



**The importance of breastfeeding and
complementary feeding practices in
childhood nutrition, survival and
development.
A European perspective**



BREASTFEEDING

Lancet Series 2016

Breastfeeding 1



Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect

Cesar G Victora, Rajiv Bahi, Alaisio D Barros, Giovanni V A Franca, Susan Nigam C Rollins, for The Lancet Breastfeeding Series Group*

The importance of breastfeeding in low-income and middle-income countries is well established, but uncertainty exists about its importance in high-income countries. In children younger than 6 months of age, exclusive breastfeeding is shorter in high-income countries than in those that are res

child infections and malocclusion, increases in intelligence did not find associations with allergic disorders such as ast

Breastfeeding 2

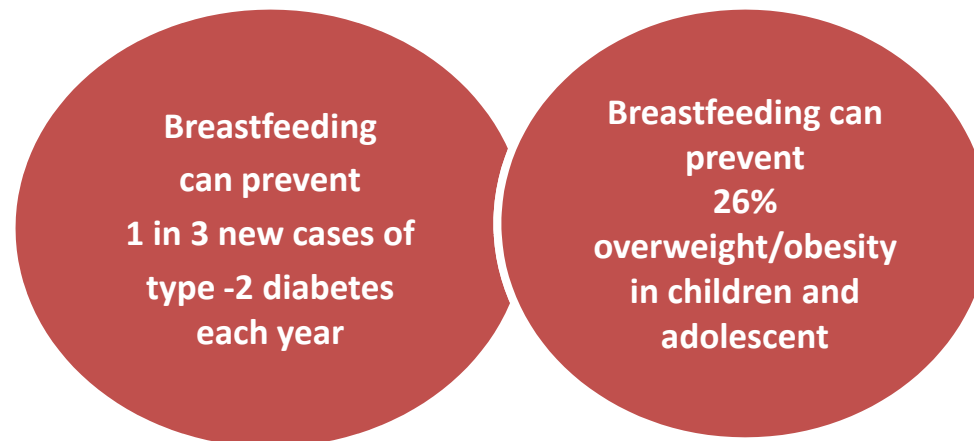
Why invest, and what it will take to improve breastfeeding practices?

Nigel C Rollins, Nilesh Bhandari, Nemat Hajebshoy, Susan Horton, Chessa E Lubler, Jose CM Martins, Ellen G Pkwari, Linda M Richter, Cesar G Victora, on behalf of The Lancet Breastfeeding Series Group*

Despite its established benefits, breastfeeding is no longer a norm in many communities. Multifactorial determinants of breastfeeding need supportive measures at many levels, from legal and policy directives to social attitudes and values, women's work and employment conditions, and health-care services to enable women to breastfeed. When relevant interventions are delivered adequately, breastfeeding practices are responsive and can improve rapidly. The best outcomes are achieved when interventions are implemented concurrently through several channels. The

Lancet 2016: Breastfeeding saves lives and improves health

- Improving breastfeeding practices could save about 820,000 lives a year, 87% of them infants under 6 months of age.
- Nearly half of all diarrhea episodes and one-third of all respiratory infections would be prevented with increased breastfeeding in low- and middle-income countries.
- There is growing evidence that breastfeeding decreases the prevalence of overweight/obesity and diabetes later in life.



Source: Lancet Series on Breastfeeding 2016

Breastfeeding helps prepare children for a prosperous future

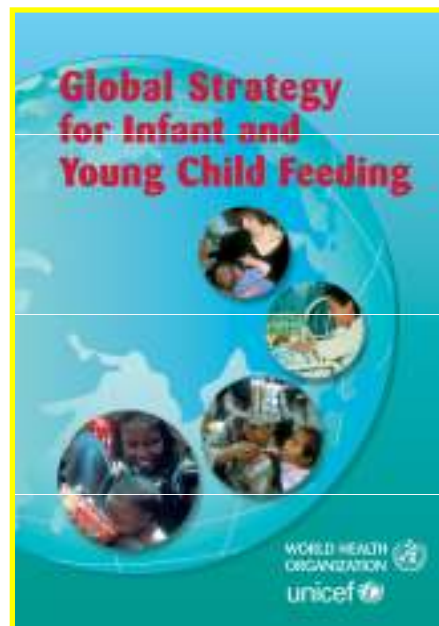
- Longer breastfeeding is associated with higher performance on intelligence tests among children and adolescents (3 points on average)
- Breastfeeding translates to improved academic performance, increased long-term earnings and productivity
- Globally, estimated costs of lower cognitive ability associated with not breastfeeding amount to about \$300 billion annually (representing 0.49% of global gross national income, or GNI).



Source: Lancet Series on Breastfeeding 2016

Optimal Infant and Young Child Feeding

- **Initiation of breastfeeding within an hour of birth**
- **Exclusive breastfeeding for the first six months**
- **Complementary feeding after six months**
- **Continued breastfeeding for 2 years and beyond**

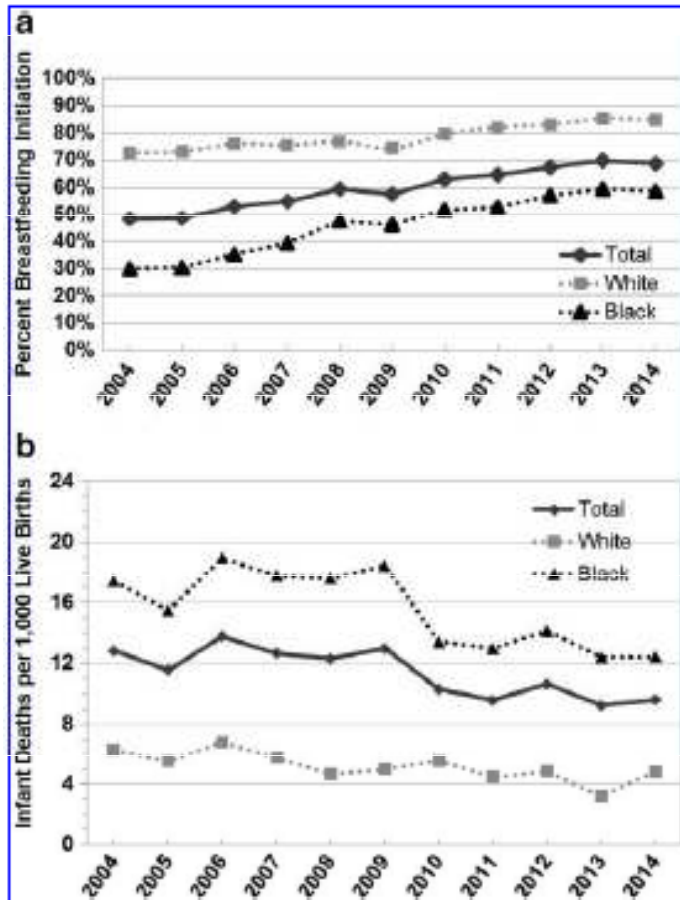


Summary of reporting countries and proportion of breastfeeding practices in the WHO European Region (data from 1998 to 2013)

Indicator	Reporting countries		Minimum–maximum (%)	Median (%)
	<i>n</i>	%		
Breastfeeding within 1 h after birth*	21	40	5–84	43
EBF under 4 months (0–3.9 months)	13	25	6–66	33
EBF under 6 months (0–5.9 months)	24	45	2–56	23
EBF at 6 months†	21	40	1–49	13
Continued breastfeeding at 1 year (12–15.9 months)‡	25	47	1–78	28

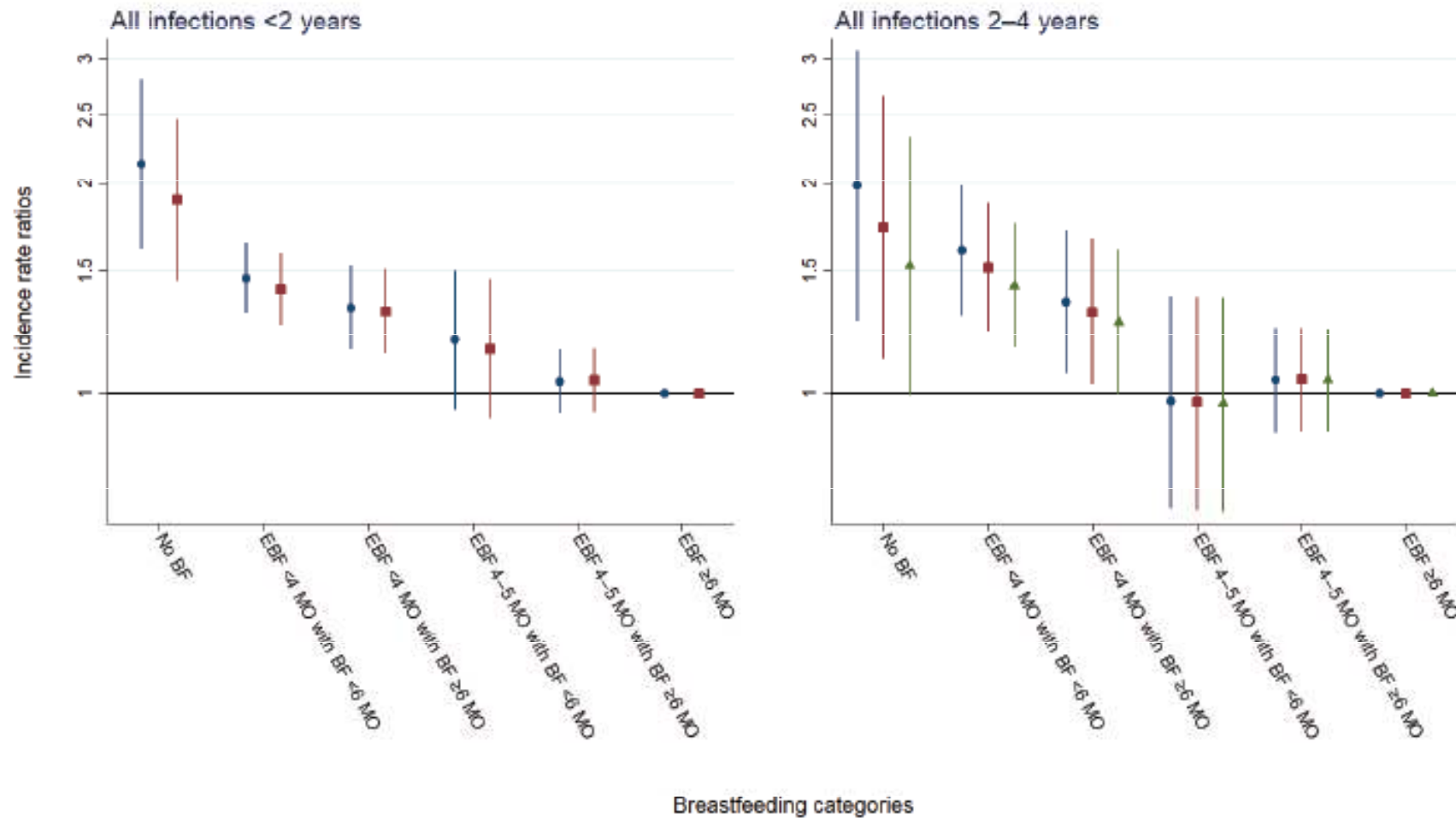
Bagci Bosi et al. Breastfeeding practices and policies in WHO European Region Member States. *Public Health Nutr* 2015;19:753-64

Breastfeeding initiation and infant mortality in an urban population (Tennessee, USA)



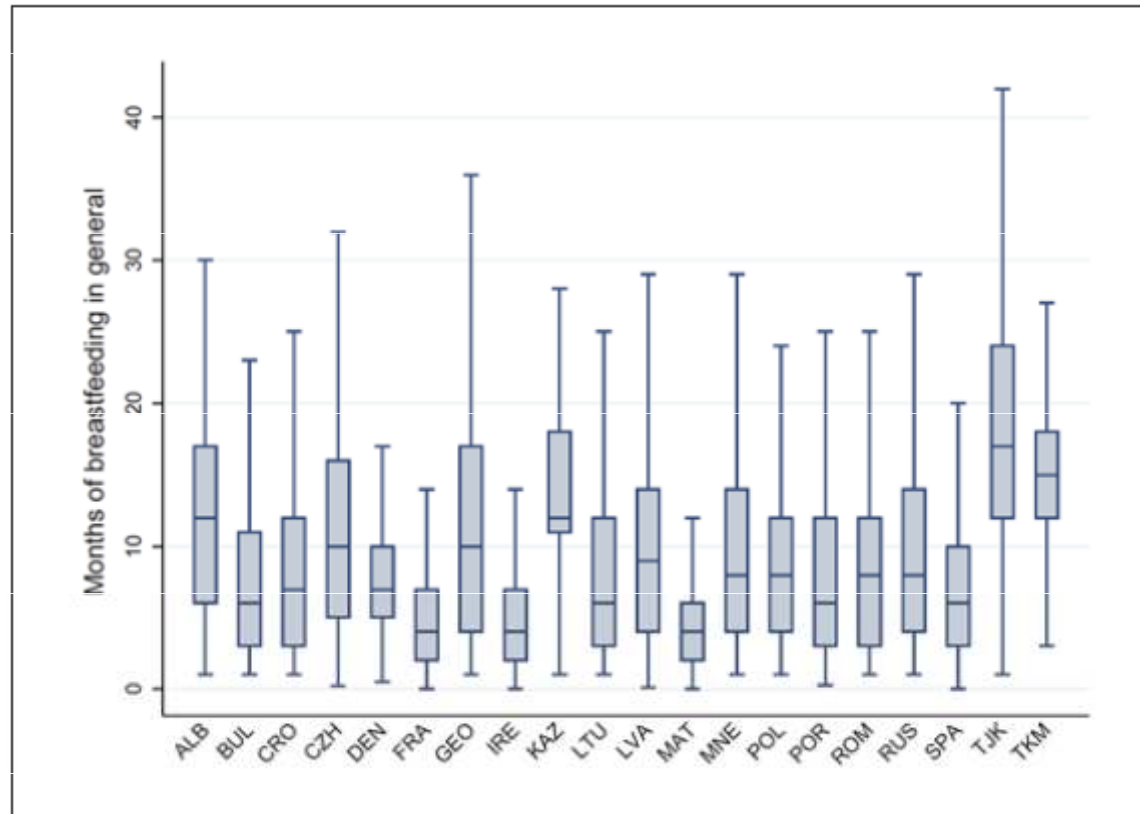
- Initiation of BF was associated with a significant reduction in total infant mortality (19%; 95% CI 3-32%)
- Neonatal mortality was also significantly reduced with any BF (51%; 28-66%)
- Post-neonatal mortality was not significantly associated with BF initiation in the overall population, but was significant in the nonblack population (37%; 2-59%)
- An association was observed between BF initiation and infant mortality from infectious disease (51%; 23-68%)

Breastfeeding categories and overall hospitalisations for infectious disease (Sweden, 1998-2010)



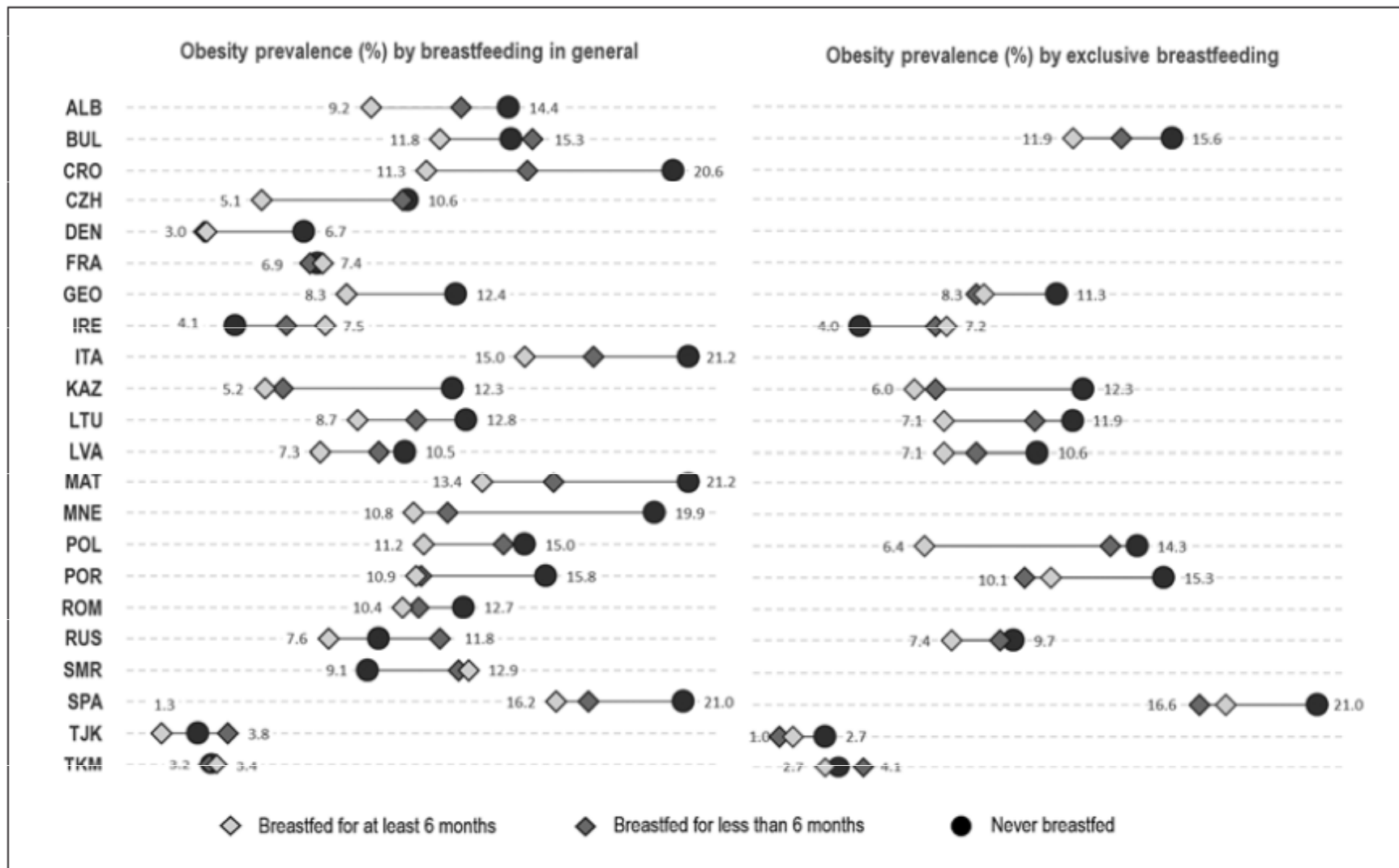
Videholm S et al. BMJ Open 2021;11:e046583

Duration of breastfeeding among children aged 6–9 years by country

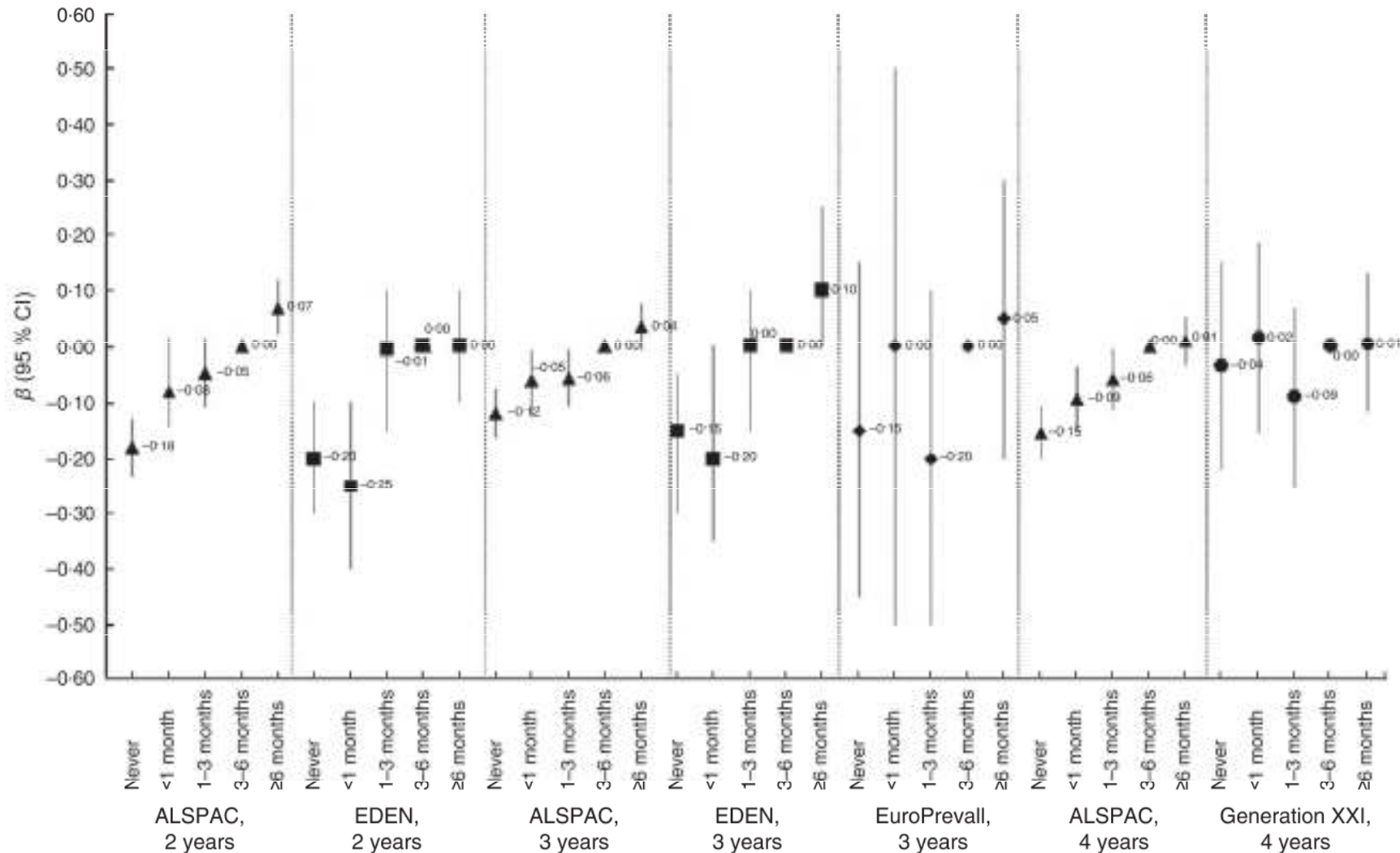


Rito et al. Association between characteristics at birth, breastfeeding and obesity in 22 Countries: the WHO European Childhood Obesity Surveillance Initiative – COSI 2015/2017. *Obes Facts* 2019;12:226-43

Prevalence of obesity among children aged 6–9 years, by breastfeeding duration and country



Feeding practices and later healthy diet variety score (UK, France, Portugal, Greece)



Prolonged and exclusive BF improves children's cognitive ability at age 6.5 years (Belarus, 2005)

Table 3. Wechsler Abbreviated Scales of Intelligence Results

Outcome	Score, Mean (SD)		ICC	Cluster-Adjusted Mean Difference (95% CI)
	Experimental Group	Control Group		
Vocabulary (n=13 838)	53.5 (11.6)	46.9 (11.4)	0.28	+4.9 (+0.4 to +9.3)
Similarities (n=13 836)	56.6 (9.9)	50.7 (11.7)	0.29	+4.6 (+0.2 to +9.0)
Block designs (n=13 840)	57.2 (9.4)	54.6 (10.3)	0.21	+1.9 (-1.7 to +5.5)
Matrices (n=13 841)	52.8 (10.1)	50.9 (9.9)	0.20	+1.8 (-1.9 to +5.5)
Verbal IQ (n=13 828)	108.7 (16.4)	98.7 (16.0)	0.31	+7.5 (+0.8 to +14.3)
Performance IQ (n=13 836)	108.6 (15.1)	104.8 (15.4)	0.24	+2.9 (-3.3 to +9.1)
Full-scale IQ (n=13 824)	109.7 (15.4)	101.9 (15.8)	0.31	+5.9 (-1.0 to +12.8)

Table 4. Teacher Ratings of Academic Performance

Outcome	Rating, Mean (SD)		ICC	Cluster-Adjusted Mean Difference (95% CI)
	Experimental Group	Control Group		
Reading (n=10 406)	3.26 (0.82)	3.19 (0.80)	0.02	+0.07 (-0.01 to +0.16)
Writing (n=10 569)	3.19 (0.78)	3.13 (0.73)	0.02	+0.08 (-0.03 to +0.17)
Mathematics (n=10 778)	3.23 (0.79)	3.20 (0.77)	0.02	+0.06 (-0.04 to +0.15)
Other subjects (n=10 474)	3.30 (0.66)	3.27 (0.65)	0.02	+0.05 (-0.04 to +0.13)

Kramer MS et al. Breastfeeding and child cognitive development. Arch Gen Psychiatry 2008;65:578-84

Global Breastfeeding Collective

A Call to Action

We call upon implementers and donors from governments, philanthropies, international organizations, civil society to:



1. Increase funding to raise breastfeeding rates from birth through two years



2. Fully implement the International Code of Marketing of Breastmilk Substitutes and relevant World Health Assembly resolutions through **strong legal measures that are enforced and independently monitored** by organizations free from conflicts of interest.



3. Enact paid family leave and workplace breastfeeding policies, building on the International Labour Organization's maternity protection guidelines as a minimum requirement, including provisions for the informal sector.



4. Implement the Ten Steps to Successful Breastfeeding in maternity facilities, including providing breastmilk for sick and vulnerable newborns.



5. Improve access to skilled breastfeeding counselling as part of comprehensive breastfeeding policies and programmes in health facilities.



6. Strengthen links between health facilities and communities, and encourage community networks that protect, promote, and support breastfeeding



7. Strengthen monitoring systems that track the progress of policies, programmes, and funding towards achieving both national and global breastfeeding targets.

Global Breastfeeding Collective

Conclusions

- Breastfeeding and Infant and Young Child Feeding are important public health interventions to improve:
 - Child Survival and Health
 - Child Growth and Nutrition
 - Child Development
- The situation of Infant and Young Child Feeding practices in Europe is dismal
- A coordinated approach to implement the Global Strategy is required to improve Infant and Young Child Feeding practices