damaged by malnutrition during pregnacy, as can the gonadal tissues of the male. During the "fundamental phases of genetic development, almost anything can happen to the cellular structures as a consequence of inadequate nutrition."26 We are thus faced with the very real possibility that the children of malnourished mothers will grow up to become not only poorly developed adults, both physically and mentally, but will also become the parents of children with the same problems.

- Adequate nutrition early in pregnancy and throughout pregnancy, therefore, is very important. If there are severe deficiencies of diet during the period of rapid growth of the brain of the fetus in the second trimester, it is doubtful that this growth can be made up later in the pregnancy. The "evidence is that the best possible nutrition during the last trimester will not wholly make up for faulty nutrition early in pregnancy."27 Some investigators believe that although a good physical recovery is possible, a good mental recovery is not, and that the effects of brain damage from malnutrition prior to birth are irreversible.28 As well as physical disabilities, these effects might include later behaviour disturbance, distractibility, short attention span, hyperactivity and learning disabilities.29 The danger is greatest where there is severe chronic malnutrition. 30 The nutritional status of the mother even before pregnancy occurs is important to the healthy development of the
- 17. The pregnant woman has special dietary requirements. These may vary according to her circumstances. The very young, the underweight, and those who are undergoing conditions of stress such as extreme anxiety, have greater than normal requirements.32 The teenage mother and her baby are especially in a position of risk and in need of nutrition counselling and a supplementary diet.
- 18. It may be thought that in a country as affluent as Canada there is little cause to concern ourselves about the effects of malnutrition. Unfortunately, that is not the case. A large number of pregnant women in Canada are at nutritional risk. 33 Malnutrition is in many cases related to poverty. But it may also occur among the wealthy who choose faulty eating habits. In particular, society's acceptance of the cult of slimness has led many affluent pregnant women to place their unborn children in the same position of nutritional risk as those among the poorest in the land. Many dietary fads reduce the opportunity for optimal development of the fetus. It has been shown that adequate consumption of protein during pregnancy is advisable. Some authors state that evidence "points to an improvement in pregnancy outcome with an increase in the consumption of animal protein which is invariably associated with lipids, vitamins and minerals in proportions more adapted to human requirements than normally found in typical diets more heavily based on vegetable products."34
- The fact that much prematurity is caused by poor nutrition during