

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Title: The baseline characteristics of the participants with Crohn's disease and healthy controls.

Description: This file provides the baseline demographic and clinical characteristics of the human participants in the study. The table compares the Crohn's disease (CD) patient group and the healthy control (HC) group in terms of sample size, sex distribution (number of males/females), age, and body mass index (BMI). Exact P-values from two-sided Chi-squared tests (for sex) and two-sided Welch's t-tests (for age and BMI) are included to assess the statistical significance of inter-group differences.

File Name: Supplementary Data 2

Title: Detailed composition of the regular chow diet used for mouse experiments.

Description: This file details the complete nutritional composition of the standard rodent chow (Product ID: P1101F-25, Manufacturer: Suzhou SHUANGSHI) used to feed mice in this study. The table includes precise amounts of macronutrients (crude protein, fat, carbohydrate, fiber), minerals (calcium, phosphorus, iron, zinc, etc.), vitamins (A, D, E, K, B complex, etc.), and all essential L-amino acids. The total energy content and the energy percentage derived from protein, carbohydrate, and fat are provided at the end.

File Name: Supplementary Data 3

Title: Untargeted metabolomics profile of human fecal samples.

Description: This file contains the primary dataset from untargeted metabolomic profiling of human fecal samples. The table lists annotated metabolites with information including compound name, abbreviation, putative microbial origin, KEGG and HMDB identifiers, chemical class, and metabolic pathway.

File Name: Supplementary Data 4

Title: Method validation parameters for the quantification of Indole-3-propionic acid (IPA).

Description: This file summarizes the key method validation results for the quantitative analysis of Indole-3-propionic acid (IPA). Reported parameters include the limit of detection (LOD), limit of quantification (LOQ), intra-day precision, repeatability precision, linear regression equation, linear range, correlation coefficient, and recovery rate.