

**REVEALING THE URINARY EXPOSOME FINGERPRINT OF PEDIATRIC  
OBESITY: THE EXPOSOME PROJECT**

**Amina Barri Barri**

**FINAL DEGREE PROJECT BIOTECHNOLOGY**

Academic tutor: Dr. Maria Teresa Blay Olivé - [mteresa.blay@urv.cat](mailto:mteresa.blay@urv.cat)

In cooperation with: PEDINUR / IISPV

Supervisor: Dr. Noelia Ramírez González - [noelia.ramirez@iispv.cat](mailto:noelia.ramirez@iispv.cat)

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## **ABSTRACT**

This study examined the link between childhood obesity and environmental exposures. By analyzing urine samples from children living in an area affected by industrial activity, researchers identified a broad range of environmental chemicals alongside natural metabolites. The results revealed a distinctive chemical fingerprint that included plasticizers, bisphenols, pesticides, and pharmaceutical residues. These findings suggest that exposure to pollutants, food additives, and endocrine disruptors may contribute to obesity development by interacting with poor dietary habits. This highlights the importance of considering environmental factors, not just genetics or caloric intake, when designing strategies to prevent and treat pediatric obesity.

**Keywords:** Childhood obesity, urinary exposome, environmental metabolomics.