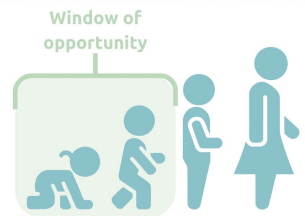


Dietary patterns to prevent childhood obesity: Starting from the beginning

This infographic has been developed by the Committee of Nutrition and its Special Interest Group on childhood obesity, with the support of the Public Affairs Committee

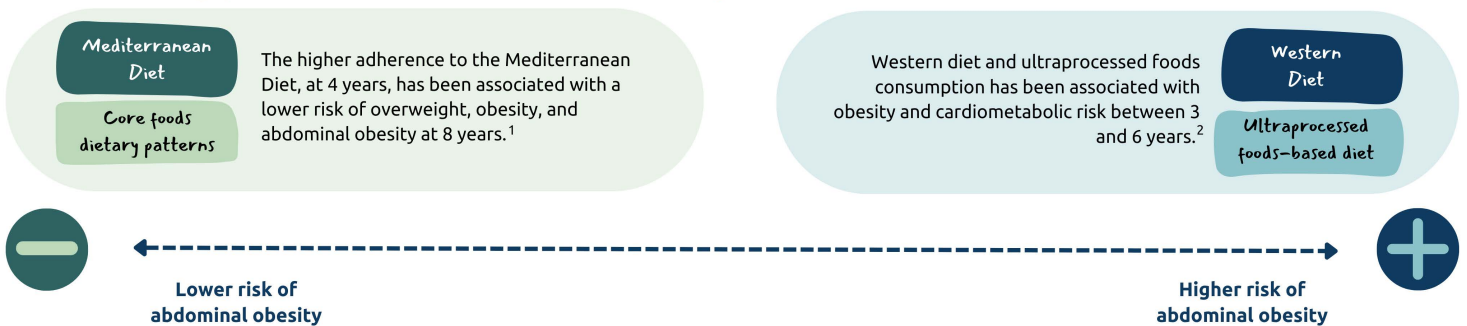
Dietary patterns track from early ages

Prospective European studies evaluating the development of children's dietary patterns from early childhood to adolescence identified a window of opportunity during which dietary patterns are established. All studies seem to agree that this window falls between 1–3 years of age.



During this period of transition, dietary patterns are not only established but are also more easily modifiable, highlighting the need for early intervention to promote the adoption of healthy habits. Beyond this time frame, the dietary patterns adopted tend to remain relatively stable throughout childhood, especially unhealthy dietary patterns (e.g., rich in processed/industrial foods, ready-to-eat meals, and snacks).

How do dietary patterns determine health from early childhood?

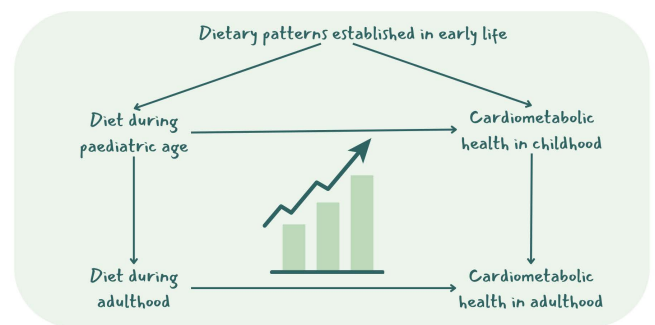


A persistent intake of dietary patterns rich in processed foods or sugary products shows a greater trend toward increased BMI z-scores, waist circumference (WC), and fat mass (FM) during childhood compared to the adoption of healthier patterns. The adoption and maintenance, starting from 2 years, of a dietary pattern rich in vegetables, fish, olive oil, and meat, and low in snacks, sugar, and sweets, have been linked to better insulin profiles (lower HOMA-IR) and improved blood pressure outcomes at 8 years.

Synergistic pathways³

Diet itself could influence health during developmental age through two synergistic pathways:

- Nutritional programming during the first 1,000 days of life.
- The accumulative effect of unhealthy dietary patterns throughout the life course



Factors around the family as a strategy for prevention⁴



References: 1. High adherence to a mediterranean diet at age 4 reduces overweight, obesity and abdominal obesity incidence in children at the age of 8. (2020). *Int J Obes* (Lond): 44(9), pp. 1906-1917. 2. Ultra-Processed Food Consumption and Incidence of Obesity and Cardiometabolic Risk Factors in Adults: A Systematic Review of Prospective Studies. (2023). *Nutrients*: 15(11), pp. 2583. 3. Dietary patterns acquired in early life are associated with cardiometabolic markers at school age. (2021). *Clin Nutr*: 40(7), pp. 4606-4614. 4. Associations Between Maternal Diet, Family Eating Habits and Preschool Children's Dietary Patterns: Insights from the UPBEAT Trial. (2024). *Nutrition J*: 23(1), pp. 115.