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Interventions to promote breast-feeding: applying the evidence in clinical practice

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In this document, the Canadian Task Force on Preventive Health Care (CTFPHC) updates its earlier breast-feeding recommendations[1] by presenting evidence on interventions that improve the initiation or duration of breast-feeding (or both). Breast-feeding has been shown in both developing and developed countries to improve the health of infants and their mothers, making it the optimal method of infant nutrition.[2,3] Although the prevalence of breast-feeding in Canada has risen, with over three-quarters of mothers now initiating breast-feeding, the duration of this practice remains short of the recommended World Health Organization (WHO) targets of exclusive breast-feeding for 6 months and partial breast-feeding for up to 2 years.[4,5] Recent Canadian data indicate that 22% of recent mothers aged 15–49 years breast-feed for less than 3 months, and 35% do so for at least 3 months.[6] This premature discontinuation is more a result of difficulty with breast-feeding, including lack of information and support, than of women's choice.[7] In fact, the number of Canadian hospitals that would qualify as "baby-friendly" according to WHO–UNICEF criteria[8] was 5 of 523 hospitals responding to a 1993 survey,[9] and according to UNICEF only a single hospital had that designation in 2002.[10]

In a joint endeavour, the CTFPHC and the US Preventive Services Task Force systematically reviewed the randomized trial evidence for the effectiveness of all counselling interventions originating in a clinician's practice (such as antepartum and postpartum support groups, education, telephone support or peer counsellors) to increase the rate of initiation or the duration of breast-feeding.[11,12] We present here the new CTFPHC recommendations, based on the joint systematic review as well as a key Canadian trial[13] published after that review and tailored to the Canadian health care setting (Table 1). Definitions of the levels of evidence and grades of recommendations used in Table 1 are available in an online appendix to this article (www.cmaj.ca/cgi/content/full/170/6/976/DC1).

Interventions consisting of antepartum structured breast-feeding education are effective at improving both initiation and continuation of breast-feeding during the first 2 months postpartum, compared with usual care.[14–28] These interventions, consisting of individual or group instruction about breast-feeding knowledge, practical skills and problem-solving techniques, were effective when provided by lactation specialists or nurses, and both single sessions and multiple sessions were effective. Postpartum telephone or in-person support by lactation specialists, nurses or peer counsellors enhanced the effectiveness of these interventions. In addition, the use of peer counsellors improved breast-feeding rates and duration, and these types of programs may represent a cost-effective alternative to professionally delivered services, especially in locations or settings where professional services are scarce or not available.[13,20,29–32] The CTFPHC recommends against the use of written materials (which have not been shown to be effective when used alone,[16,19,22,26,33–36] although no harm was demonstrated) and commercial discharge packages (which have been shown to decrease breast-feeding rates).[37] Unfortunately, advice from a woman's primary clinician (such as family physician, obstetrician or midwife) has not been sufficiently evaluated, and a research gap remains in this area.

The recommendations presented here (Table 1) do not

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Table 1: Canadian Task Force on Preventive Health Care recommendations on interventions to promote breast-feeding

Manoeuvre	Effectiveness	Level of evidence*	Recommendation*
Education programs and postpartum support to promote breast-feeding†	Structured antepartum breast-feeding education improves both initiation and continuation of short-term breast-feeding rates post-partum, compared with usual care† In-person or telephone support strengthens the effect of education, leading to an additional 5% to 10% increase in breast-feeding initiation and short-term duration In-person or telephone support by itself may increase both short- and long-term breast-feeding rates	*Education* Level I — fair[14–19] Level I — poor[20–24] *Education + support* Level I — fair[15,18,19,25–27] Level I — poor[20,28]	There is good evidence to recommend provision of structured antepartum educational programs and postpartum support[1] to promote breast-feeding initiation and duration **A recommendation**
Peer counselling to promote breast-feeding	Peer counsellors had a significant effect on breast-feeding rates and duration	Level I — fair[13] Level I — poor[20] Level II-1 — poor[29–32]	There is fair evidence to recommend peer counselling to promote initiation and maintenance of breast-feeding **B recommendation**
Provision of written materials to new mothers to promote breast-feeding	There is no benefit when written materials are used alone	Level I — good[33] Level I — fair[16,19,26] Level I — poor[22,34–36]	There is good evidence to recommend against providing written materials alone to promote breast-feeding **D recommendation**
Primary health care provider (physician or midwife) advice to expectant or new mothers to promote breast-feeding	Effectiveness is unknown	No studies found	There is insufficient evidence to make a recommendation regarding advice by primary health care providers to promote breast-feeding **I recommendation**
Provision of commercial discharge packages to new mothers	Women receiving commercial discharge packages had lower breast-feeding rates than patients not receiving packages	Level I (systematic review) — good[37]	There is good evidence to recommend against providing commercial discharge packages to new mothers **E recommendation**
Rooming-in and early maternal contact to promote breast-feeding	The sole new study of rooming-in included multiple interventions, and conclusions could not be drawn New data regarding early maternal contact are insufficient	*Rooming in* Level I (single study) — fair[38] *Early maternal contact* Level I (meta-analysis) — good[39–42]	There is good evidence to recommend rooming-in and early maternal contact to promote breast-feeding **A recommendation‡**

*Definitions of the levels of evidence and grades of recommendations used by the Canadian Task Force on Preventive Health Care are available in an online appendix to this article (www.cmaj.ca/cgi/content/full/170/6/976/DC1).
†In the studies reviewed, these interventions were usually provided in the clinical setting by lactation specialists or nurses and consisted of individual or group instruction about breast-feeding knowledge, practical skills and problem-solving techniques.
‡The 1994 recommendations of the task force[1] reviewed "good" level I evidence. Those recommendations, which were classified as grade A, are not overturned by the evidence reviewed here.

address the clinical benefits of breast-feeding, which the CTFPHC felt had been established by its earlier breast-feeding recommendations;[1] instead, we have concentrated on recommendations about interventions that change the initiation and duration of breast-feeding.

The Canadian Paediatric Society, Dieticians of Canada and Health Canada have recommended exclusive breast-feeding for at least the first 4 months of life, then continuation of breast-feeding along with complementary foods for up to 2 years and beyond.[43] The American Academy of Pediatrics has recommended exclusive breast-feeding for approximately the first 6 months after birth and continued breast-feeding for at least 12 months and thereafter for as long as mutually desired.[44] Provision of adequate individual and systems-based supports, such as recommended in the Baby-Friendly Hospital Initiative,[8] are also recommended by most groups.

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