Healthy families make healthy babies
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The family constitutes the biological, cultural and social unit where “life-styles” develop; the pregnant woman needs the support of all the family members to give her baby the best possible start in life.

Low birth weight is one of the most serious public health problems in the world today. It is estimated that more than 20 million low-birth-weight children are born every year, more than 90% of them in the developing countries. These low-birth-weight babies – defined as infants born weighing less than 2500 grams in the first few hours of life – account for a high proportion of infant mortality. If they survive, they suffer higher rates of childhood illnesses and more or less permanent and severe disabling conditions, such as mental retardation, behavioural disorders, cerebral palsy, and impairment of vision and deafness.

For a long time all low-birth-weight babies were regarded as premature. We now know that there are two clearly distinct groups. The first comprises babies born before completion of the full 37 weeks of pregnancy; these should be described as “pre-term” and are the true premature babies. A second group, who are “small full-term babies,” have completed the full gestation period but are born with low birth weight as a result of retarded intrauterine development, which may have several causes. This distinction is useful for designing control programmes and anticipating the child’s later development.

Low birth weight is nearly always the result of socioeconomic, life-style or behavioural factors on the part of the mother and family. These factors are well known and include insufficient antenatal care, inadequate maternal nutrition, pregnancy at extreme ages or insufficient birth spacing, smoking, too much physical activity during pregnancy, psychosocial and occupational stress, and so forth.

The scale of the problem and the nature of the causes, many of which are deep-seated and therefore difficult to redress, clearly indicate that the answer must lie in a shared
commitment on the part of governments, communities and individuals. There have been instances where improving the coverage and quality of antenatal care and introducing programmes of supplementary nutrition for pregnant women have produced encouraging results, with visible gains in birth weight. But these measures, reflecting determined political will, must in all cases be matched by commitment from the community and especially from the family, since this is where the most important decisions bearing on maternal and child health are taken.

**Birthplaces of life-styles**

The family is the biological and cultural unit comprising parents, children and relations, but also employees and other people living together under the same roof and sharing the same food. It is in this social unit that “life-styles” develop. This is where routine daily activities take place and habits are formed, such as the hours of waking and sleeping, dietary likes and dislikes, the number of meals taken each day, smoking, consumption of alcohol and other stimulants, physical exercise, use made of the health services and so on.

Some of the most important steps that can be taken by families to prevent low birth weight include:

1. **Good antenatal care.** Among the most important aspects are to monitor the growth of the fetus, to treat infections and other diseases, and to take practical measures to prevent low birth weight.

   Antenatal control must be initiated early and maintained if it is to be effective. This means the mother should seek health care before the third month of pregnancy and continue to attend the clinic at the dates set by the health service, according to the degree of risk involved in the pregnancy. Very often this check-up is not carried out adequately because of such problems as distance, the cost of transport, having no one to look after small children or being unable to get away from work or household chores. This is where other members of the family must lend their support; it has been found that the more family members who help the pregnant woman to seek antenatal care, the more consultations she will attend.

   This “family support network” can help in many different ways – for instance, discussions aimed at dispelling doubts or fears and taboos, advice on how to take care during pregnancy, or helping to pay for the cost of consultations.

2. **Better sharing of the family food so as to improve the expectant mother’s diet.**

   It is now recognized that the first cause of malnutrition is usually inadequate food intake, which is due to lack of purchasing power. Pregnant women have increased calorie and protein requirements; if these are not met, the baby’s intrauterine development can be retarded, resulting in low birth weight.

   Very often, for sociocultural and economic reasons, the woman’s share of the food available within the family is not enough to meet her increased needs. These families must understand how vital it is to increase the pregnant woman’s share.

3. **Ensure that pregnant women avoid heavy work, rest as much as possible and avoid stress.**

   Many studies on occupational risks in women have shown that pregnant women who do heavy work put on less weight and have a higher percentage of low-birth-weight babies than women with a similar diet who are not subjected to excessive work.
In the developing world, women in the countryside take an active part in agriculture and animal husbandry, as well as having to cope with household work, look after the children, prepare food and fetch water and fuel. In the cities, where women are increasingly employed in the service and industry sectors, women often have to do a full day’s work and then start the housework. To reduce the time and energy that pregnant women have to spend on work, the other members of the family, especially husbands and older children, must contribute to the housework even if this means breaking with patterns of behaviour that are very deep-rooted in most cultures.

4. Prevent adolescent pregnancy and ensure adequate birth spacing through family planning measures.

   Babies born to teenage mothers more often weigh less than the norm. Birth weight usually increases with birth rank but after a large number of births – more than five – the chances of low birth weight are increased. In these cases, low birth weight can be attributed to the mother’s poor nutritional status and to what has been called the “maternal exhaustion syndrome”. This means that the intervals between births are too short, and do not give the mother enough time to replace the nutrients used in the previous pregnancy.

   A study carried out in the USA compared birth weights of infants born within a year of a previous full-term pregnancy with the birth weights of babies born after more than a year. The babies born after longer intervals had a much higher weight on average. In this study there were no socio-economic differences between the two groups, so the various findings can be attributed to biological factors.

5. Give up smoking during pregnancy.

   Smoking involves deliberate and repeated exposure to a mixture of air and smoke containing more than 4000 different chemicals, at least 30 of which have been recognized as harmful to health. Epidemiological and laboratory studies, as well as direct observation, have provided definitive evidence that smoking increases the risk of fetal death and intrauterine damage, results in a higher percentage of low birth weight, and more often predisposes the mother to complications.

   Babies born to mothers who smoke weigh as much as 420 grams less, on average, than babies born to nonsmokers. This weight differential is also related to the number of cigarettes smoked. It has been calculated that each additional day of smoking results in the loss of 10-20 grams in the baby’s weight, usually because of retarded intrauterine development.

   Living with smokers is also harmful for pregnant women, especially in enclosed environments. The mothers then become passive smokers and can absorb up to one-sixth of the smoke exhaled by another member of the family. The risk of fetal or neonatal death increases in proportion to maternal and environmental exposure. So it is not only important that the expectant mother should give up smoking, but that the whole household should become smoke-free. All the family must cooperate, realizing that it is not just a matter of the very legitimate rights of nonsmokers but the paramount right of the fetus not to be a passive smoker, whose life is threatened. It is possible to reduce or stop smoking during pregnancy if a concerted effort is made by all members of the family, in the spirit of a fervent wish to protect the child.

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