six months. (3) Introduce other foods together with continuing, so-called "prolonged" breast-feeding (two to three years) from four to six months together with the most locally appropriate technological contraceptive which has no adverse effect on lactation (for example, especially excluding oestrogen preparations).

Breast milk production from six months to two or more years has been shown to supply a small but very important nutritional supplement.[14] Conversely, breast-feeding alone and unsupplemented into the second year of life has long been recognised as a problem in parts of India[15] and Bangladesh, leading to "late marasmus." From a more flexible viewpoint the appropriate age at which technological contraceptives are needed to reinforce the waning effects of breast-feeding varies with the community and the many details of local infant feeding practices, essentially with their influence on sucking stimulation and prolactin secretion. There is in fact a gradient from the !Kung to the partially breast-fed to the entirely bottle-fed.

In breast-feeding communities the usual length of lactation amenorrhoea in the particular society minus two months seems a reasonable rule-of-thumb for introducing technological contraceptives, allowing for the well recognised anovulation that can occur before menstruation. Indeed, it is our view that the bacteriologically and endocrinologically dangerous time for introducing foods other than human milk, and hence the need for technological contraceptives, may often be later than currently believed. Ultimately this hinges on a balance of risks and benefits.

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Sulpiride improves inadequate lactation

SIR,—On reading the research by Professor O Ylikorkala and others (24 July, p 249) I was surprised to find that tests with drugs are being considered useful in improving breast-milk yields, while the usual method used by mothers—that is increasing the number and frequency of nursings—was not mentioned.

The significant factor in the study—the number of nursings a day—was mentioned in the table. None of the babies in the test group was nursed more than seven times a day, and some as few as four times a day. The average was 5·3 ± 0·3. There are some babies who can maintain their mother's milk production at a level adequate for growth and contentment on nursings as infrequent as this, but they are rare and should not be considered the norm.

In countries where breast-feeding is unrestricted babies may nurse every hour day and night with little disturbance to the mother. In the less supportive culture of the West embarrassment, ignorance, and the habit of bottle-feeding combine to separate mother and baby and restrict the number of feeds given in the 24-hour period. Still many mothers find it quite possible and very restful and relaxing to nurse their babies upwards of eight times a day.

Mothers often find it helpful to discuss with a group of other mothers the practical problems involved in arranging sleeping quarters so that mother and baby can sleep close together, choosing clothes for discreet nursing away from home, and so on. The emotional support of a friendly peer group can also provide the key to successful lactation in a non-supportive culture. The self-help organisation for breast-feeding mothers, La Leche League (Box BM 3424, London WC1V 6XX), is particularly useful in this context.

This raises the question of why the medical community should be investigating the effects of drugs on lactation rather than the simpler but cheaper management techniques used by women. Doubtless the answer is partly technical, since measurement of breast-milk quantities in the intimacy of successful lactation is impossible. Partly no doubt it is financial since no-one stands to make a profit out of successful breast-feeding (although the benefits to the community in financial terms are evident.) The political aspect should not be ignored, however. Taking politics in its widest sense as relating to power and control, successful breast-feeding managed and supported by women places power in the hands of women. Dependence on drugs for the maintenance of lactation places power (and money) in the hands of corporations. It is worth thinking about.

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SIR,—The study by Dr O Ylikorkala and colleagues on the value of sulpiride to improve lactation performance by increasing prolactin secretion (24 July, p 249) is a valuable contribution to knowledge of substances which can enhance lactation (galactogogues). Throughout the ages methods to improve lactation have occupied much attention in many and widely diverse populations. An ancient Slavonic galactogogue was for the mother to tickle and catch a trout and to swallow it. Larvae of blow flies, cuttlefish soup, dried udder of goat, and even the husband suckling were remedies widely used in not so ancient China.[1] Perhaps the simplest galactogogue, however, is the most effective—the baby who suckles when and as often as it wants to.

The most frequent explanations mothers in Britain give for stopping breast-feeding early and introducing complementary foods are that they are not able to make enough milk (a truly remarkable admission, surely, at a time when our mothers enjoy better health during pregnancy than ever before) and their babies cry after a feed or wake early before the next feed. What many mothers, in company with all too many doctors and nurses, seem not to realise is that frequent suckling is in fact vital to allow the mother to continue to provide adequate amounts of milk. Studies in Zaire by Delvoye *et al* of lactating mothers between two and 22 months' postpartum have shown that basal prolactin concentrations correlate well with the frequency of suckling.[2] Suckling more than six times a day results in basal prolactin concentrations which are unchanged for about 12 months. When the number of breast-feedings fall to four to six there is a marked decline in basal prolactin concentrations. The mothers in the Finnish study suckled only an average of five times a day at the time of entry into the study, so is it surprising that breast-feeding performance was so precarious? It would therefore have been interesting had Ylikorkala included a third group—namely, babies who were simply put to the breast more often.

Failure of breast-feeding in Britain does not always lead simply to a change to bottle-feeding. Inadequate breast-feeding is also an important cause of failure to thrive.[3] In some of these babies breast-feeding takes place only three or four times a day. On some occasions when these babies are made to feed more often they begin to thrive, indicating improved lactation performance. Natural means of improving milk production need to be considered alongside artificial methods, particularly if the latter result in young babies receiving, in breast milk, drugs whose metabolic effects are not fully understood.

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Postmenopausal osteoporosis

SIR,—Your leading article on postmenopausal osteoporosis (28 August, p 585) highlights the pain and suffering in women that are the result of this process and emphasises the great cost of treatment. That prevention is possible by the administration of oestrogens is now accepted, but whether it will be easy to persuade fit postmenopausal women to take oestrogens and progestogens with the nuisance of monthly withdrawal bleeding remains to be seen. Perhaps those who have undergone hysterectomy would be more willing to take oestrogens, probably with progestogens, for 10-20 years, provided that the fear of breast cancer can be dispelled.

The main difficulty will be to reverse the adverse publicity regarding the risks of thromboembolism, believed to be associated with the ordinary combined oral contraceptive. It is very galling for the practising gynaecologist to have one of his most effective drugs rejected by his patient because of the fear of thrombosis and myocardial infarction; this is especially so when the older woman takes an oestrogen/progestogen preparation not greatly different in dosage for menopausal symptoms.

The dose of oestrogen that may help women depends, I believe, on their biological age. The younger woman requires a reasonable amount to suppress ovulation; her elder sister needs a little less; while the middle-aged woman might continue to take a perimeno-