

These estimates may be helpful when nuchal translucency measurement is used as a marker in Down syndrome screening to provide trisomy 18 interpretation as well.

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Preconceptional Use of Folic Acid Amongst Women of Advanced Maternal Age

With great interest we read the article by Brandenburg *et al.* (1999) in this journal in which they reported the preconceptional use of folic acid amongst women of advanced maternal age that underwent prenatal diagnosis. They found few women using folic acid at the right time and dose (25 per cent). They stated that the main reason for failure of appropriate use was an unplanned pregnancy. Therefore, they concluded that effective folic acid supplementation requires food fortification rather than information provided by healthcare workers.

Over four years (1994, 1995, 1996 and 1998) we also did surveys on preconceptional awareness and use of folic acid (de Jong-van den Berg *et al.*, 1998; de Walle *et al.*, 1998, 1999). These were not restricted to women of advanced maternal age, nor to one hospital. Our surveys included all pregnant women at their first or second antenatal visit. They had to fill out a questionnaire with items not only about awareness and use of folic acid but also about their demographic background, planning of pregnancy and education.

In our 1998 survey 63 per cent of all the respondents used folic acid and 36 per cent used it during the entire advised period. For 'advised period' we used the recommendations of the Dutch Inspectorate of Public Health in which the advised period is four weeks before till eight weeks after conception (Inspectorate of Public Health, 1993). It is unclear why Brandenburg *et al.* (1999) defined the advised period in their study as 6 weeks (or more) before the last menstrual period and 12 weeks (or more) after conception when they referred to the official advice in their introduction. Evidently, it is more difficult to meet this 20-weeks criterion of Brandenburg *et al.* (1999) than the official 12 weeks criterion. Using this criterion it can be expected that their numbers are lower than ours.

Another factor that can explain the lower figures of Brandenburg *et al.* (1999) is the use of folic acid in relation to parity. In our 1998 survey the use of folic acid at any time amongst women without children was 70 per cent whereas it was only 20 per cent amongst women with three or more children. The study popu-

lation of Brandenburg *et al.* (1999) is restricted to women of 35 years of age or more. In 1997, 46 per cent of all liveborn children in the Netherlands were first born and 18 per cent were third born or more. For women aged 35 years or more these percentages are 26 per cent and 37 per cent, respectively (Central Bureau of Statistics, 1999). Since Brandenburg *et al.* (1999) gave no information about parity, it can be expected that the percentage of women with one or more children is much higher than in the total population of pregnant women. Because of the higher parity the estimations of Brandenburg *et al.* (1999) are biased.

Brandenburg *et al.* (1999) stated that in the Netherlands 'healthcare providers only play a minor role as a source of information on folic acid supplementation'. In the questionnaire we used it was possible to mention more than one source of information. 39 per cent of the respondents cited healthcare professionals as a source of information. Our results show a much more important role for healthcare professionals.

In the discussion section, Brandenburg *et al.* (1999) stated that an unplanned pregnancy was the main reason for not taking folic acid. In their Table 3 this reason is not mentioned at all. Furthermore, they referred to an Irish article saying that depending on socio-economic factors, up to 89 per cent of pregnancies may be unplanned. This may be true for Ireland but not necessarily for the Netherlands. We specifically asked in our surveys if the pregnancy had been planned and in 1998 we found that 85 per cent of the respondents stated that their pregnancies had been planned. In our 1996 survey this percentage was 90 per cent. In studies by The Netherlands Institute for Social-Sexological Research similar percentages are reported (Van Delft and Ketting, 1992). We do not think that unplanned pregnancies are the main reason for not taking folic acid. Not thinking about the possibility of taking folic acid and being pregnant earlier than expected (although planned) were the most mentioned reasons in our survey. Therefore, we were

surprised to read their conclusions that food fortification might be a solution to overcome the problem of unplanned pregnancies in relation to the appropriate use of folic acid. The Dutch Health Council (1993) already advised considering food fortification, but due to legal restrictions the Inspectorate advised use of tablets for the time-being. In 1998 the Dutch Ministry of Health again asked the Health Council for advice on intake of folic acid, this time referring especially to the potential risks when more than 1 mg per day is ingested. Meanwhile, the evidence for protective effects of folic acid is increasing rapidly, and therefore we do agree that fortification of staple foods should be reconsidered in The Netherlands.

The goals of the mass media campaign in 1995 to which Brandenburg *et al.* (1999) referred were that 70 per cent of women planning pregnancy should know about the advice and that 65 per cent of women who knew of the advice before pregnancy should use it during the entire advised period. The first goal was already achieved in 1996 (de Walle *et al.*, 1999) and the second goal has been approached in 1998, when 51 per cent of these women used folic acid during the entire advised period.

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