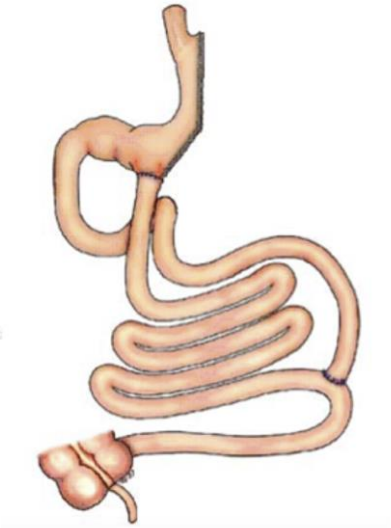
Transit bipartition and intestinal glc absorption



François Pattou

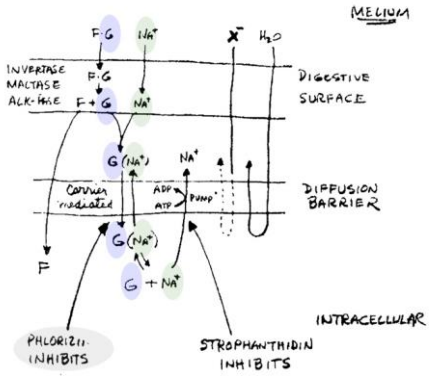
Department of Endocrine and Metabolic Surgery , CHRU Lille

UMR1190 Translational Research in Diabetes , INSERM - Univ Lille

European Genomic Institute for Diabetes, Lille, France

Intestinal glucose absorption

Sodium-glucose co-transporter 1



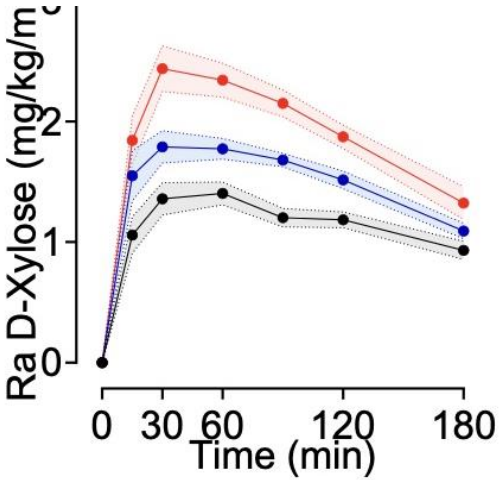
Bob Crane 1960

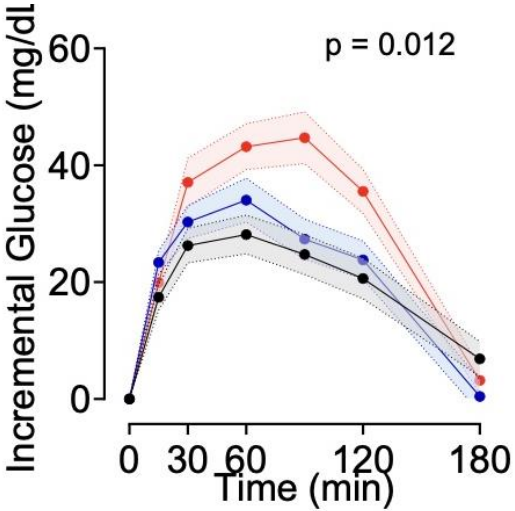
oral Fluorodeoxyglucose / TEP

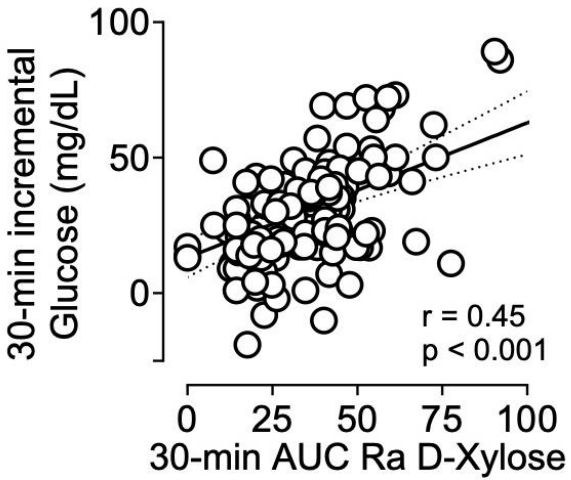
Lorea Zubiaga et al. *iScience 2023*

D-Xylose is a biomarker of glc absorption

Mixed meal Xylose test in 130 patients

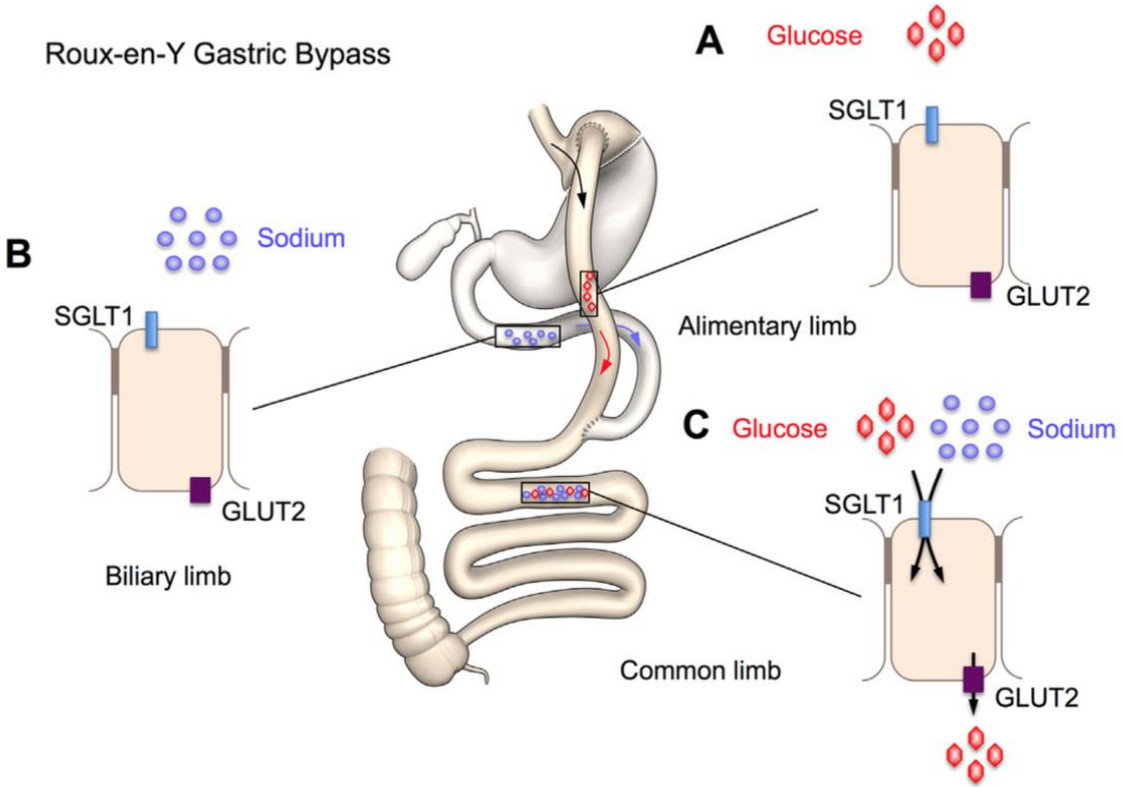






(Goutchtat et al (submitted))

Glc is only absorbed in the Common limb

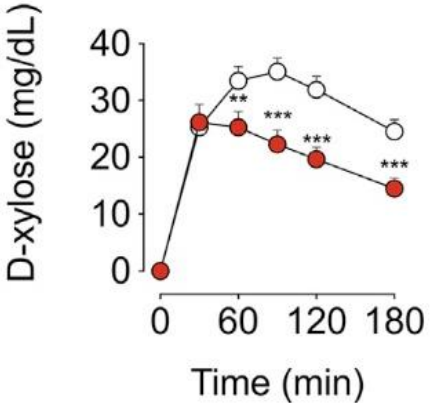


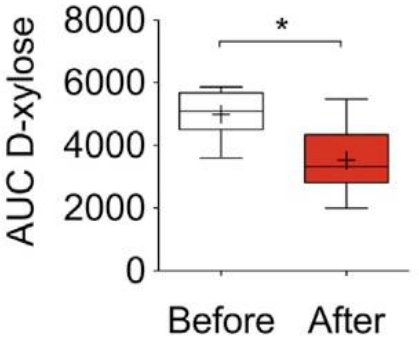
Gregory Baud et al. *Cell Metabolism 2016*

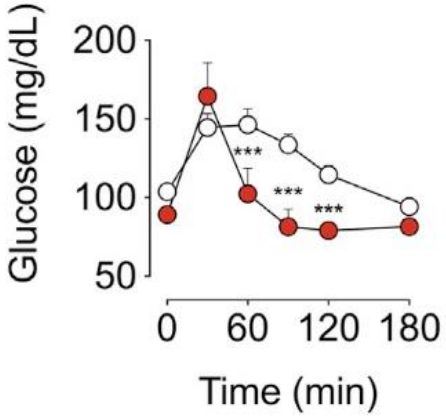
Laferrere & Pattou *Cell Metabolism 2019*

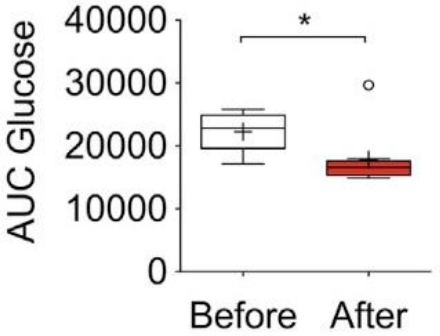
RYGB reduces intestinal glc absorption

Mixed meal
Xylose test
(n=9)



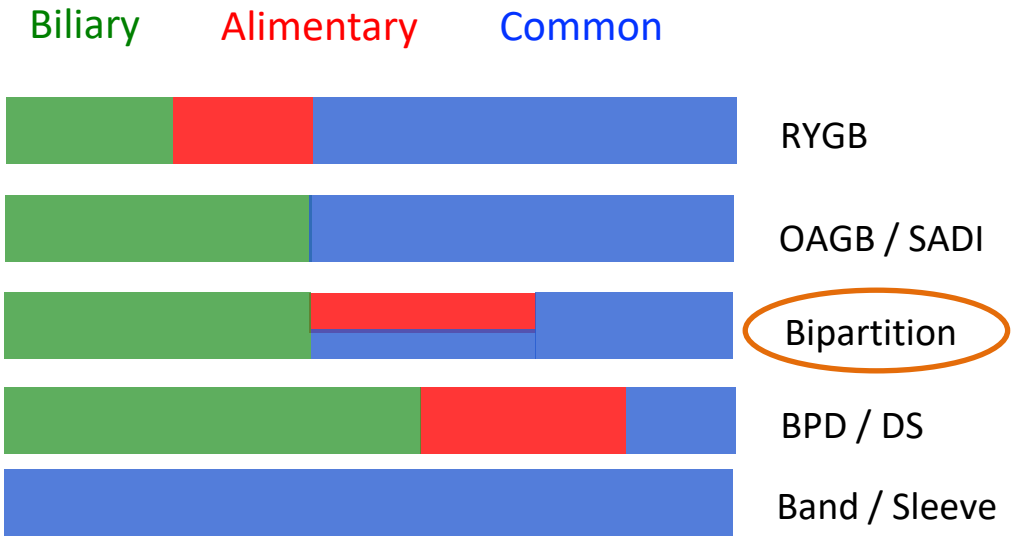


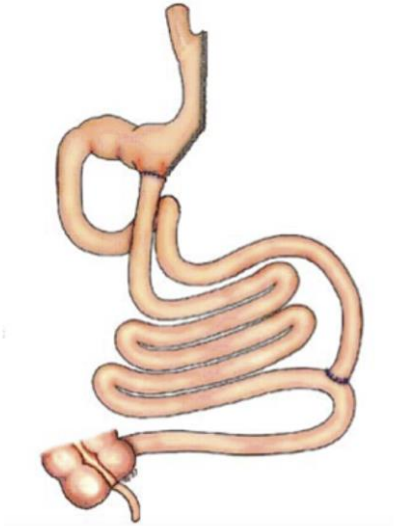




Gregory Baud et al.
Cell Metabolism 2016

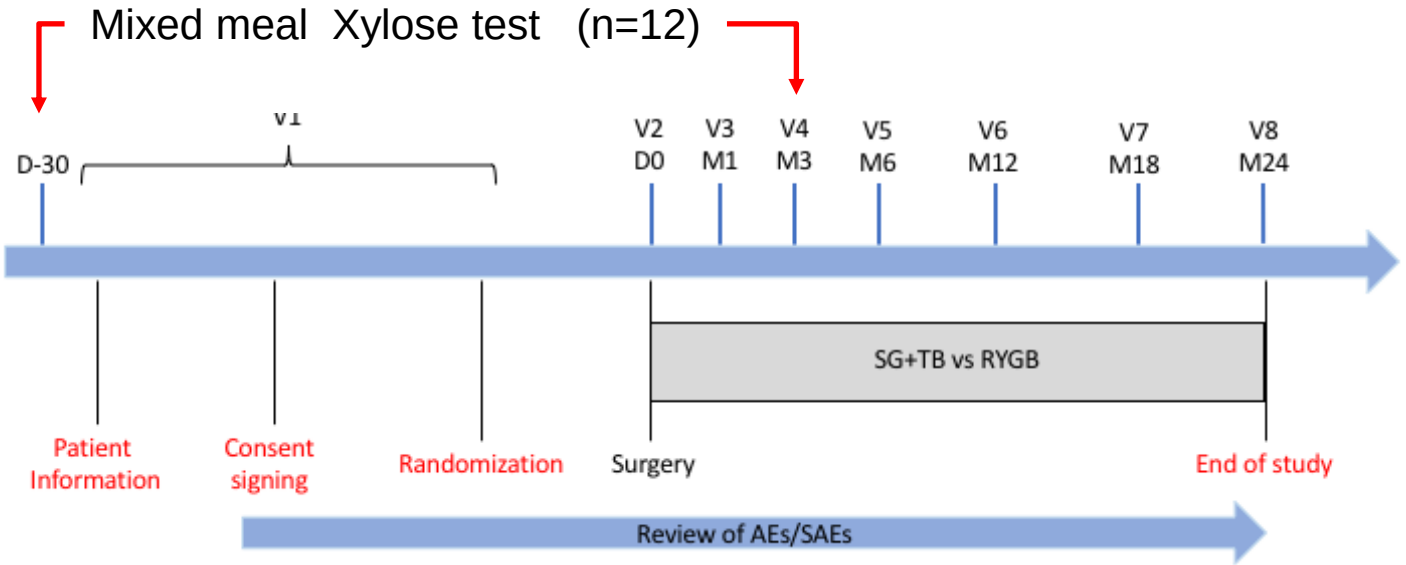
Surgical gastrointestinal diversion(s)





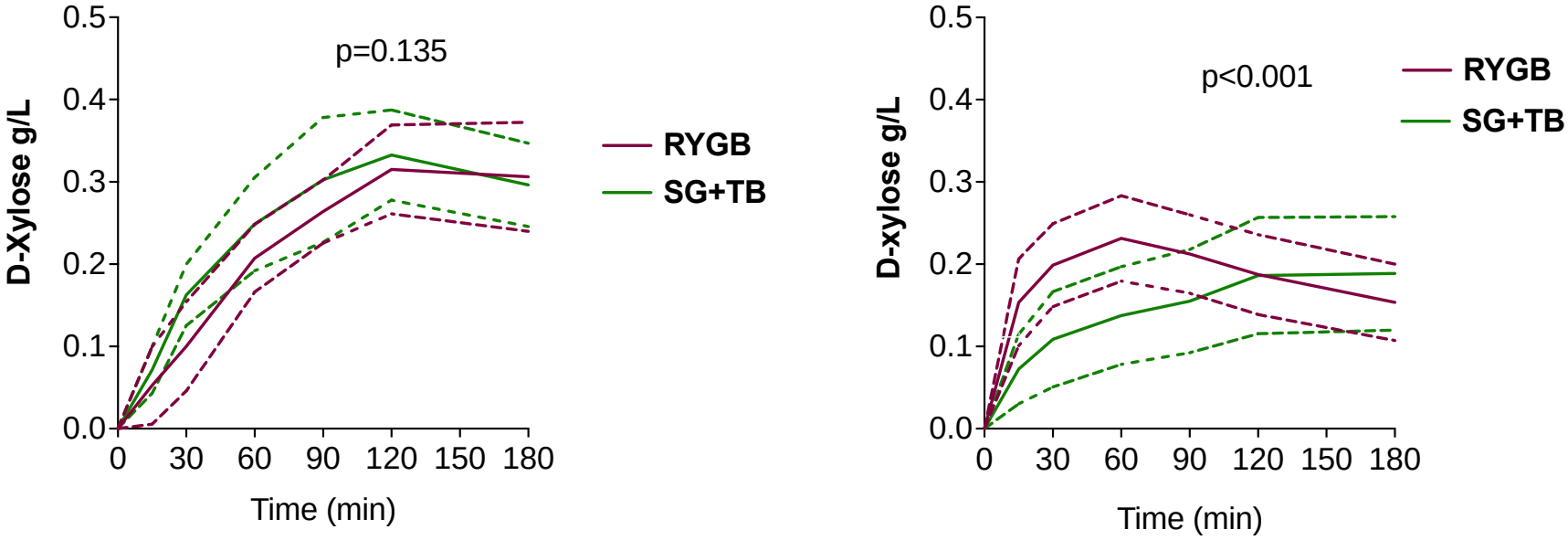
BIPASS - Transit bipartition vs RYGBP (RCT)

Robert Caiazzo (PI)



Mixed meal test : Xylose

Before surgery (n=6 per group) After surgery

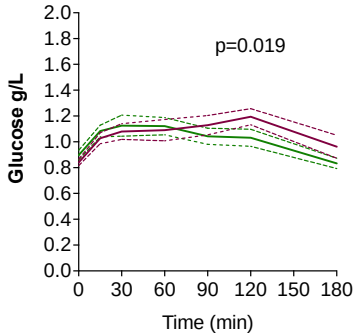


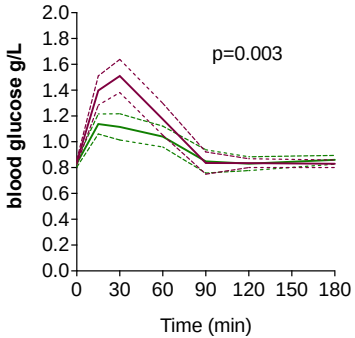
Mixed meal test : Glc response

Before surgery

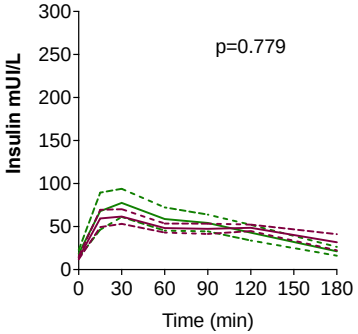
After surgery

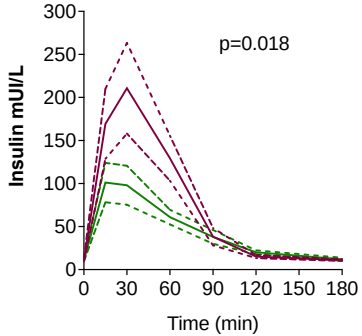
Blood glucose





Plasma insulin





RYGB

SG+TB

Transit bipartition reduces intestinal glucose absorption