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# *Determining the bioaccessibility of FRs in indoor dust.*

Chris Collins, Sonia García Alcega

# Personnel

## Sonia

BSc – Biological Sciences – University of Basque Country

MSc – Pharmacology - University of Basque Country

Experience in microbiology after graduation. PCR techniques.

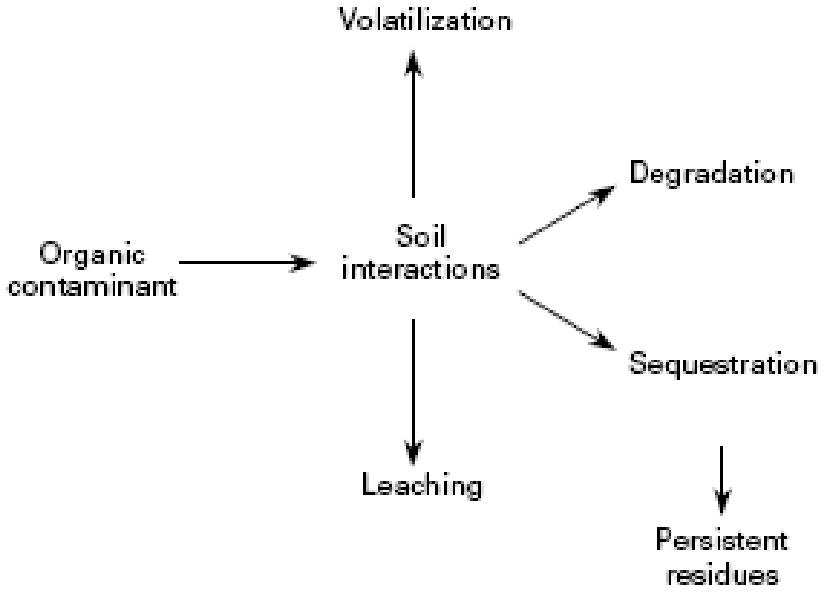
## Chris

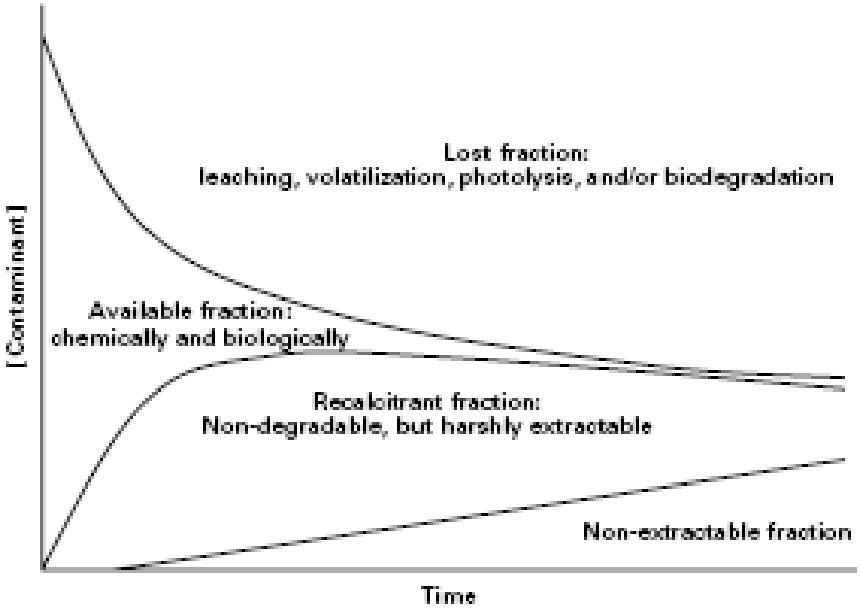
Reader in Soil Science – University of Reading

Contaminated land risk assessment

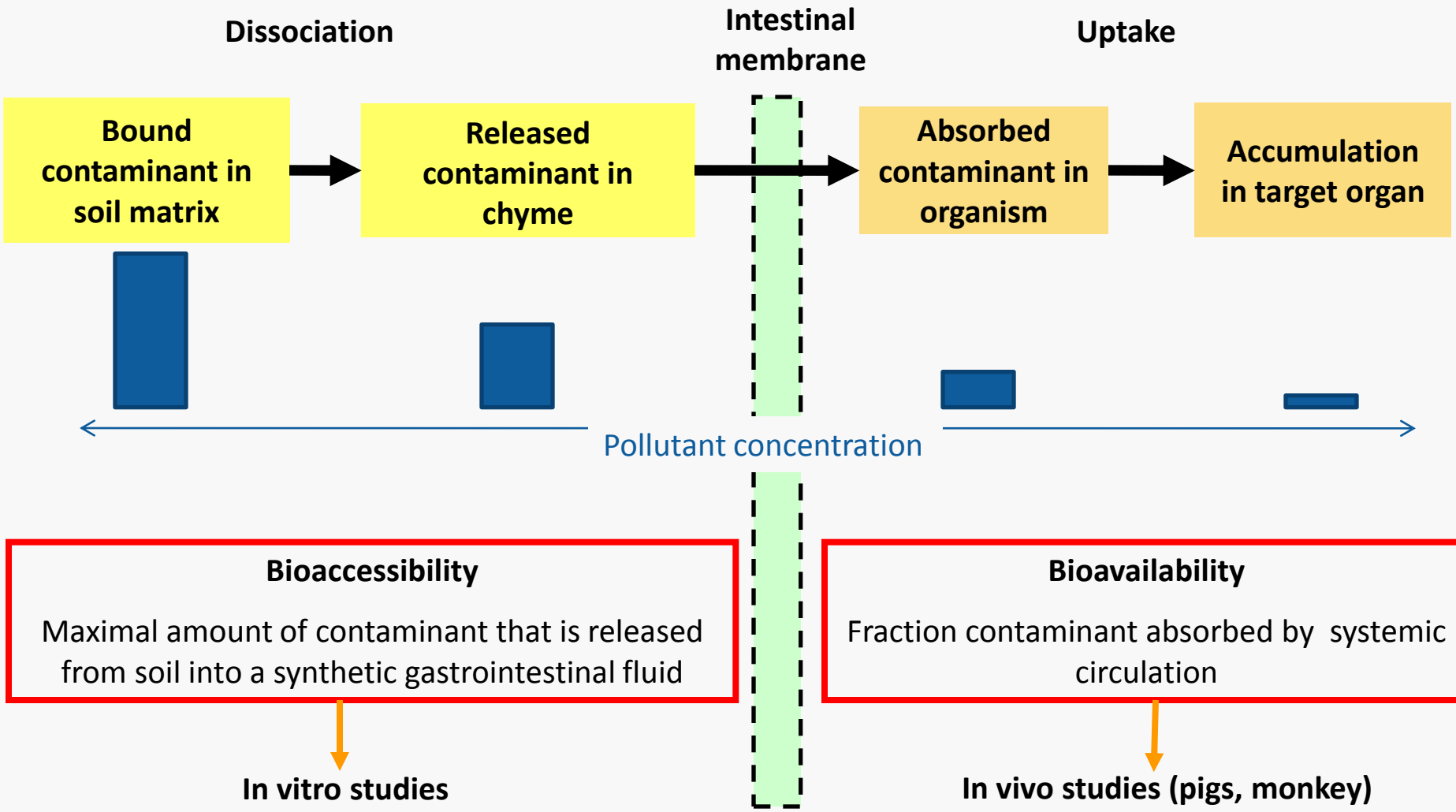
Plant uptake, bioavailability, bioaccessibility.

# Pollutant sorption (organics)

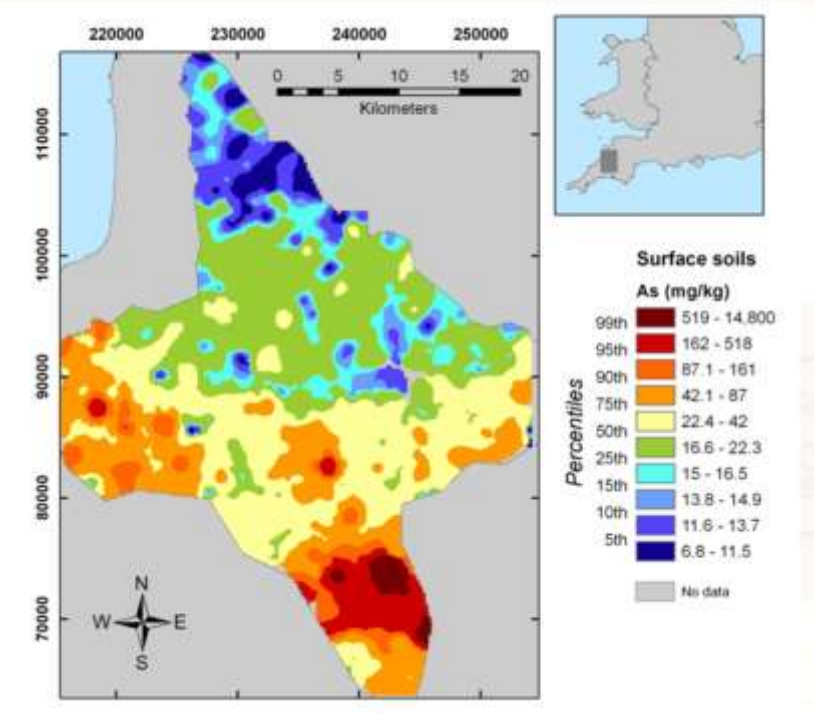


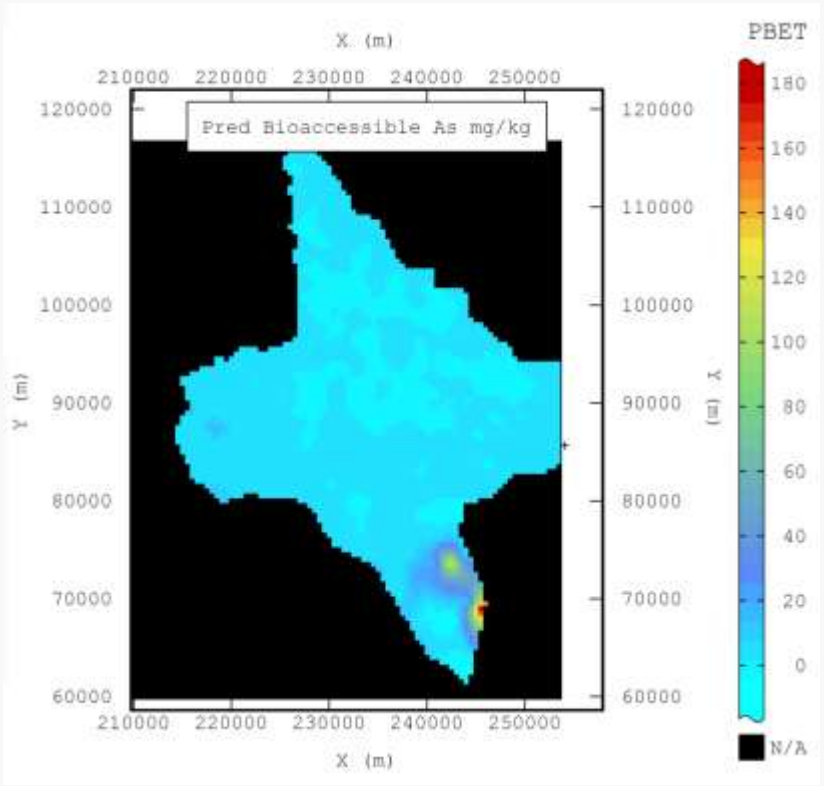



# Bioaccessibility and bioavailability



# Well researched for Arsenic




Controlled by mineralogy of parent material

Data from Mark Cave BGS

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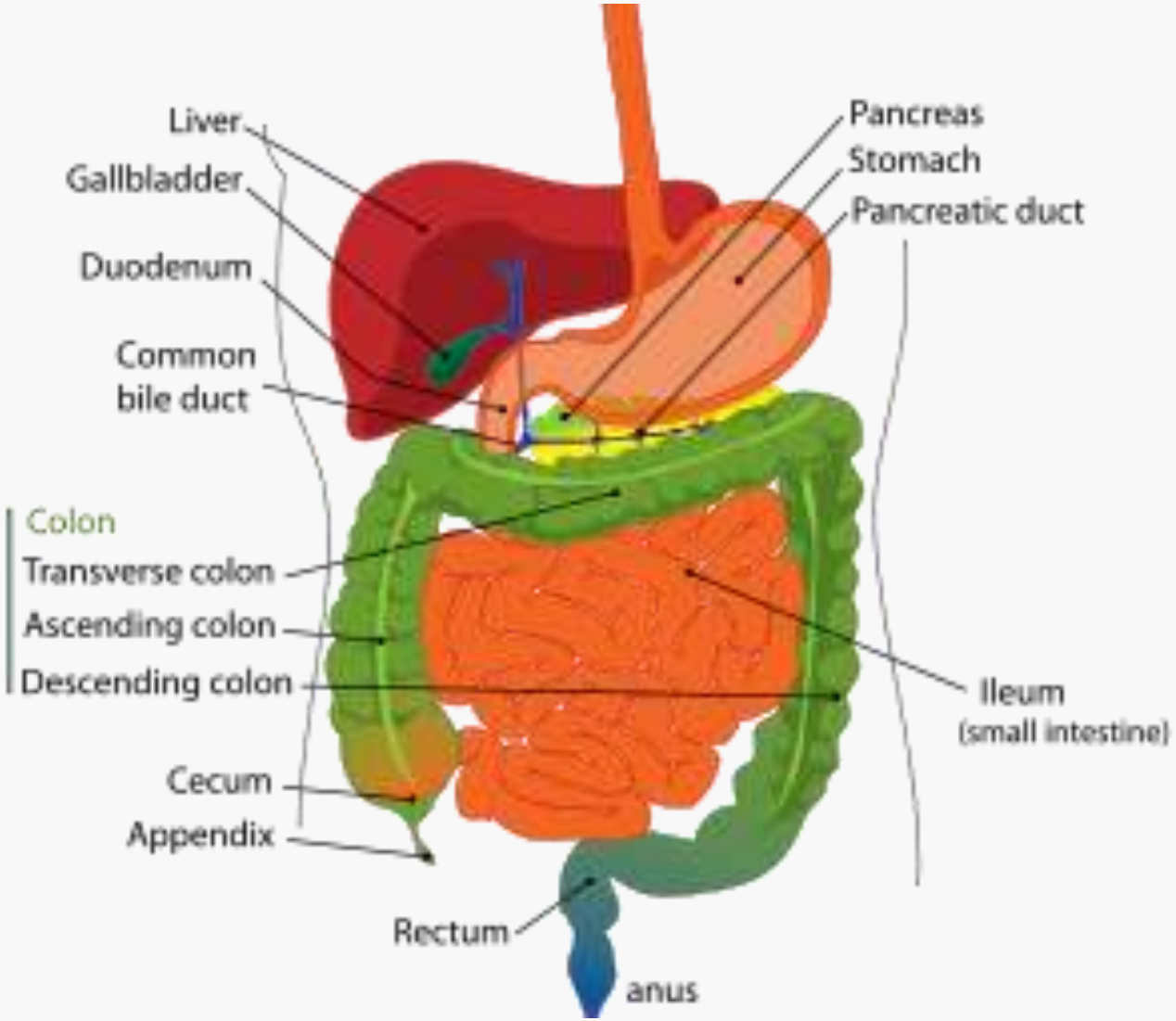
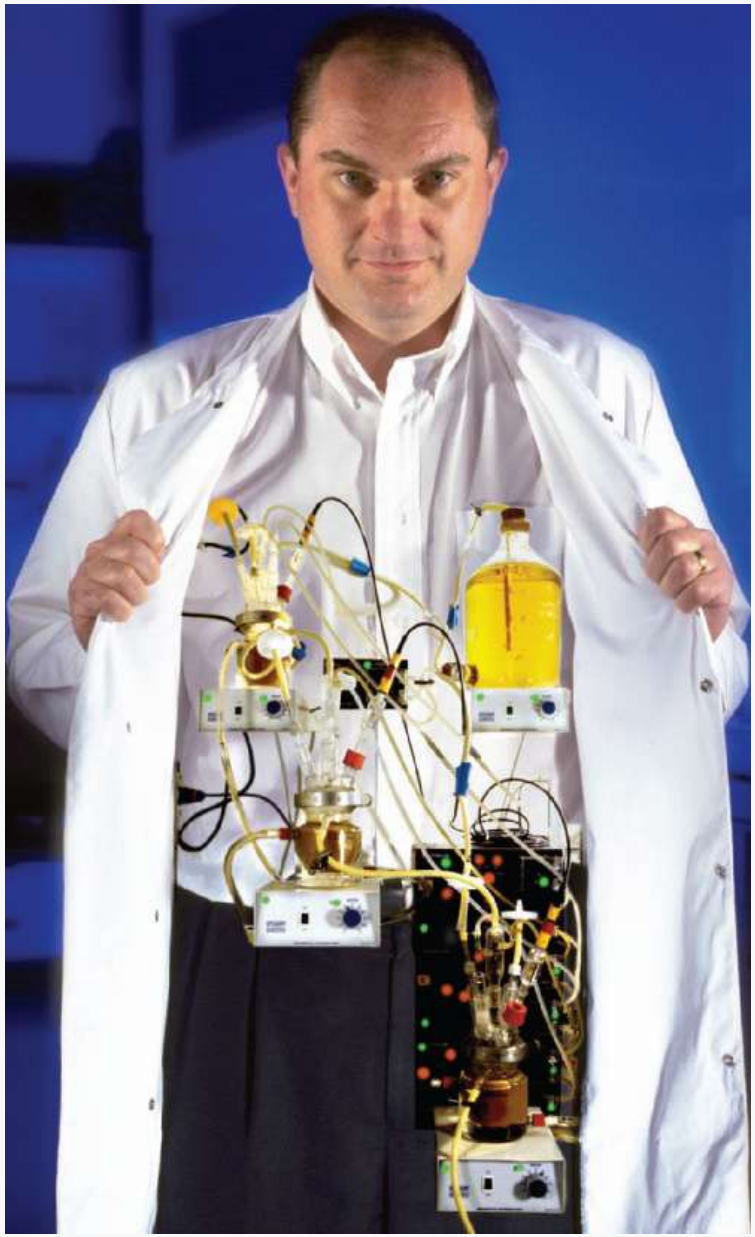
# The human gut



# Colon enhanced physiologically based extraction test system (CEPBET)



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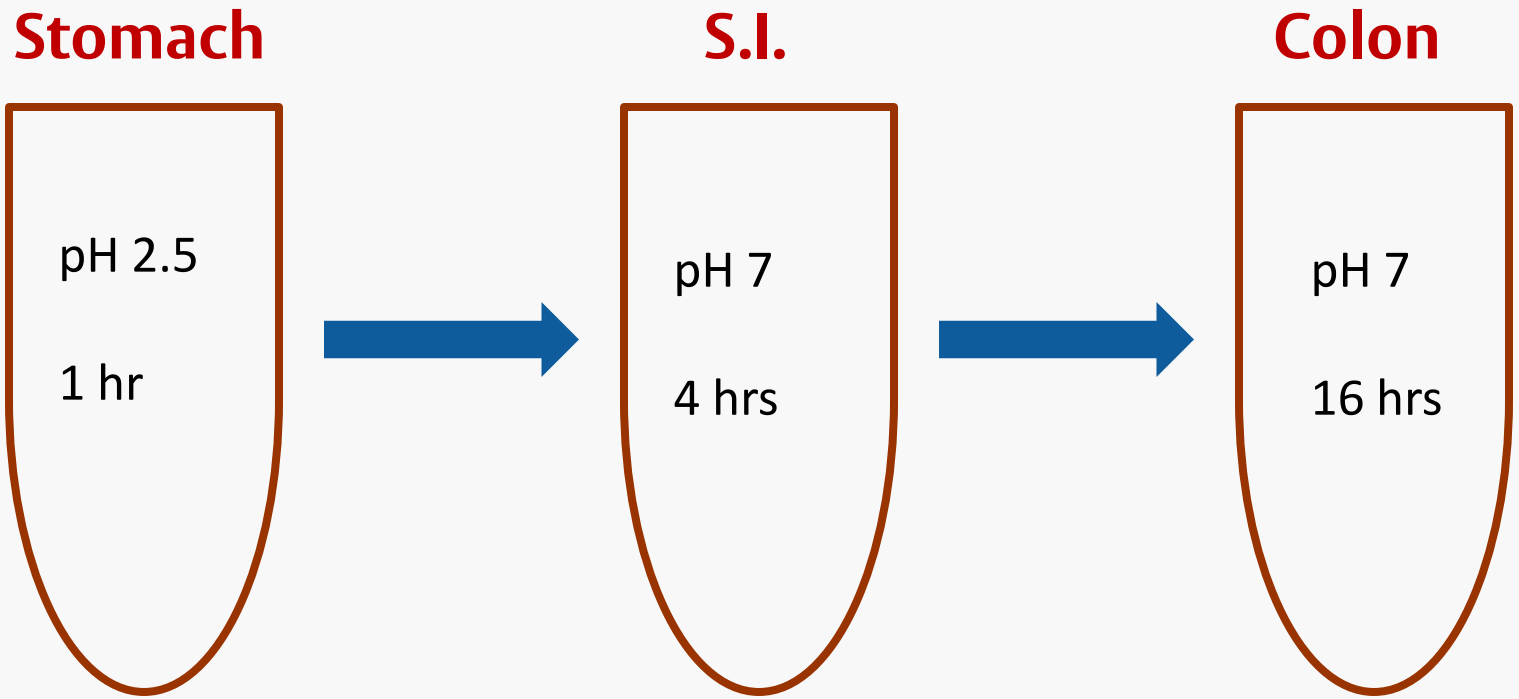


1.2 g of OECD soil spiked with PAH added to stomach medium (pepsin, NaCl, HCl).

Add bile, pancreatin, adjust pH

Sample centrifuged, and supernatant taken for analysis, colon medium added to soil pellet. Can be frozen.

# PBET + Colon.
# Spiked OECD soil

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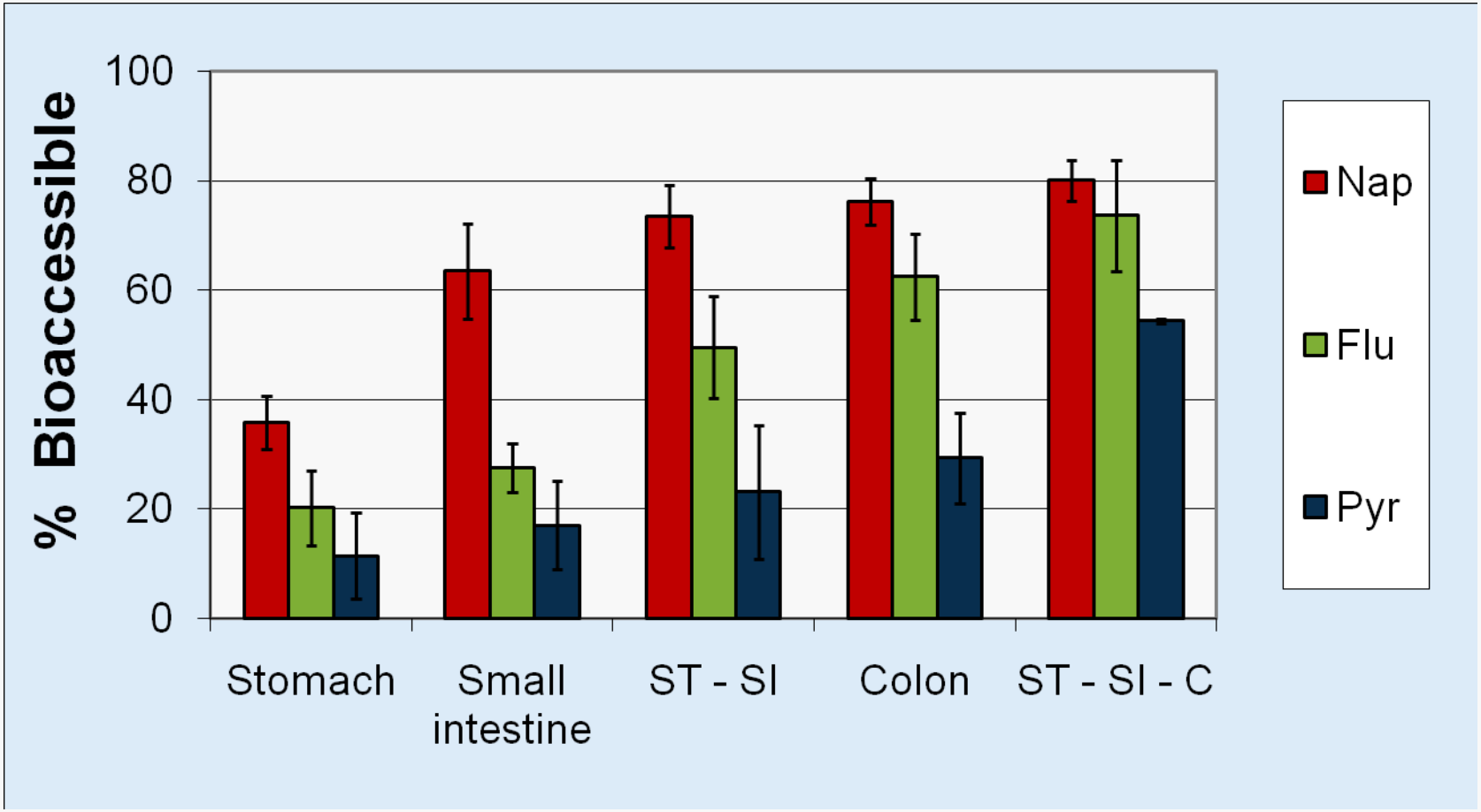

# PBET + Colon.
# Dust samples.

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