

The blood pressure lowering effect of beetroot juice is impaired in periodontitis and recovered after periodontal treatment

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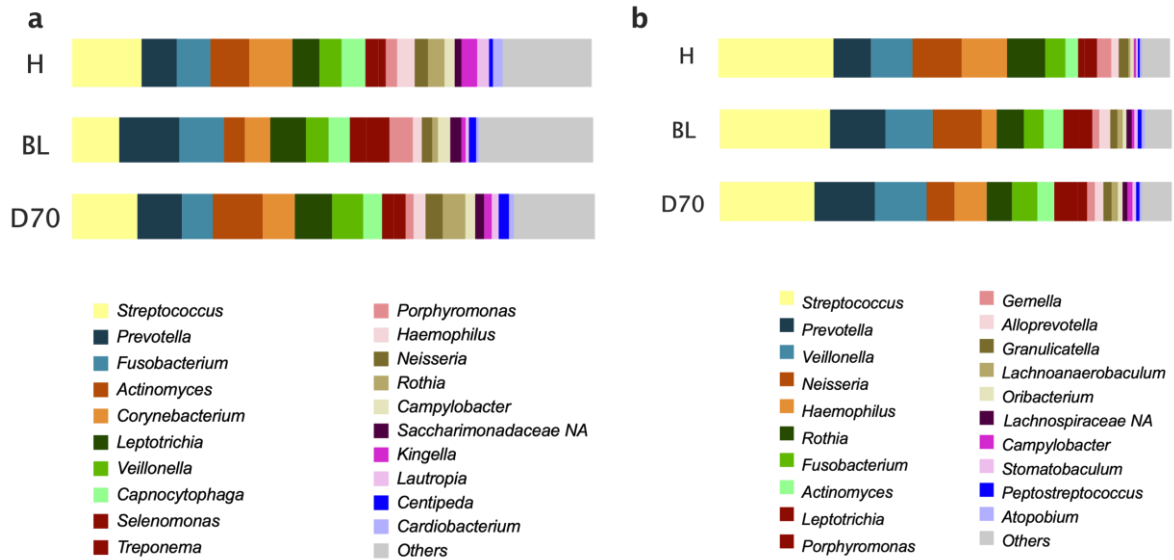
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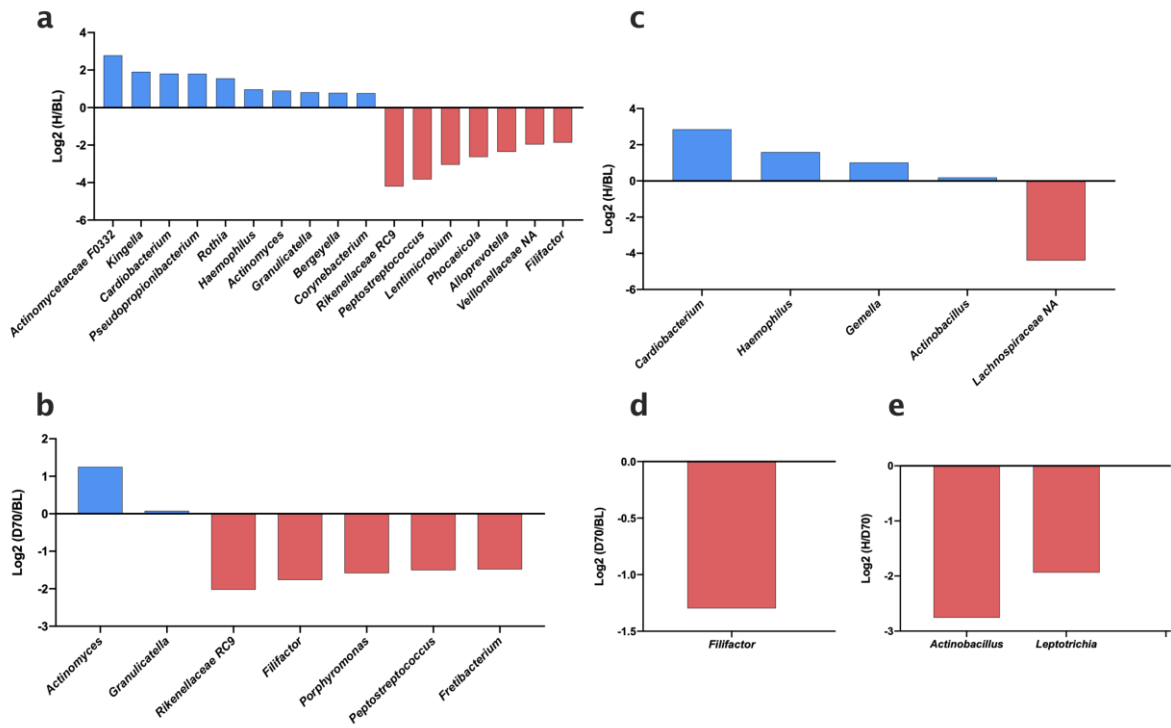
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Supplementary Information (2 tables, 2 figures)



Supplementary Figure 1. Relative bacterial abundances in subgingival plaque (A) and tongue coating (B). Bar graphs show the top 30 most abundant genera in healthy individuals (H) and periodontitis patients before (BL) and after periodontal treatment (D70). Relative abundances are shown.



Supplementary Figure 2. Log₂ fold change of all significantly different genera in subgingival plaque (A, B) and tongue (C-E). Bar graphs show comparisons between healthy individuals (H) and periodontitis patients at baseline (BL) and 70 days after treatment (D70). The groups that are compared are H and BL (A), and D70 and BL (B) in subgingival plaque, as well as H and BL (C), D70 and BL (D), and H and D70 (E) in tongue coating. Blue bars (positive values) indicate genera which increased significantly after treatment or are more abundant in health; red bars (negative values) indicate genera which significantly decreased after treatment or are more abundant in disease. To calculate the ratios, relative abundances were used. All plotted organisms were significantly different (adjusted p-values < 0.05) between two groups after standardization of the compositional data by ANCOM-BC. Organisms marked with NA indicate that they could not be assigned at the genus level.

Supplementary Table 1. Spearman-Rho correlation between relative abundance of subgingival plaque species with clinical parameters. Displaying p(adjusted)<0.05, data displayed as Spearman R (adjusted p-value)

	BoP	PD	CAL	PoC	SBP	DBP
<i>Gemella NA</i>	-0.56 (p<0.05)	-	-		-	-
<i>Rothia dentocariosa</i>	-0.56 (p<0.05)	-	-	-0.57 (p<0.05)	-	-
<i>Kingella oralis</i>	-0.54 (p<0.05)	-	-	-0.52 (p<0.05)	-	-
<i>Phocaeicola abscessus</i>	0.52 (p<0.05)	-	-	0.53 (p<0.05)	-	-
<i>Prevotella intermedia</i>	0.51 (p<0.05)	-	-	0.57 (p<0.05)	-	-
<i>Treponema maltophilum</i>	0.52 (p<0.05)	-	-	-	-	-
<i>Cardiobacterium hominis</i>	-	-0.50 (p<0.05)	-0.55 (p<0.05)	-0.52 (p<0.05)	-	-
<i>Actinomycetaceae F0332 NA</i>	-	-	-	-0.61 (p<0.01)	-	-
<i>Actinomyces gerencseriae</i>	-	-	-	-0.58 (p<0.05)	-	-
<i>Fretibacterium NA</i>	-	-	-	0.57 (p<0.05)	-	-
<i>Peptostreptococcus stomatis</i>	-	-	-	0.56 (p<0.05)	-	-
<i>Veillonellaceae NA</i>	-	-	-	0.50 (p<0.05)	-	-
<i>Leptotrichia hongkongensis</i>	-	-	-	-0.49 (p<0.05)	-	-
<i>Veillonella dispar</i>	-	-	-	-0.49 (p<0.05)	-	-
<i>Granulicatella NA</i>	-	-	-	-0.49 (p<0.05)	-	-
<i>Veillonella atypica</i>	-	-	-	-	0.48 (p<0.05)	
<i>Desulfobulbus NA</i>	-	-	-	-	0.47 (p<0.05)	0.57 (p<0.01)
<i>TM7x NA</i>	-	-	-	-	-0.41 (p<0.05)	-
<i>Kingella NA</i>	-	-	-	-	-	-0.43 (p<0.05)

Supplementary Table 2. Spearman-Rho correlation between relative abundance of tongue species with clinical parameters. Displaying p(adjusted)<0.05, data displayed as Spearman R (adjusted p-value).

	BoP	PD	CAL	POC	SBP	DBP
<i>Rothia dentocariosa</i>	-0.63 (p<0.01)	-	-	-	-	-
<i>Actinomyces massiliensis</i>	-0.62 (p<0.01)	-	-	-	-	-
<i>Lautropia mirabilis</i>	-0.54 (p<0.05)	-	-0.58 (p<0.05)	-	-	-
<i>Actinobacillus pleuropneumoniae</i>	-0.54 (p<0.05)	-	-0.68 (p<0.01)	-	-	-
<i>Streptococcus</i> NA	-0.51 (p<0.05)	-	-	-	-	-
<i>Veillonella</i> NA	-0.51 (p<0.05)	-	-	-0.49 (p<0.05)	-	-
<i>Kingella oralis</i>	-0.51 (p<0.05)	-	-	-	-	-
<i>Actinobacillus pleuropneumoniae</i>	-	-0.52 (p<0.05)	-	-0.60 (p<0.05)	-	-
<i>Veillonella rogosae</i>	-	-0.50 (p<0.05)	-0.52 (p<0.05)	-	-	-
<i>Veillonella</i> NA	-	-0.49 (p<0.05)	-0.59 (p<0.05)	-	-	-
<i>Gemella sanguinis</i>	-	-	-0.58 (p<0.05)	-0.49 (p<0.05)	-	-
<i>Veillonella massiliensis</i>	-	-	-0.53 (p<0.05)		-	-
<i>Haemophilus</i> NA	-	-	-0.53 (p<0.05)	-0.55 (p<0.05)	-	-
<i>Bergeyella</i> NA	-	-	-0.51 (p<0.05)	-	-	-
<i>Cardiobacterium hominis</i>	-	-	-0.52 (p<0.05)	-	-	-
<i>Actinomycetaceae</i> F0332 NA	-	-	-	-0.49 (p<0.05)	-	-
<i>Leptotrichia wadei</i>	-	-	-	-	0.48 (p<0.05)	-
<i>Veillonellaceae</i> NA	-	-	-	-	0.43 (p<0.05)	0.47 (p<0.05)
<i>Tannerella forsythia</i>	-	-	-	-	0.42 (p<0.05)	0.50 (p<0.05)
<i>Corynebacterium durum</i>	-	-	-	-	-	-0.44 (p<0.05)
<i>Kingella</i> NA	-	-	-	-	-	-0.42 (p<0.05)