Title: Nutritional profile of rodent diets impacts experimental reproducibility in microbiome preclinical

research

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SUPPLEMENTARY FIGURES

Supplementary Figure 1. In vivo study protocol

	1 week	3 weeks]
A	LabDiet 5066 (n=10)	Tissue harvested	
В	LabDiet 5066 (n=10)	LabDiet 5066	Tissue harvested
C	LabDiet 5066 (n=10)	Research Diets AIN93G	Tissue harvested
D	LabDiet 5066 (n=10)	LabDiet 5001	Tissue harvested

Supplementary Figure 2. Diets used in the United States of America, Canada, Australia, India, Ireland, Antigua and Barbuda. A wide variety of commercially available rodent diets were reported to be used by universities and industry. Those marked in black indicate diets assessed in dietary compositional studies (study aim 2).



Supplementary Figure 3. The impact of different commercially available rodent diets on gut

microbiota composition. Analysis conducted using MaAsLin (Multivariate Analysis by Linear Models)[26] of the taxonomy table at genus level. All P values were corrected for FDR, allowing a 5% of FDR.



In violet the diets that were significantly associated with changes in the respective bacterial genera

Supplementary Figure 4. (A) Short-chain fatty acid analysis of cecal contents (displayed with median). (B) Branched-chain fatty acid analysis of cecal contents (displayed with mean). Females are shown here as pink dots and males as blue dots. Statistical analysis conducted via one-way ANOVA.

A) Sacrificed at baseline



