

Glucose and Gluconate Metabolism in "Drinker" and "Nondrinker" Rats

Segovia-Riquelme,

Campos,

Solodkowska,

Figuerola-Camps,

Mardones,

The rate of combustion of glucose-1-C¹⁴, 6-C¹⁴ or U-C¹⁴ (10 mmole/kg) and of gluconate-1-C¹⁴ (1 μ mole/kg) to expired CO₂ in intact rats of both sexes belonging to Ute "drinker" and "nondrinker" strains, was studied. Females of both strains combusted glucose at a significantly higher rate than Ute respective males. The males of the "drinker" strain combusted carbon 1 of glucose at a significantly higher rate than Ute males of the "nondrinker" one. Rats of both sexes belonging to the "drinker" strain combusted carbon 1 of gluconate at significantly higher rates than those of the "nondrinker" one. In each strain, females exhibited a significantly higher combustion rate of this carbon than the males. © 1964 S. Karger AG, Basel.