



MICROPLASTICS IN DAIRY PRODUCTS

1. INTRODUCTION

Each person ingests approximately between 39,000 and 52,000 microplastics (MP) per year [1]. They are plastic particles from 0.1 to 5,000 μm [2].

MP are harmful to human health [2] and little is known of their presence in dairy products.

2. OBJECTIVE

To determine through a bibliographic search if there are scientific evidences on the presence of MP in dairy products

3. METHODOLOGY

Keywords: Microplastics, dairy, milk, formula milk
8 peer review scientific articles (33 \rightarrow 14 \rightarrow 8)

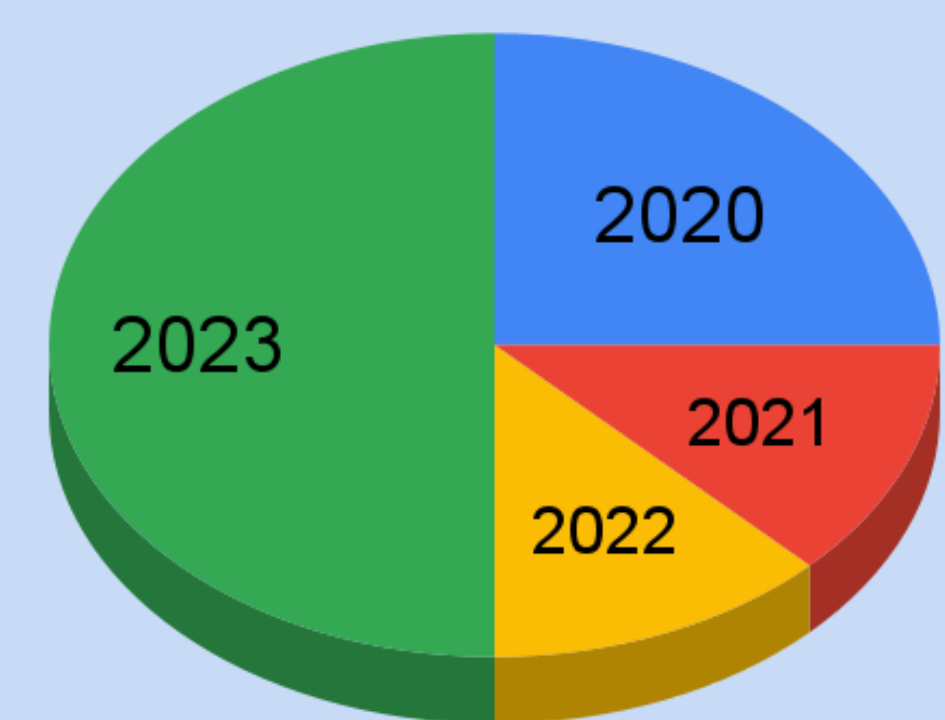


Figure 1: Scientific articles classified according to the year of publication



4. EVIDENCE OF MICROPLASTICS PRESENCE

• Analyzed products:



• Extraction: Degradation of biological matter + Vacuum filtration

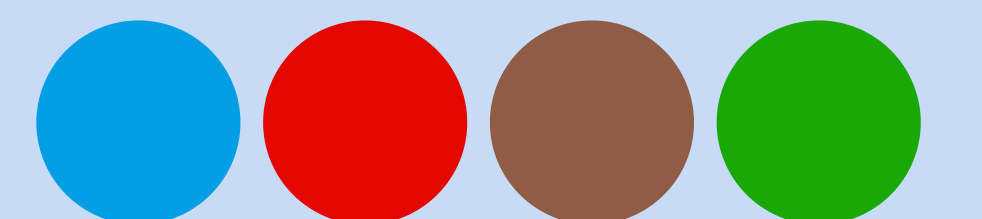
• Visualisation and identification: Microscope, FTIR, LDIR, μ -Raman

• Presence of microplastics in all products



• Shape: Fibers (\uparrow) and fragments (\downarrow)

• Colours identified in most scientific articles:



5. CONCLUSIONS

• MP can be found in dairy products

• It is necessary to have a standardized method for determining MP

• More studies are needed to determine the amount, the characteristics and the origin of these MP

