

**Table S2. Relative abundances of the bacterial groups from the palm surfaces sampled in the smaller-scale study designed to specifically examine the influence of hand washing on bacterial community composition**

	Sex		Time since hand washing			
	Female	Male	0 hours	2 hours	4 hours	6 hours
No. of individual swabs collected	16	16	8	8	8	8
No. of sequences	5628	7547	2971	3116	3608	3480
Acidobacteria	0.11 (0.05)	0.02 (0.02)	0.00 (0.00)	0.09 (0.09)	0.10 (0.05)	0.06 (0.04)
Actinobacteria	0.36 (0.14)	0.10 (0.06)	0.35 (0.26)	0.17 (0.09)	0.28 (0.15)	0.11 (0.06)
Corynebacterium	2.67 (0.50)	3.58 (0.78)	5.91 (1.25)	2.43 (0.48)	2.40 (0.37)	1.75 (0.63)
Frankineae	0.35 (0.11)	0.07 (0.04)	0.18 (0.11)	0.40 (0.20)	0.14 (0.07)	0.12 (0.06)
Intrasporangiaceae	0.19 (0.13)	0.24 (0.14)	0.31 (0.28)	0.31 (0.26)	0.15 (0.07)	0.09 (0.07)
Propriionibacterium	57.85 (5.81)	65.56 (5.08)	38.34 (5.18)	68.06 (6.79)	70.64 (5.65)	69.79 (7.37)
Other	2.52 (0.39)	1.68 (0.30)	2.89 (0.47)	1.76 (0.45)	1.62 (0.44)	2.12 (0.63)
Bacteroidetes	0.19 (0.07)	0.05 (0.03)	0.11 (0.07)	0.09 (0.06)	0.16 (0.12)	0.13 (0.05)
Capnocytophaga	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Chryseobacterium	0.33 (0.11)	0.10 (0.05)	0.18 (0.12)	0.26 (0.09)	0.11 (0.09)	0.31 (0.20)
Hymenobacter	0.41 (0.16)	0.25 (0.17)	0.17 (0.08)	0.39 (0.27)	0.22 (0.16)	0.56 (0.34)
Porphyromonas	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Prevotella	0.41 (0.23)	0.03 (0.02)	0.51 (0.46)	0.18 (0.08)	0.02 (0.02)	0.15 (0.08)
Sapspirales	0.41 (0.29)	0.84 (0.28)	2.40 (0.34)	0.55 (0.22)	0.59 (0.34)	0.31 (0.14)
Other	0.10 (0.05)	0.14 (0.06)	0.24 (0.13)	0.07 (0.07)	0.06 (0.04)	0.11 (0.06)
Alphaproteobacteria	1.56 (0.49)	0.91 (0.26)	2.45 (0.68)	0.68 (0.25)	0.99 (0.62)	0.81 (0.42)
Acetobacterales	0.21 (0.10)	0.13 (0.06)	0.47 (0.18)	0.06 (0.04)	0.03 (0.03)	0.13 (0.06)
Bradyrhizobiales	0.04 (0.02)	0.07 (0.04)	0.20 (0.08)	0.00 (0.00)	0.00 (0.00)	0.02 (0.02)
Caulobacterales	0.23 (0.10)	0.16 (0.07)	0.08 (0.04)	0.32 (0.19)	0.10 (0.07)	0.29 (0.10)
Rhizobiaceae	0.57 (0.19)	0.50 (0.14)	0.99 (0.32)	0.48 (0.17)	0.31 (0.14)	0.38 (0.20)
Rhodobacterales	0.27 (0.08)	0.03 (0.02)	0.13 (0.10)	0.29 (0.12)	0.08 (0.06)	0.10 (0.08)
Sphingomonadales	3.41 (1.22)	2.00 (0.75)	8.07 (1.82)	1.15 (0.45)	0.80 (0.20)	0.79 (0.23)
Betaproteobacteria						

	Neisseriales	0.95 (0.28)	0.51 (0.15)	0.63 (0.26)	0.79 (0.44)	0.93 (0.36)	0.58 (0.26)
	Other	0.25 (0.14)	0.20 (0.08)	0.64 (0.25)	0.15 (0.10)	0.02 (0.02)	0.08 (0.08)
Deltaproteobacteria	Myxococcales	0.12 (0.08)	0.00 (0.00)	0.19 (0.16)	0.04 (0.04)	0.00 (0.00)	0.00 (0.00)
	Other	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Epsilonproteobacteria	Other	0.37 (0.30)	0.00 (0.00)	0.10 (0.10)	0.05 (0.05)	0.60 (0.60)	0.00 (0.00)
	Gammaproteobacteria	Enterobacteriales	1.15 (0.55)	0.26 (0.19)	0.41 (0.29)	1.44 (0.98)	0.64 (0.59)
	Moraxellaceae	2.67 (1.00)	3.22 (0.97)	8.24 (1.59)	1.10 (0.33)	1.42 (0.42)	1.02 (0.48)
	Pasteurellaceae	1.87 (0.48)	1.37 (0.45)	1.37 (0.48)	1.20 (0.62)	1.60 (0.70)	2.30 (0.82)
	Pseudomonadaceae	0.94 (0.34)	1.85 (0.78)	2.38 (0.58)	2.00 (1.54)	0.89 (0.29)	0.29 (0.17)
	Xanthomonadales	0.10 (0.06)	0.09 (0.07)	0.28 (0.15)	0.10 (0.07)	0.00 (0.00)	0.00 (0.00)
	Other	0.19 (0.11)	0.07 (0.04)	0.07 (0.05)	0.32 (0.22)	0.09 (0.07)	0.04 (0.04)
Chloroflexi		0.01 (0.01)	0.03 (0.02)	0.03 (0.03)	0.00 (0.00)	0.03 (0.03)	0.03 (0.03)
Chloroplasts		2.01 (0.49)	2.96 (1.06)	1.11 (0.56)	2.89 (1.35)	3.59 (1.42)	2.36 (1.17)
Cyanobacteria		0.11 (0.08)	0.00 (0.00)	0.16 (0.16)	0.00 (0.00)	0.06 (0.06)	0.00 (0.00)
Firmicutes	Acidaminococcaceae	0.71 (0.15)	0.26 (0.10)	0.66 (0.22)	0.47 (0.20)	0.50 (0.20)	0.31 (0.18)
	Aerococcaceae	0.40 (0.14)	0.30 (0.08)	0.52 (0.19)	0.19 (0.13)	0.27 (0.11)	0.43 (0.19)
	Brochotrix	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Lactobacillaceae	2.69 (0.93)	0.88 (0.26)	2.03 (0.70)	2.62 (1.80)	0.90 (0.51)	1.59 (0.50)
	Peptostreptococcaceae	1.21 (0.35)	0.55 (0.21)	1.89 (0.56)	0.52 (0.33)	0.44 (0.18)	0.66 (0.34)
	Staphylococcaceae	3.49 (0.61)	2.84 (0.73)	6.27 (1.25)	2.47 (0.38)	2.15 (0.37)	1.78 (0.46)
	Streptococcaceae	5.27 (0.78)	6.87 (1.57)	6.28 (1.83)	4.22 (1.46)	5.18 (0.98)	8.60 (2.36)
	Other	1.16 (0.20)	0.63 (0.15)	1.11 (0.21)	0.89 (0.25)	0.99 (0.21)	0.58 (0.36)
Fusobacteria		0.40 (0.14)	0.40 (0.11)	0.67 (0.18)	0.36 (0.23)	0.22 (0.07)	0.36 (0.20)
Gemmatimonadetes		0.03 (0.03)	0.00 (0.00)	0.05 (0.05)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Thermi		0.85 (0.38)	0.08 (0.04)	0.84 (0.73)	0.29 (0.18)	0.23 (0.20)	0.50 (0.26)
TM7		0.07 (0.03)	0.06 (0.03)	0.07 (0.05)	0.03 (0.03)	0.10 (0.05)	0.05 (0.04)
Other		0.11 (0.08)	0.11 (0.07)	0.00 (0.00)	0.13 (0.13)	0.32 (0.14)	0.00 (0.00)

All of the abundances are reported as percentages of the sequences within each category that match the taxonomic group with one standard error of the mean indicated in parentheses. For this table, we used the Hugenholtz classification scheme against the Greengenes database (10), and the sequences were classified to the level of taxonomic resolution deemed to be most appropriate. For this study, we swabbed both left and right hands together from 4 men and 4 women immediately after hand washing (time 0) and every 2 h over a 6-h period.