Accumulated evidence shows that the consequences of an early life nutritional challenge could be exacerbated by dietary practices in adult life

Metabolic Programming in the Immediate Postnatal Life
by Mulchand S. Patel and Malathi Srinivasan

Key insights
Animal studies show that an altered nutritional experience during the postnatal period can impact adult health. Combined with observations in humans, these findings suggest that altered infant feeding practices could contribute to the increased incidence of overweight/obesity.

Current knowledge
In most mammals, organ development is not complete at birth and continues in the immediate postnatal period. Developmental plasticity allows the offspring the ability to adapt, ensuring its short-term survival, yet, long-term studies of the effects are few. Results from animal models indicate that metabolic malprogramming of vital regulatory pathways occurs as a response to an altered nutritional experience during the immediate postnatal life.

Practical implications
The immediate postnatal life may be considered as a vulnerable time for permanent metabolic programming of appetite and growth dynamics. Malprogramming in the first 6 months may result in the development of obesity at an earlier age and to a greater extent.

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