

National perspectives:

Millar et al²⁵⁸ reported on Canadian trends and patterns in multiple births from 1974 to 1990. A steady increase was observed in the number of twin births (from 904.5 to 1037.2 per 100,000 confinements in 1995) and triplet births and higher order births (from 8.3 to 21.7 per 100,000 confinements between 1974 and 1990). The increase was more pronounced in women over 30 years of age. The rate of preterm birth among multiple births has increased from 32.8% in 1974 to 45.8% in 1990.

The rising trend has continued and the latest figures indicate that the rate of multiple births in Canada was 2.5% in 1997 (excluding Newfoundland).²¹ Among multiple births the rates of preterm births are higher. In Canada (excluding Ontario) there were 4,953 twin births (2,556 preterm births: preterm birth rate 51.6/100 live births among twins) and 218 triplet or higher order multiple births (209 preterm births: preterm birth rate 95.9/100 live births among triplets) in 1997. The rise has been secondary to an increased use of fertility treatments.²¹

Conclusion:

The incidence of multiple births is increasing in Canada. In-vitro fertilization is contributing to this increase. Multiple birth puts a social and economic strain on families and society. The children are at increased risk of disabilities and birth defects.²⁵⁹ Controlling the use of fertility drugs and reducing the number of implanted embryos can prevent the rise in multiple births. The Society of Obstetricians and Gynecologists, Canada²⁶⁰ has urged for national regulations regarding the maximum number of embryos that may be transferred in artificial reproductive treatment programs in Canada as well as the prescribing practices of the clinics and physicians in relation to ovulation inducing agents.

I. Miscellaneous factors**1. Electromagnetic beds:**

Bracken et al²⁶¹ performed a prospective study to assess the effects of electromagnetic field exposure particularly from electrically heated beds and waterbeds on fetal growth. Exposure to electromagnetic fields during pregnancy or before conception had no effect on LBW/IUGR births.

2. Licorice ingestion:

Glucocorticoids are thought to play a role in the initiation of labor. Licorice contains glycyrrhizin, which is an inhibitor of cortisol metabolism. Strandberg et al²⁶² studied 1049 women in Finland to assess the impact of licorice ingestion on preterm/LBW births. The glycyrrhizin content in licorice is approximately 0.2% in Finland. Common sweet sizes are 100 grams to 200 grams, so they contain 200 mg and 400 mg of glycyrrhizin acid, respectively. The risk of delivery before 38 weeks was increased in women consuming a high intake (≥ 500 mg/week) of glycyrrhizin (OR 2.5, 95% CI 1.1, 5.5) compared to women with a low intake (< 250 mg/week).

No other studies were identified. Further research on this possible association is needed before reaching any conclusions. Until such evidence is available, women should be informed of the potential risks of excessive ingestion of licorice.