

Gut microbiota profiles and characterization of cultivable fungal isolates in IBS patients

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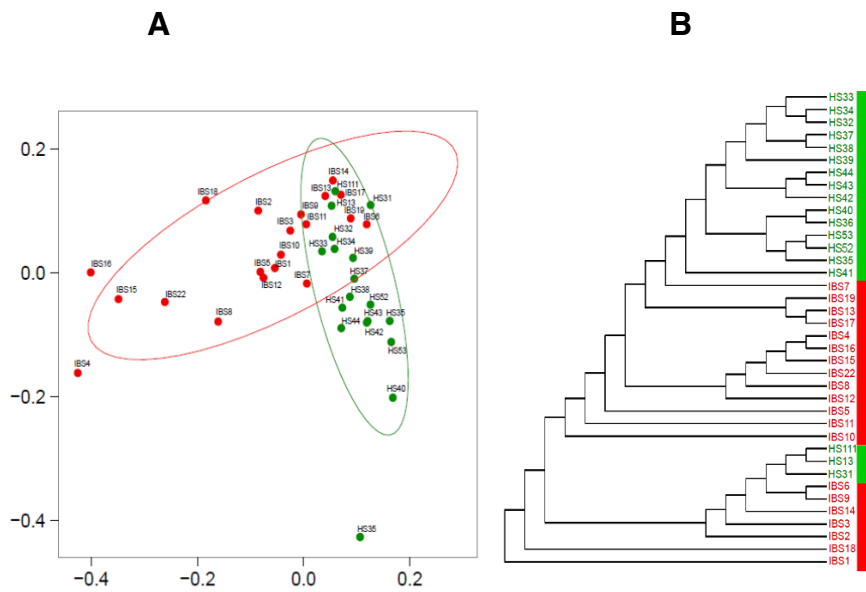
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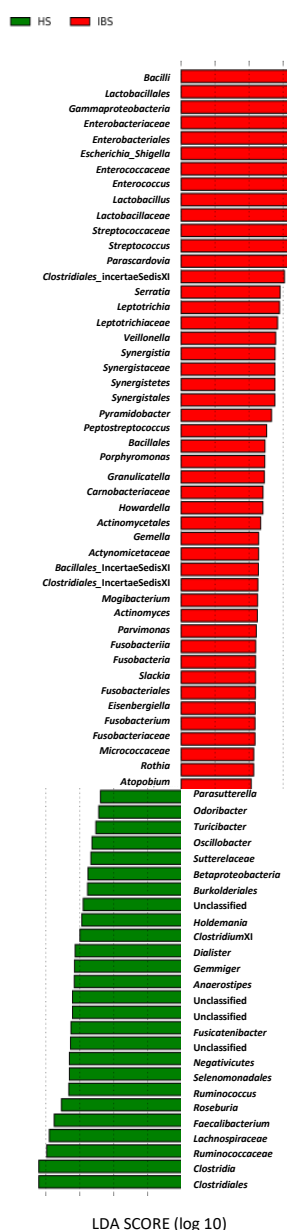
Supplementary Table S1. Characteristics of study participants and hematological parameters at the moment of fecal sampling.

	IBS subjects (n = 20)	HS subjects (n = 18)
Age, years (mean $\pm$ SD)	46.4 $\pm$ 6.3	45.4 $\pm$ 5.8
Gender, male (n)	13	10
BMI (mean $\pm$ SD)	22 $\pm$ SD	23 $\pm$ SD
Smokers, (n)	7	6
Symptoms		
Constipated	11 (55%)	
Abdominal pain	7 (35%)	
Bloating	14 (70%)	
Flatulence	4 (20%)	
Diarrhea	9 (45%)	
Hematological parameters		
White blood cell count ($\times 10^9/L$)	5393.4 $\pm$ 1411.8	5700 $\pm$ 1310*
Creatinine ($\mu\text{mol/L}$)	0.905 $\pm$ 0.2	0.7 $\pm$ 0.2 *
Urea (mg/dL)	45.6 $\pm$ 5.8	46.4 $\pm$ 3.5 *
Cholesterol (mg/dL)	188.2 $\pm$ 25.7	175.3 $\pm$ 23.6 *
Glucose (mg/dL)	99.6 $\pm$ 14.7	91.5 $\pm$ 13 *
ESR (mm/h)	10.3 $\pm$ 3.1	5.2 $\pm$ 2.2**

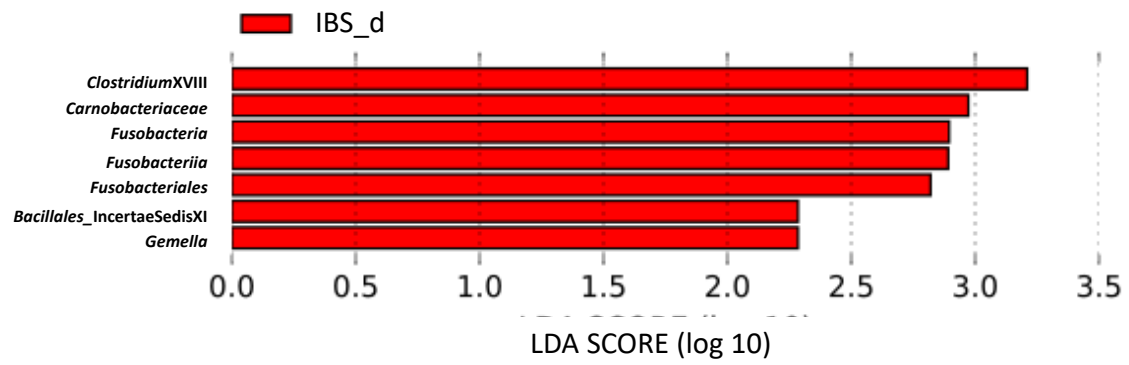
BMI: body mass index; ESR: erythrocyte sedimentation rate. *, not significant ($p>0.5$); **, significant ($p>0.01$)



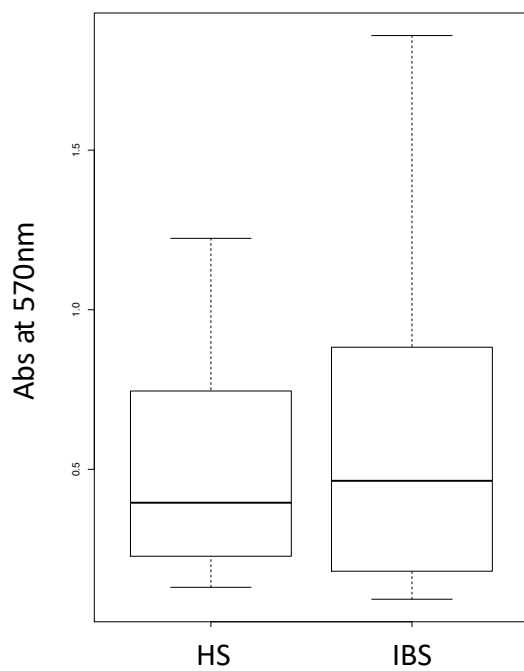
Supplementary Fig. S1 Gut microbial community structure of the two studied cohorts by restriction profiles of microbial communities obtained by ARDRA. A) Sample distribution of IBS (red) and HS subjects (green), according to gut microbiota composition by Multidimensional scaling analysis and B) UPGMA hierarchical clustering calculated on Jaccard distances of the restriction profiles.



Supplementary Figure S2. Differences in bacterial taxa among IBS and HS. LEfSe analysis shows a statistically significant enrichment of bacterial genera in the two cohorts. LEfSe results indicate a sequentially significant ranking among groups (Alpha value = 0.05 for the factorial Kruskal–Wallis test among classes). The threshold for the logarithmic LDA score was 2.0.



Supplementary Fig. S3. Differences in bacterial taxa among IBS patients with symptoms of constipation (IBS-C) or diarrhea (IBS-D). LEfSe analysis shows a statistically significant enrichment of bacterial genera. LEfSe results indicate a sequentially significant ranking among groups (Alpha value=0.05 for the factorial Kruskal–Wallis test among classes). The threshold for the logarithmic LDA score was 2.0.



Supplementary Fig. S4. Box plot of biofilm formation by HS and IBS *C. albicans* isolates. Box plots are defined by the 25th and 75th percentiles. Center line represents the median (50th percentile). Whiskers are defined as 1.5 times the interquartile range (IQR, 75th–25th percentile), plus or minus the 75th and 25th percentiles, respectively. Y-axis, Abs (absorbance) at 570 nm.

