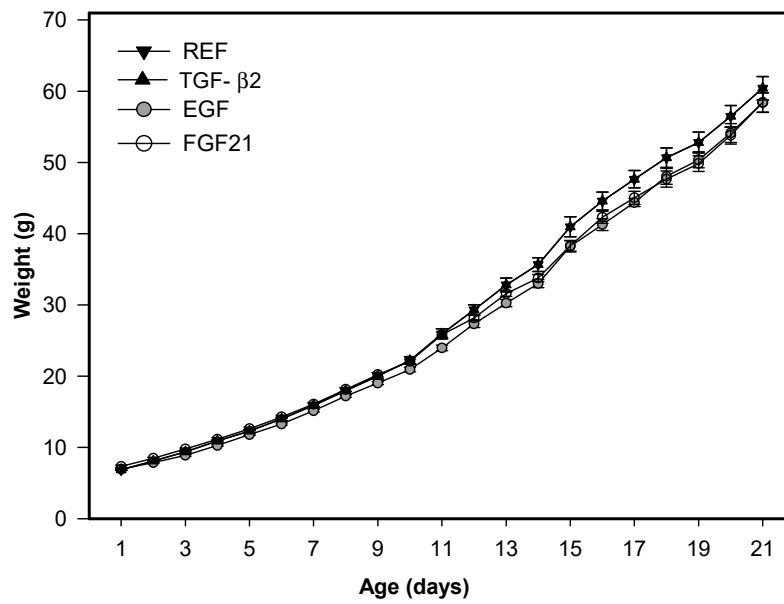
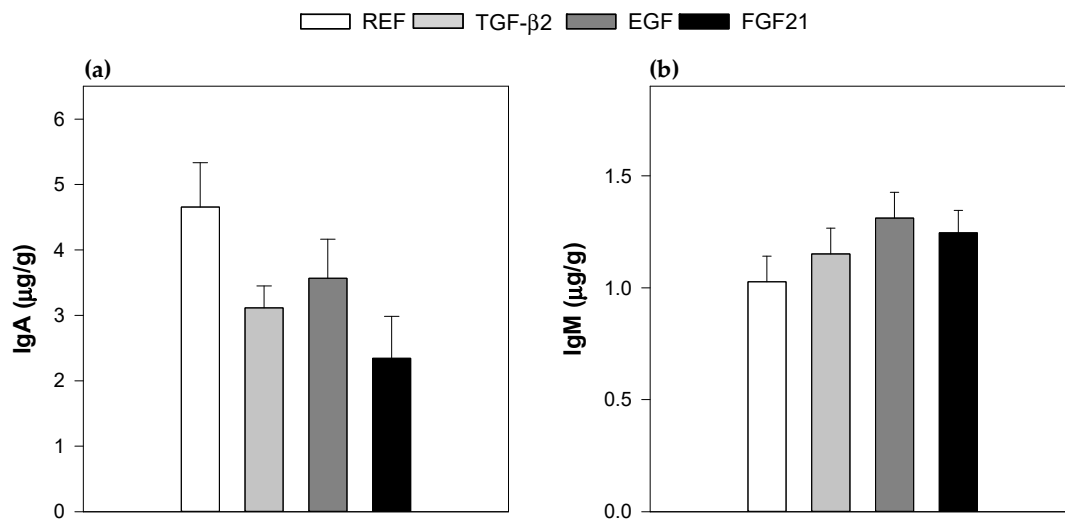


Supplementary Figure S1.



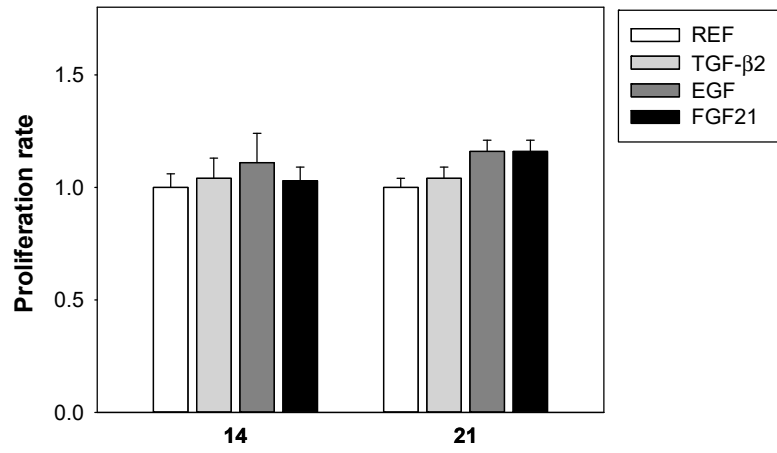
Growth curve of all studied groups during the suckling period (from 1 to 21 days of life). Results are expressed as mean  $\pm$  S.E.M (n=9-27 pups/group).

Supplementary Figure S2.



IgA and IgM concentration in gut wash from 21-day-old animals after the different nutritional interventions. (a) IgA; (b) IgM. Results are expressed as concentration of Igs normalized per gram of tissue used for the gut wash ( $\mu\text{g/g}$ ) represented as mean  $\pm$  S.E.M (n=9).

Supplementary Figure S3.



Proliferation of mesenteric lymph nodes lymphocytes at 14 and 21 days of life. Results are expressed as proliferation rate  $\pm$  S.E.M (n=9).

**Supplementary Table S1.****Table S1.** List of mAbs used for immunophenotyping the MLN cells.

<b>Anti-rat mAbs</b>	<b>Clone</b>	<b>Fluorochrome<sup>1</sup></b>	<b>Concentration (<math>\mu\text{g}/\text{mL}</math>)</b>	<b>Supplier</b>
Anti-CD4	OX-35	APC/PE	7/5	BD Biosciences
Anti-CD8 $\alpha$	OX-8	PerCP	10	BD Biosciences
Anti-CD8 $\beta$	3.41	FITC	17	BD Biosciences
Anti-TCR $\alpha\beta$	R73	FITC	17	BD Biosciences
Anti-TCR $\gamma\delta$	V65	PE	10	BD Biosciences
Anti-NKR-P1A	10/78	PE	12	BD Biosciences
Anti-CD45RA	OX-33	APC-Cy7	20	BD Biosciences
Anti-CD25	OX-39	FITC	25	BD Biosciences
Anti-CD103 ( $\alpha\text{E}$ )	OX-62	FITC	50	Biolegend
Anti-CD62L	OX-85	PE	13	Biolegend
Anti-TLR4	76B357.1	PE	25	Novus Biologicals
Anti-Foxp3	FJK-165	APC	5	eBioscience

<sup>1</sup>Allophycocyanin (APC), phycoerythrin (PE), peridinin-chlorophyll-a protein (PerCP), fluorescein isothiocyanate (FITC), APC-cyanine 7 (APC-Cy7)