); affiliate, nurture, attract, love, hoard, play (mammal brain); status (primate brain) and justice (human brain). To change behaviour, one needs to identify which motive is the strongest driver for the target behaviour. Satisfaction of short-term motives is at least as important and sometimes more important than long-term benefits.

Understanding the interplay between our environments (which challenges us), our brains (which responds to that challenge), and our bodies (which produces behaviour through input from our brains), is key to devising new methods of changing behaviour.

Compared to traditional formative research, this approach relies heavily on lengthy observation of participants, which in this study was conducted by video. This means that participants' true behaviour was captured in conjunction with their reported actions.

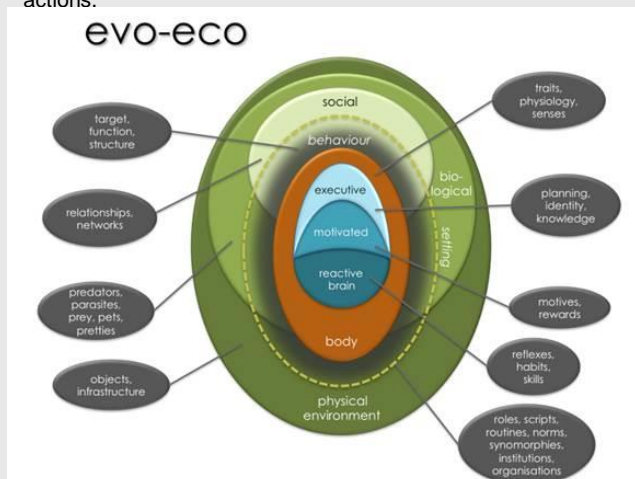


Figure 1 Behaviour Change: The Evo-Eco Approach 9

On GAIN's behalf, The London School of Hygiene and Tropical Medicine (LSHTM) designed the study protocols, and two LSHTM behaviour-change researchers led the data collection in Sidoarjo.

FEEDING HABITS IN SIDOARJP, INDONESIA

Our research looked into the feeding habits of children under the age of two years in the Indonesian district of Sidoarjo, a peri-urban area. The households chosen fell in the lower-middle socioeconomic classes of C and D (where E is the least wealthy), with monthly incomes ranging from Rp. 650,000 (US\$68.5) to Rp. 3,800,000 (US\$382), since they represent 60% of the Indonesian population and is the largest subsection of the population at risk of poor child nutrition. Crucially, this population also has some financial capability to improve their children's nutrition, provided they are given the right information and education, and access to suitable high quality nutritious foods. On the basis of a desk review of existing research four feeding habits were identified which lead to a grossly inadequate dietary intake of infants between 5 to 8 months of age.

Low rates of breastfeeding

Exclusive breastfeeding rates for children 0-5 months is 42% (Risksedas 2013); this has hardly changed over the past decade (40% in 2003). Despite the government's pro-breastfeeding agenda,⁷ which includes guidance for midwives on promoting breastfeeding, many mothers do not breastfeed their babies exclusively, feeding them formula instead. Many babies also often receive a taste of food to keep them quiet, mostly from members of the family other than the mothers.⁸ At 12 months breastfeeding begins to tail off and usually stops at a baby's eighteenth month.

Extensive use of formula milk

In the first 6 months, an estimated 22% of Indonesian mothers appear to feed their children exclusively with formula.⁹ Mixed feeding is also common with frequent formula use interrupting the mother's breast milk supply, so that she ends up relying even more on formula. 60 percent of children are given a prelacteal feed, that is, something other than breast milk during the first three days of life.¹⁰ Mothers continue to give

⁷ The Indonesian government is taking malnutrition seriously at a policy and legislative level. In 2010, it enacted a law stating that all babies must be breastfed in the first six months unless there are compelling medical reasons not to do so, following the WHO's recommendation that babies should be exclusively breast-fed for the first six months. Reducing stunting and underweight have been goals of the Indonesian National Development Plan 2010-2014. Yet enforcement of these laws and policies – including translation into ante-natal guidance – need to be strengthened.

⁸ Source: unpublished reanalysis of the Risikesmas data 2010. (secondary data analysis Risikesdas 2010)

¹⁰ IDHS 2012

formula milk to the baby until its twenty-fourth month and regular children's milk beyond this time.



Complementary foods

Complementary feeding is often introduced at too young an age, is very rice-heavy and often too liquid (filling the baby's stomach with water). Also, it does not have the required nutrient-density (especially lacking energy from good fats, and micronutrients). Some infants are given rice porridge or scraped banana by the third month. By the fifth month they receive soft foods. The majority of the mothers also gave their babies water to drink after feedings.

Many mothers feed their children instant porridge for a couple of months as a means to transition to more solid foods when their child reached the age of 6-8 months or 9 months. Around the first birthday almost all informants begin feeding their children the family diet (mostly fried rice and fish, softened to a mush at first. Many informants said that their child had a low appetite for family meals. At this time, biscuits, jelly, fruits and fried snacks are available. Only 41% of children 6 - 23 months are fed according to 3 main IYCF principles.

Unhealthy snacking

Compounding the problem of complementary foods is the introduction of unhealthy snacks – such as biscuits – which are given to children as young as 5 months old. By 12 to 24 months, snacks such as jelly and fried foods are available to children on demand. Snacks are being used as pacifiers and often given just before the meal time, thus interfering with proper meal intake.

WHAT INFLUENCES FEEDING HABITS IN INDONESIA?

Identifying feeding habits is crucial to understand the immediate causes of childhood nutrition in Indonesia. To understand how to change these habits, it was crucial that the research explored the underlying factors which inform these practices.

Below are the four key insights identified by the research:

Parents have a poor understanding of nutrition

Overall, participants in the research were strongly committed to being good parents and feeding their babies well. Many mothers know that they should ensure their children's food has dietary diversity (i.e. including the benefits of fruit and high vitamin foods such as chicken liver etc.) and expressed disdain towards snacks as “being full of chemicals”.

However, the research highlighted that nutrition knowledge and understanding are often two different things:

- Few parents understood what constitutes a healthy diet for a child under two years old, with many not understanding which foods contained the nutrients children need. Fruit jelly was considered to be as healthy as fruit for example.
- Even when parents knew a diverse diet was important, they lacked an understanding about quantity and the frequency in which diverse foods should be offered to their children. They also accept without question the nutritional claims made by manufacturers of formula.
- Parents do not pay attention to the timing of snacking, and allow their children to consume snacks close to meal-time. Parents lacked understanding that this may decrease their appetite for more nutritious foods at meal time, and in turn may accelerate their hunger feeling before the next meal.

Parents' lack of understanding is evident not only in what to feed a child and when, but the connection between what a baby eats and their health. For instance mothers are aware through watching TV commercials that their babies need calcium, protein, vitamin, iron, omega oils, but do not know what the nutritional benefits are. Height is not understood as a marker of nutrition or health, for example, since mothers believe that height is only hereditary. They also perceive a fat baby to be thriving, and for a

healthy baby to look “solid” and “compact”, but also active, alert and reactive.

Similarly, parents’ understanding of how disease is spread and the appreciation of the need for hygiene was fairly low. Those interviewed believed that diarrhoea might be due to spicy food rather than contamination, for instance, and do not see the link to hygiene practices.

Hand washing (with soap) is not common and children are not taught to wash hands before eating. Food preparation practices are not very hygienic. Parents are not diligent about cleaning or sterilising feeding bottles, and poor understanding of how infection spreads mean that mothers may follow instructions by sterilising a bottle but then let it come into direct contact with non-sterile surfaces.

Participants had little understanding of the need to keep kitchens clean. They are seen as “dirty” places, are located close to the bathroom, have unfinished floors and are often messy and cluttered.



Health professionals have limited skills, tools and time to provide nutrition guidance

Our research showed that mothers regularly consulted midwives and other health professionals. However, women rarely receive enough support and guidance on feeding their babies from health professionals on matters related to maternal and young child nutrition beyond growth monitoring and provision of complementary food for malnourished children.

Interviews with health professionals revealed that they are limited in their ability to influence mothers’ feeding behaviours, since communication tools (such as explanatory materials) are scarce and counselling opportunities, as well as time are limited. For instance, it is common to have only 2.5 hours for handling 70 mothers and babies, meaning that each mother and

UNDUE INFLUENCE OF FORMULA MILK MANUFACTURERS

Formula milk producers describe their products as economical, nutritious, convenient, and tasty. They claim that their production and marketing practices, including labelling and packaging and not targeting infants under six-months of age, are within the legal framework established by the Indonesian Government.

However, there is anecdotal evidence in the region of unscrupulous practices such as formula companies obtaining hospitals’ patient data. Participants in our research recalled receiving calls after delivery in a maternity clinic, from formula milk companies asking about the well-being of her baby by name, whether her baby was getting enough food, and whether the mother intends to return to work after the 3 months of official maternity leave (and hence might need formula). Participants received birthday wishes from formula companies for their child, even up to age 7 years, which came with promotional messages for children’s milk formulations.

child received on average just two minutes with a health professional.

Although almost every mother had a book to record details of their baby’s health, and had their child weighed at least every two months at the local centre and the growth chart filled in, they did not receive adequate feedback on their child’s weight and did not understand the charts. Although some cases of growth faltering were referred to the community health centre, they were mostly ignored.

One midwife even believed she need not explain anything to the mother, since the key messages were explained in the health book. However, in reality few mothers we interviewed had read the messages.

Parents lack confidence

Even where parental knowledge and understanding is adequate, a lack of confidence can hinder correct feeding practices.

Every mother in our study agreed that “breast is best” and held breastfeeding in high esteem. Equally, all the mothers we interviewed tried to breastfeed their baby, and those who could not successfully manage, were disappointed. International guidelines and Indonesian law on breastfeeding state that babies should be breastfed exclusively until at least 6 months of age – but the mothers we spoke to were not confident or did not believe their bodies were capable of producing sufficient milk for their baby. Mothers were concerned that:

- It takes (too) long for breast milk to start flowing after delivery, and she thinks the baby is hungry when it is crying
- Her breast milk looks thinner than cow's milk, therefore it must be of poorer quality and lesser quantity
- They cannot see the amount of breast milk the child drinks, and therefore cannot be certain that it is sufficient to fill the baby's stomach
- She has a poor diet herself, because she cannot follow the dietary advice of the midwife, therefore her breast milk is likely of low quality
- She may be too old (or too young) and therefore breast milk may be inadequate

These concerns are compounded by the fact that mothers do not see any downside to formula feeding apart from the price. Bottle feeding is convenient for her: the mother can see how much the baby drinks, others can feed the child when she is away, the child can hold the bottle itself at some point in time, it calms down the baby when he or she is crying, it shows others that the mother is really doing the best she can for her child - buying expensive formula for his or her development. Breastfeeding plus formula feeding takes away all her doubts and surely must be perfect. This perception is supported and strengthened by a well-known slogan of more than fifty-years old; 4S5S (4 Sehat 5 Sempurna) meaning 'Four is Healthy' referring to the four food groups, but 'Five is Perfect', displaying milk as the fifth food in the middle. Mothers do not realize that formula is substituting rather than supplementing breast feeding.

Moreover, since formula milk can be expensive, the ability to afford it is strongly linked to social status, and mothers often feel embarrassed by not giving it to their babies.

“You cannot afford not to give formula to your child – others will think you are really too poor.”



The first feed as soon as the baby is born is often formula milk, for various reasons: colostrum is considered as 'dirty' and traditional views are that this should not be given to the baby, some mothers are concerned their baby is hungry when it takes a couple of days until breast milk production starts up; and when women have babies by caesarean section, they are not reunited with their baby for several days and the baby is started on formula.¹¹

Well-intended advice may have unintended consequences

Often, the mother's lack of confidence in their breast milk can be traced back to their dealings with the health workers. All midwives and nutritionists give well-intended advice to mothers to eat well during the lactation period, however for mothers who are unable to follow the advice, it exacerbates the mother's lack of confidence in the quality of her breast milk.

Anecdotal evidence suggests that some midwives promote and sell pregnancy milks or vitamins to expectant mothers. Most mothers cannot afford to purchase these items, giving them the feeling that they've not been able to do the best, resulting in insufficient breast milk quality or quantity. Some midwives also provide free formula samples and bottles to mothers at their practices, advising mothers this is only in case breast milk is not enough, thus planting more seeds of doubt in the mother's mind about her capacity to breastfeed.

Breastfeeding is presented as the most natural behaviour on earth, and mothers are made to believe that it works automatically. This can lead to disappointment and concern if it turns out to be more difficult, slow in starting up and even painful.

“Everyone says that breastfeeding is the most natural thing, but why does it take me such a long time to get working? Maybe I'm not capable.”

Mothers also reported being discouraged from breastfeeding while on medication since they are told it may contaminate their breast milk; though true for some drugs, there is insufficient information about which medications do and which ones do not actually affect breast milk.

¹¹ Figure 2 outlines some of the key reasons for formula use after the babies are back home.



Child-led Feeding

The lack of parents' confidence about nutrition combined with certain social and cultural attitudes, leads amongst others to a feeding pattern that is largely child-led.

Fulfilling a child's wishes is a high priority for Indonesian parents. A primary focus for parents is nurturing their baby, but this is focused on ensuring they are happy rather than on the nutritional needs of the child. Any foods which make the child happy are therefore considered a token of nurture.

As a result, children are frequently given snacks such as biscuits, deep-fried snacks, crisps or krupuk. These are appealing because they are often sold in individual sizes, which mean food is not wasted, and mothers don't need to be engaged in feeding their child as soon as the child can easily reach and feed itself. They also appeal to children since snacks tend to be marketed in visually appealing packaging, with a variety of flavours and textures and are sized to fit in a child's hand for easy consumption.

Parents defer to their children's gestures, which are believed to provide visual cues for feeding. For example, if a baby reaches out to grab food and put it in its mouth, then the mother is likely to interpret the cue as hunger or wanting solid food, when instead it may simply be the baby's natural exploration of its surroundings. Often, a mother will then feed the baby, especially if the gesture is accompanied by other cues such as restlessness or difficulty to sleep.

Lastly, parents tend to give children snacks, to comfort, distract and pacify the child if it is restless or won't sleep. Generally, the mothers interviewed wanted their babies to be calm and quiet so they could go about their everyday chores and would not disturb family, friends and neighbours. Mothers are conscious of their social environment, the potential for criticism and rumours if her child is crying, and wish to be

recognised as a good mother by their peers and extended family.

Role of family and friends

The feeding practices and beliefs which allow child-led feeding are further influenced by family and friends. Children's primary care givers are their mothers, but child-rearing is often communal, as paying for childcare is rare and people may live in extended families (unless they are migrants). Parents rarely have the sole responsibility for what their children consume.

Grandmothers, aunts, neighbours, or older children in the family often feed babies. This means that mothers are not always aware of exactly what, or how often, their infants are eating. Few infants are exclusively breastfed, because family members often give them a taste of food to keep them quiet.

In addition, social hierarchy means that parents tend to follow the advice of older friends and family in terms of how to manage their children's nutrition. Such advice is given whether it is solicited or not. When a child is not growing well or is not behaving in an acceptable way to the community (e.g. is too thin or seems restless), family members and neighbours are likely to intervene. The influence this can have is especially evident in the introduction of complementary food, for instance, and mothers will use food to pacify restless children on the advice of family members even if they themselves know breastfeeding would be better. In previous generations, mashed banana and rice porridge was often given to children at an early age. Since older family members think it worked well for their babies they recommend it to younger parents. Parents follow the advice of older family members or neighbours, and their advice on when to transition to solid foods often overrides national recommendations based on international guidance.

Mothers are in a hurry to get children to adapt to the family diet, which is seen as an important achievement. As such, there is a strong social pressure to transition babies to softened adult foods, particularly rice, to enable them to re-establish routine and order in their lives. The subtle – but very – important differentiation between the recommendation to introduce family foods (in appropriate quantities and frequencies adapted to the infant's needs) and the introduction of the family diet (with foods in child portions, but adult proportions - leading to bulky, rice-rich meals) is not made by health workers, nor by mothers.

APPLICATION OF FORMATIVE RESEARCH INSIGHTS IN CREATIVE DESIGN



The formative research and the insights have resulted in a creative brief for the development of a campaign idea, three TV commercials and a community activation program.

Through dialogue with key nutrition stakeholders (academics, NGOs) and in a subsequent discussion with health authorities at central and provincial level, three main behaviours were selected to be addressed in the campaign:

- ❑ Improving breastfeeding rates by discouraging introduction and use of infant formula
- ❑ Increasing the dietary diversity ('colour') of the family meal plate by reducing the proportion of rice ('white')
- ❑ Reducing (unhealthy) snacking between meals

Although these key insights are drawn from one region in East-Java, Indonesia – and feeding habits and practices are informed by local customs, beliefs and culture – similar insights have been reported elsewhere and may apply in other contexts.

The importance of a woman's social environment, for example, is applicable in many cultural settings. The key authority figures may differ from one context to another, but their influential role can be used to establish new social norms. The TV commercials and the community intervention include the same common elements, to guarantee recognition, repetition and resonance. The overarching campaign idea or story is built around a habit everybody participates in, both in Indonesia and beyond: chit-chatting or gossip. The logo says 'Rumpi Sehat', which means 'Healthy Gossip', followed by the slogan: 'Got it wrong? Get it right!' The lead characters in each of the TV commercials, who also feature on the posters and other materials are: (1) the 'Gossip Lady', a silly but lovable character who likes to comment on the

behaviours of other mothers (2) key authority figures, such as the grandmother, and the midwife, and (3) the good mother, who is the target of the gossip lady, but who actually portrays all the good behaviours that need to be communicated.

A similar narrative 'arc' is built into each story board for the Gossip Lady: she starts by commenting on the behaviours of other mothers and is then corrected by a key authority figure who sanctions the correct practice. She then observes the Good Mother's correct behaviour and has a revelation moment when she realizes that she has previously been doing the wrong thing and learns the right thing to do, which she in the end spreads to others, engaging in 'Healthy Gossip'.

A number of important behavior change principles were consistently applied during the creative process of developing the TV commercials, and where appropriate are also being applied at community and interpersonal communication level.

The first principle is to 'keep it real', using real-life dialogues, portraying daily-life situations and realistic actions, while avoiding a lecturing tone or public health jargon – no talking to the camera and minimal use of voice-overs.

Secondly we made sure that both the incorrect and the desired behaviours are shown in action, and that the correct behaviour gets rewarded by approval of the key authority figure or a smiling baby. Visual demonstration is stronger than speech.

The third principle is to confirm a social norm, which we do by making the target behaviour appear common to all in the population, except to one who is gossiping all along.

The fourth and last principle is to ensure stickiness of the TVC and messages using recognizable funny gestures or sounds that grab the attention because they are funny or a bit cheeky – this includes the exclamation of the lead character when her mistake is revealed but also the pushing away of the bad behaviour by the key authority figure.



PROGRAM NEXT STEPS

- Results of the initial mass media and community activations pilot will be available in the coming months, and will be used to prepare for a scaling-up of this program.
- Throughout the process GAIN brought together a diverse group of experts, including academics, field researchers, government representatives and creative agents.
- The process was inspiring, creative, thought-provoking and challenging at times. Most importantly, we believe the principles of public health nutrition and behaviour change theory have been reaffirmed throughout.



ANNEX 1: STUDY PROTOCOLS AND RESEARCH METHODS

Study site and participant selection

A qualitative research study was designed in the district of Sidoarjo, a peri-urban area located close to the city of Surabaya, the capital of East Java province. East Java already ranks badly in terms of child nutrition compared to other Indonesian provinces, but Sidoarjo's nutritional profile is worse than the provincial statistics. In East Java, 34.8% of children are stunted, 17.4% suffer from wasting, and 3.7% are underweight. In Sidoarjo, however, 40.4% are stunted, 19.3% suffer from wasting, and 15.5% are underweight.

The households chosen fell in the lower-middle socioeconomic classes of C and D (where E is the least wealthy), with monthly incomes ranging from Rp. 650,000 (US\$68.5) to Rp. 3,800,000 (US\$382), since they represent 60% of the Indonesian population and is the largest subsection of the population at risk of poor child nutrition. Crucially, this population also has some financial capability to improve their children's nutrition, provided they are given the right information and education, and access to suitable high quality nutritious foods.

The study sample of 58 people, which comprised mostly mothers, but a few fathers and health workers as well, was considered representative of the population. The criteria for being included in the study were being parents of a child under 24 months old or being pregnant.

The researchers interviewed 58 participants in total: 38 mothers, 5 pregnant women; 7 fathers; 4 health professionals (two nutritionists and two midwives), and 4 milk industry experts.

The mothers were aged between 20 and 43 years old. Twenty-seven of them have more than one child and only ten of the women were not full-time housewives. Among the 7 fathers involved, only one is younger than 30 years old; the other fathers were between 35 and 48, and have more than one child indicating that they have prior experience with babies. All fathers are employed.

All participants are married and Muslim, representing the majority of East Java's demographics. Only one of the participants had an education beyond senior high school, the others had education levels of senior high school or lower.

All participants were selected from five villages,¹² within three Sidoarjo sub-districts,¹³ and belonged to the C and D socio-economic categories.¹⁴ They all fulfilled the following main criteria.

- ☐ Live in peri-urban households, and
- ☐ Have a child between 0 and 24 months old.

Research methods

On GAIN's behalf, The London School of Hygiene and Tropical Medicine (LSHTM) designed the study protocols, and two LSHTM behaviour-change researchers led the data collection in Sidoarjo. GAIN appointed PT Santulita Vikasa (SAVICA, a privately held Public Health Advisory and Communication Consultancy based in Jakarta, Indonesia), to undertake preparatory work, and conduct relevant fieldwork and data processing, with guidance from LSHTM and the support of the Indonesian ministry of health. LSHTM and Savica researchers worked in tandem for the duration of the fieldwork in May, 2013.

The households who took part were videoed extensively to record their feeding and living habits. In addition, the research team undertook focus groups, in-depth interviews, and researched case studies.

This formative research employed a number of qualitative research tools and techniques that are commonly used in ethnographic and consumer research, to answer the following four key questions:

- ☐ **What** are the current practices and when and where do they take place?
(to define what exactly needs to be changed);
- ☐ **Who** implements these practices and who influences their actions?
(to define the target audience and segments);
- ☐ **Why** do they do it?
(to identify motivators and barriers to change); and
- ☐ **How** do people communicate?
(to identify channels that can be used to reach target audience with health promotion messages).

¹² Tenggulunan, Larangan, Banjar Kemantren, Buduran, and Sekardangan.

¹³ Candi, Buduran, and Sidoarjo.

¹⁴ Monthly expenses range from Rp600,000 (\$62) to Rp1,750,000 (\$182) based on AC Nielsen 2003, as published in *Food Exporter's Guide to Indonesia* prepared for the Australian Government Department of Agriculture, Fisheries and Forestry by INSTATE Pty Ltd

The following methods and tools were used to gather data:

DATA COLLECTION METHODS

- ☐ 16 full-day videos
- ☐ 15 deep dives
- ☐ 8 case studies
- ☐ 3 focus groups
- ☐ 1 baby masterchef event
- ☐ 4 key informant interviews
- ☐ Neighbourhood, shop and facility visits



RESEARCH TOOLS

- ☐ Daily scripting
- ☐ Feeding history decision trees
- ☐ Food attribute ranking
- ☐ Motives elicitation
- ☐ Social change histories
- ☐ Food life histories
- ☐ Video analysis

Furthermore, throughout the course of the fieldwork, the research team regularly conducted “sequential recycling” sessions, during which they briefed one another on their individual findings and provided each other with insights and feedback. These sessions were instrumental in ensuring the implementation of timely and context-relevant fieldwork, because they helped the researchers to quickly undertake necessary changes and adjustments, and to better understand the key elements and issues involved.

Moreover, the researchers sought participants from households with varying numbers of family members to reflect the ranges typically found in peri-urban areas.

The securing of the necessary research permits from the Sidoarjo district health office (Dinas Kesehatan) preceded the recruitment process. Once these permits were obtained, the recruitment process began with the selection of potential participants, conducted in close cooperation with local health centres (puskesmas), and followed by the collection of participants' basic demographic information. Recruitment through the health system was necessary because data of children in the appropriate age-range is managed by kader Posyandu, supervised by the local bidans.

Participants were verbally informed of the study methods and were requested to sign informed consent forms. To minimise bias, participants were told that the study was only to learn about daily life in their respective communities. During this stage of the process, none of the target participants refused to be involved in this research. However, three mothers decided to withdraw from the research after signing

and submitting their informed consent forms due to the inconvenience of video shooting, one of the data collection methods. In addition, one mother was not available for an in-depth interview after a deep-dive video in her household was already shot.

The London School of Hygiene and Tropical Medicine Ethics Committee provided ethical clearance for this study.