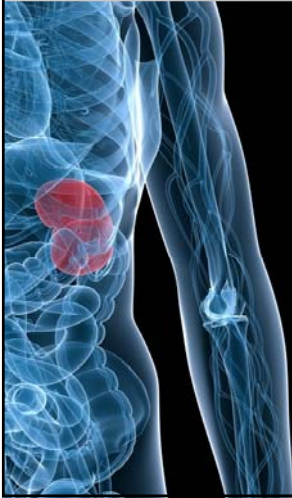


Role of calcium-sensing receptors in reducing the risk for calcium stones

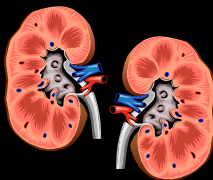
Kirsten Renkema, Ph.D.

Department of Physiology
Radboud University Nijmegen Medical
Centre
The Netherlands



Ca²⁺ homeostasis

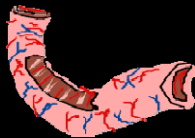
Kidney



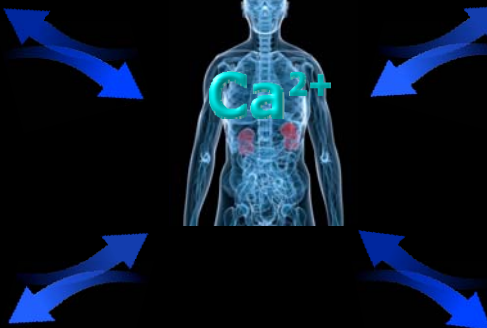
Bone



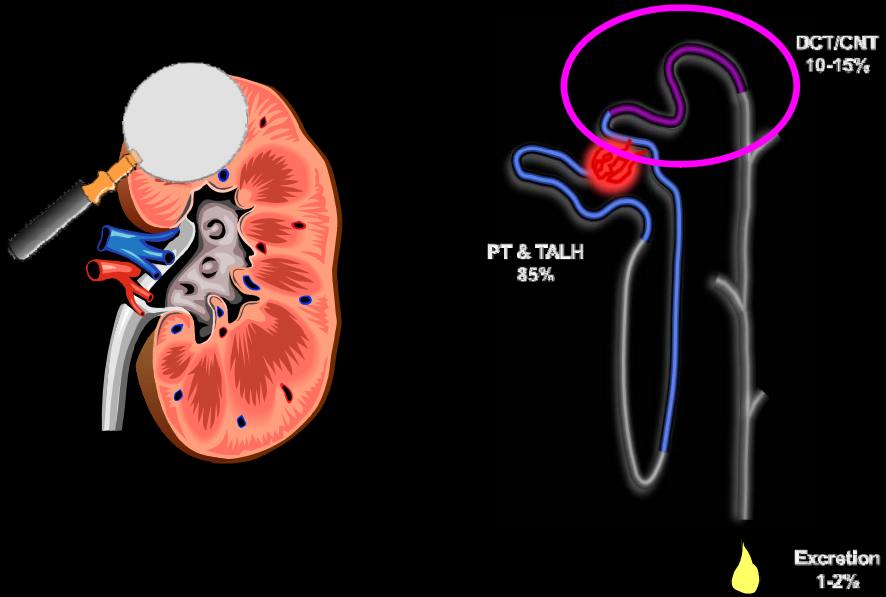
Intestine



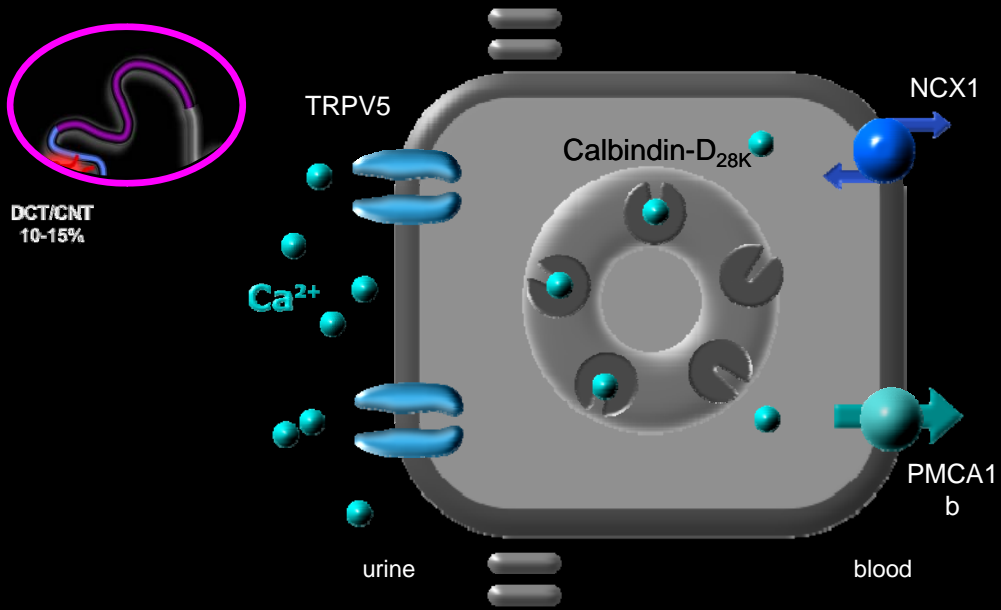
Parathyroid glands



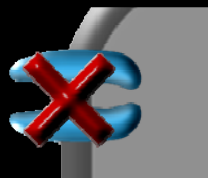
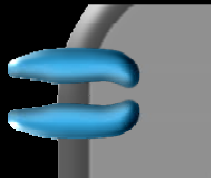
Ca²⁺ reabsorption



Active Ca²⁺ reabsorption



Trpv5 knockout mouse model



Trpv5^{+/+}



Trpv5^{-/-}

Inactivation of TRPV5 leads to hypercalciuria

Metabolic cage experiment

12-wks old



Trpv5^{+/+}

Trpv5^{-/-}

Analysis of 24-hrs urine

