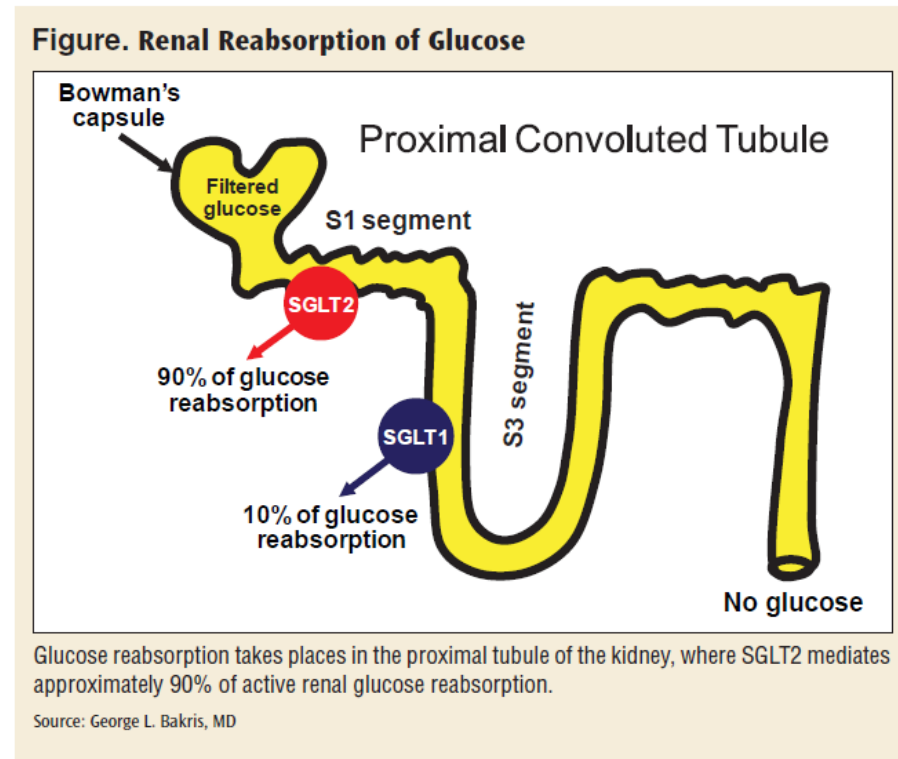


SGLT2 Inhibitors: A New Class of Diabetes Medications

The kidneys play an important role in the handling of glucose.

- Renal glucose filtration and reabsorption in non-diabetics = 180g/day

SGLT2 mediates approximately 90% of active renal glucose reabsorption.



Agent in Clinical Practice

- Canagliflozin: FDA approved for adults with type 2 diabetes mellitus

SGLT2 Inhibitors in Phase 3 Clinical Trials

- Dapagliflozin
- Empagliflozin
- Ipragliflozin

Non-glycemic Effects of SGLT2 Inhibitors Reported in Clinical Trials

1. Decreased systolic and diastolic blood pressure
2. Decreased weight
3. Hyperkalemia, hypermagnesemia, hyperphosphatemia
4. Increased HDL-C, increased non-HDL-C, increased LDL-C
5. Increased hematocrit
6. Decreased serum uric acid
7. Increased genital infections (balanitis and vulvovaginitis)