Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: Characteristics of fecal metagenomics samples included in the study

File name: Supplementary Data 2

Description: Differential microbial species between EBW-CRC and EBW-CTR

File name: Supplementary Data 3

Description: Differential microbial species between lean-CRC and lean-CTR

File name: Supplementary Data 4

Description: Common differential species between EBW-CRC and lean-CRC

File name: Supplementary Data 5

Description: Differential species specific for EBW-CRC

File name: Supplementary Data 6

Description: Differential species specific for lean-CRC

File name: Supplementary Data 7

Description: Co-abundance correlations in EBW-CRC

File name: Supplementary Data 8

Description: Co-abundance correlations in EBW-CTR

File name: Supplementary Data 9

Description: Co-abundance correlations in lean-CRC

File name: Supplementary Data 10

Description: Co-abundance correlations in lean-CTR

File name: Supplementary Data 11

Description: Differential KO genes between EBW-CRC and EBW-CTR

File name: Supplementary Data 12

Description: Differential KO genes between lean-CRC and lean-CTR

File name: Supplementary Data 13

Description: Common differential KO genes between EBW-CRC and lean-CRC

File name: Supplementary Data 14

Description: Differential KO genes specific for EBW-CRC

File name: Supplementary Data 15

Description: Differential KO genes specific for lean-CRC

File name: Supplementary Data 16

Description: Differential pathways between EBW-CRC and EBW-CTR

File name: Supplementary Data 17

Description: Differential pathways between lean-CRC and lean-CTR

File name: Supplementary Data 18

Description: Performances of the models constructed with different combinations of multi-

kingdom signatures for lean-CRC

File name: Supplementary Data 19

Description: Associations between differential species and differential pathways in EBW-CRC

File name: Supplementary Data 20

Description: Associations between differential species and differential pathways in lean-CRC

File name: Supplementary Data 21

Description: Numerical source data for all graphs and charts in the manuscript