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Nationality: Italy
Date of birth: 03/03/1997
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Education:

- PhD student in Animal and Food Science (2024-)
- Master student in Food Science and Technology (2020-2023)
- Bachelor student in Food safety (2016-2019)

Research areas:

- Food safety
- Food Science and Technology
- Chemometric analysis

Brief description of Ph.D project:

Energy-Dispersive X-ray Fluorescence (ED-XRF) is a promising analytical technique due to its rapid, non-destructive nature, allowing for direct, multi-elemental analysis without extensive sample preparation. This makes ED-XRF particularly valuable in the food industry, where quick and accurate assessment of

mineral content is essential for quality control, safety, and nutritional labeling. In this context, the development of predictive models for mineral quantification across various food matrices, such as milk, dairy products, meat-based products and feed, will expand the applicability of ED-XRF, enabling precise and consistent mineral assessments for these complex matrices. This research has the potential to provide the food and feed industries with a faster, cost-effective, and reliable approach for routine mineral analysis, supporting more efficient and sustainable practices in nutritional evaluation and quality assurance.

Supervisor:

Professor Massimo De Marchi