

OXALATE stones (Type I, calcium oxalate monohydrate, whewellite)

⚠️ THREE RISK FACTORS

1) Concentrated urine

Dark urine
Insufficient urine volume



HYDRATION (Dilution)

- Goal : **clear urine throughout the day**
- Target urine volume depends on stone burden
- Prefer water
- Drink especially in summer or during physical activity

2) Increased oxalate levels

Excess dietary intake (e.g. chocolate, nuts...)
Malabsorption and digestive disorders
Primary hyperoxaluria (rare)



✓ MANAGEMENT

DIET (Oxalate)

- See dietary booklet
- In particular : **nuts and chocolate**
- Tea : consider pre-infusing it
- Avoid vitamin C supplements

3) Low calcium intake

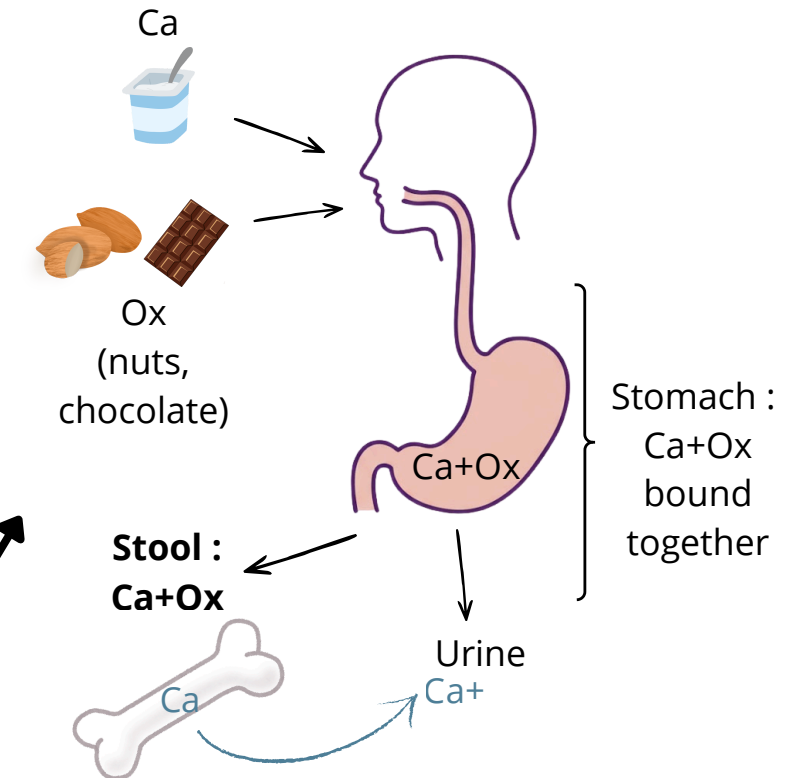
Insufficient dietary calcium



CALCIUM (Binding effect)

- Goal : **1 dairy product with each meal** (or when eating a piece of dark chocolate !)
- **Dietary calcium is protective because it binds oxalate in the digestive tract**

Dietary calcium binds oxalate in the digestive tract and promotes its elimination in the stool.



Without adequate calcium intake, oxalate passes into the urine and, combined with calcium from bone, contributes to kidney stone formation.

