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Titel des Beitrags: Growth of infants fed formula rich in canola oil (low erucic acid rapeseed oil).

Abstract: BACKGROUND & AIMS: Canola oil is a variety of rapeseed oil low in erucic acid (<2%). For many years, canola oil has been widely used as an ingredient in infant formula in Europe, but not in North America due to safety concerns. A number of studies have used variable canola content of infant formulas to investigate the effects of linoleic acid: α-linolenic acid ratio on visual function of infants. However, little published data is available to compare the safety of canola versus non-canola containing infant formula. The aim of this study is to investigate whether infant formulas containing canola oil support normal growth in infants as assessed by weight and length gain. METHODS: Re-analyses of data on infant weight and length gain from a prospective randomized double-blind trial in full-term infants in the German Infant Nutritional Intervention study (GINI). This analysis compared growth in infants receiving infant formulas with or without canola oil from week 4 to month 7. Absolute weight and length, weight and length gain in gram or cm per day and standardized weight and length measurements were analyzed by analyses of variance and a longitudinal random effects model. Standardization was conducted according to the new WHO 2006 age- and sex-specific child growth standards. RESULTS: Absolute and
standardized weight and length measures did not differ between the formula groups with or without canola oil. This was true for both, analyses within each of the three anthropometric measurement periods (4-6 weeks, 3-4 months, 6-7 months) and for the longitudinal analyses over the whole period from 4 weeks to 7 months of life. Power analyses confirmed that sample size was sufficient to detect a difference of 3 g per day between 14 and 120 days between the two formula groups.

CONCLUSIONS: Infant formula containing canola oil supports normal infant growth as assessed by weight and length gain.