

maternal breast tissue and the developing digestive tract of newborns.

Armogida, Sheila A.; Yannaras, Niki M.; Melton, Alton L.; Srivastava, Maya D. Identification and quantification of innate immune system mediators in human breast milk. *Allergy and Asthma Proc* 25: 297-304, 2004

## 2 INCREASED RISK OF OVERWEIGHT

A Brazilian cohort of 405 women were followed at 6 and 9 months postpartum to determine the association between weight retention and breastfeeding practices. When women who had 22% body fat and breastfed for 180 days were compared with those who had breastfed for only 30 days, each month of breastfeeding brought an average reduction of 0.44 kg in weight. In conclusion the authors confirm the association between breastfeeding and postpartum weight and that the promotion of longer duration can contribute to decreases in postpartum weight retention.

Kac G, Benício MHDA, Velásquez-Meléndez G, Valente JG, Struchiner CJ. Breastfeeding and postpartum weight retention in a cohort of Brazilian women. *Am J Clin Nutr* 79: 487-493, 2004

## 3 INCREASED RISK OF OVARIAN CANCER AND ENDOMETRIAL CANCER

Not breastfeeding has been associated with increased risk of ovarian cancer. A large case-control Italian study of 1031 women with epithelial ovarian cancer were compared to 2411 women admitted to the same network of hospitals for a wide spectrum of acute non-neoplastic conditions, unrelated to known risk factors for ovarian cancer. Results showed inverse trends in risk with increasing duration of breastfeeding and number of children breastfed. Additional analyses by histologic subtypes suggested that the protective role of breastfeeding would be larger for serious neoplasms.

Chiapparino F, Pelucchi C, Negri E, Parazzini F, Franceschi S, Talamini R, Montella M, Ramazzotti V, La Vecchia C. Breastfeeding and the risk of epithelial ovarian cancer in an Italian population. *Gynecol Oncol*. 98: 304-308, 2005

To determine the link between breastfeeding and endometrial cancer, this Japanese hospital-based case-control study compared cases of women with endometrial cancer (155) with controls (96) selected from women attending the outpatient clinic for cervical cancer screening. The women were interviewed to determine breastfeeding practices, contraceptive usage, as well as potential risk factors for endometrial cancer. The authors observed a greater risk of endometrial cancer for parous women who had never breastfed, and concluded that breastfeeding reduces the risk of endometrial cancer in Japanese women.

Okamura C, Tsubono Y, Ito K, Niikura H, Takano T, Nagase S, Yoshinaga K, Terada Y, Murakami T, Sato S, Aoki D, Jobo T, Okamura K, Yaegashi N. *Tohoku J Exp Med*. Lactation and risk of endometrial cancer in Japan: a case-control study. 208: 109-15, 2006

## 4 INCREASED RISK OF OSTEOPOROSIS

Longitudinal studies have suggested that both pregnancy and lactation are associated with a bone mineral density loss of up to 5%, and that the loss recovers after weaning. Cross-sectional studies have indicated that women with many children and a long total period of lactation have similar or higher bone mineral density and similar or lower fracture risk than their

peers who have not given birth and breastfed. This trend has been observational and found in cross-sectional case-control studies. The causal relationships have yet to be determined.

Karlsson MK, Ahlberg HG, Karlsson C, Maternity and mineral density. *Acta Orthopaedica* 76: 2-13, 2005

## 5 REDUCED NATURAL CHILD SPACING

A questionnaire was used to obtain data from Nigerian breastfeeding mothers to determine the impact of breastfeeding practices on lactational amenorrhoea. Exclusive breastfeeding was practised by 100% of the mothers on discharge. This went down to 3.9% at six months. Feeding on cue was practised by 98.9% of the mothers. By 6 weeks 33.8% of mothers resumed menses and this rose to 70.2% at six months. The duration of lactational amenorrhoea was longer in exclusively breastfeeding mothers than in those who were not. None of the 178 mothers who participated in the survey became pregnant.

Egbuonu I, Ezechukwu CC, Chukwuka JO, Ikechebelu JI. Breast-feeding, return of menses, sexual activity and contraceptive practices among mothers in the first six months of lactation in Onitsha, South Eastern Nigeria. *J Obstet Gynaecol*. 25: 500-503, 2005

## 6 INCREASED RISK OF RHEUMATOID ARTHRITIS

Female reproductive and hormonal risks factors were studied in a cohort of 121,700 women enrolled in the Nurses' Health Study. Breastfeeding for more than 12 months was inversely related to the development of rheumatoid arthritis. The effect was found to be dose related. Those who breastfed shorter had a higher risk.

Karlson E W et al. Do breast-feeding and other reproductive factors influence future risk of rheumatoid arthritis?: Results from the Nurses Health Study. *Arthritis & Rheumatism* 50: 3458-3467, 2004

## 7 INCREASED STRESS AND ANXIETY

To find out if there is a relationship between feeding practices, stress, and mood and levels of serum cortisol, prolactin and ACTH (adrenocorticotrophic hormone) in mothers, the author compared the emotional responses of 84 exclusively breastfeeding, 99 exclusively formula-feeding and 33 non postpartum healthy control women. The mothers' responses were studied at 4 to 6 weeks post-partum.

Overall the breastfeeding mothers had more positive moods, reported more positive events, and perceived less stress than formula-feeders. Breastfeeders had less depression and anger than formula feeders and serum prolactin levels were inversely related to stress and mood in formula-feeders.

Groer M W. Differences between exclusive breastfeeders, formula-feeders, and controls: a study of stress, mood and endocrine variables. *Biol. Res Nurs*. 7: 106-117, 2005

## 8 INCREASED RISK OF MATERNAL DIABETES

Breastfeeding also reduces the mother's risk of type II diabetes later in life. The longer the duration of breastfeeding, the lower the incidence of diabetes, according to this Harvard based study. The researchers studied 83,585 mothers in the Nurses' Health Study (NHS) and 73,418 mothers in the Nurses' Health Study II (NHS II), and determined that each year of breastfeeding reduced the mother's risk of diabetes by 15%.

Stuebe AM, Rich-Edwards JW, Willett WC. Duration of lactation and incidence of type 2 diabetes. *JAMA* 294: 2601-2610, 2005

### World Alliance for Breastfeeding Action (WABA)

P O Box 1200, 10850 Penang, Malaysia

TEL: 604-658 4816

FAX: 604-657 2655

E-MAIL: waba@streamyx.com

WEBSITE: www.waba.org.my

www.breastfeedingweek.org



Prepared by Elisabeth Sterken, BSc MSc nutritionist, INFAC Canada/IBFAN North America, revised May 2006



### INFAC Canada

6 Trinity Square, Toronto ON MSC 1B1

TEL: (416) 595 9819

FAX: (416) 591 9355

E-MAIL: info@infactcanada.ca

WEBSITE: www.infactcanada.ca