Risk of Renal Stone
Master Logic Diagram (MLD)

RENAL STONE Formation

1. Increased urinary calcium excretion
2. Dietary factors
3. Increased urinary supersaturation
4. Mission duration - Mission resources
5. Hypercapnia
6. Pathologic

Dietary factors:
- Low voluntary fluid intake
- High sodium intake
- High protein intake
- High oxalate intake
- Dietary factors
- Low urinary pH
- Low magnesium intake
- Increased urinary calcium excretion
- Low citrate level
- Low urine volume
- Low voluntary fluid intake
- Excess crew workload that prevents fluid intake
- Insufficient mass quantity of fluid
- Excess calcium secretion from bone demineralization
- Low citrate level
- Low urine volume
- Insufficient mass quantity of fluid
- Genetic
- Randall's Plaques