

CORRESPONDENCE

Comments on Isoflavones in Soy-Based Infant Formulas

Sir: Recent research published in your journal (Murphy et al., 1997) confirmed previous reports (Irvine et al., 1995; Zimmerli et al., 1997) that isoflavone intakes for infants on soy-based infant formulas are greater than those typically consumed by adult Japanese soy food consumers. Not able to be substantiated, however, is the claim that soy formulas have been fed to millions of infants with no evidence of harmful effects (Murphy et al., 1997). The American Academy of Pediatrics (1983) cited a number of clinical reports of acute allergic and hypersensitivity reactions as a result of soy formula use, and an examination of published literature reveals others, including severe gastrointestinal damage (Poley and Klein, 1983; Halpin et al., 1977; Ament and Rubin, 1972) and epidemiologies (Freni-Titulaer et al., 1986; Fort et al., 1986, 1990) that associate soy feedings in infancy with subsequent hormonal disturbances.

Because isoflavones have historically been regarded as toxicants (Committee on Food Protection, 1973) and have been implicated in causing reproductive system damage and infertility in animals (Kaldas and Hughes, 1989; Setchell et al., 1987; Setchell, 1985) and as having hormonal effects in women (Cassidy et al., 1994), two governmental agencies have issued cautions. The U.K. Government's statement included information that, "The potential for phytoestrogens, including isoflavones, to affect adversely infants is of particular concern, since it is possible that a hormonal imbalance in early life can permanently affect sexual development and fertility" (U.K. Department of Health, 1996), and the Swiss Federal Health Service advised that, "taking into account the very limited knowledge on the possible adverse health effects of an isoflavone exposure in newborns and infants, it is demanded that soy-based infant formulas containing isoflavones should be used only under strict medical indications and a lack of alternative products" (Zimmerli et al., 1997).

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