MINERAL ABSORPTION Lumen Tight junction Blood Paracellular pathway Pio Tight junction Ca^{2+°}O **Q**1, 25(OH)2D3 Brush border-membrane Basolateral membrane **O** Na NPT2b Small intestinal epithelial cell **🌣**1, 25(OH)2D3 0 Ρi Mg²⁺O C_a^{2+} Nucleus **■**⊙4 DNA ? ∥ Na OHCO3 Cl^ċO[®].◀ K14734 **O**HCO3 3Na**⊙**⊶ CÎ 👁 Calbindin-D_{9K} NCX1 нсоз K14734 K14734 Na[†]O PMCA1b Galactose / Glucose **O**Ca **≁⊙**°. Ci K**©**≝ ΝάΟ 10 AAOO **₽**O Na⁺ Protein digestion and absorption Carbohydrate digestion and absorption Fe ○**⊙**__ Heme O HCP1 Transit iron pool **⊳**⊙Fe²⁺ Fe²⁺ K08370 Fe O Porphyrin and chlorophyll metabolism Storage K14736 ►O 2+ Zn K14739 ္အက်တ **ଂଠ**ୁ ATP7A transGolgi network (TNG) $\mathrm{Cu}^{\mathrm{t}}\mathcal{O}_{i}$ $C_{\mathbf{T}}^{\dagger}\mathbf{O}$ Cu^{2+} Tight junction Paracellular pathway 04978 5/30/13 (c) Kanehisa Laboratories