

Supplementary tables

Table S1. Relative abundance of identified bacterial communities' diversity in Forcha at the Phyla level.

Phyla	Relative abundance
Firmicutes	98.882
Proteobacteria	0.913
Cyanobacteria	0.138
Thermotogae	0.046
Bacteroidetes	0.009
Actinobacteria	0.004
Tenericutes	0.003
Chloroflexi	0.003
Verrucomicrobia	0.001
Chrysiogenetes	0.001
Armatimonadetes	0.001

Table S2. Relative abundance of identified bacterial communities' diversity in fermented beverages at the genus level.

Forcha		Champús		Chicha		Masato	
Genera	Relative abundance	Genera	Relative abundance	Genera	Relative abundance	Genera	Relative abundance
Lactobacillus	81.900	Weissella	68.147	Lactobacillus	89.459	Lactobacillus	70.000
Oenococcus	16.929	Lactococcus	29.400	Weissella	8.359	Acetobacter	29.583
Zymomonas	0.375	Acetobacter	0.605	Acetobacter	1.467	Zymomonas	0.417
Acetobacter	0.303	Leuconostoc	0.571	Oenococcus	0.513		
Rickettsia	0.205	Bacillus	0.445	Leuconostoc	0.165		
No identified	0.122	Lactobacillus	0.365	Granulibacter	0.018		
Leuconostoc	0.049	Burkholderia	0.251	Lactococcus	0.018		
Pediococcus	0.027	Gluconobacter	0.148				
Tetragenococcus	0.013	Klebsiella	0.034				
Weissella	0.011	Acinetobacter	0.011				
Komagataeibacter	0.008	Cronobacter	0.011				

Streptococcus	0.005	Komagataeibac- ter	0.011
Lactococcus	0.004		
Alteromonas	0.003		
Brevibacillus	0.003		
Bacteroides	0.003		
Roseiflexus	0.003		
Pseudomonas	0.002		
Pseudopedobacter	0.002		
Acinetobacter	0.002		
Orientia	0.002		
Caulobacter	0.002		
Bacillus	0.002		
Mycoplasma	0.002		
Salmonella	0.001		
Haemophilus	0.001		
Amphibacillus	0.001		
Geobacillus	0.001		
Lysinibacillus	0.001		
Paenibacillus	0.001		
Aerococcus	0.001		
Carnobacterium	0.001		
Haloferox	0.001		
Halothermothrix	0.001		
Coralimargarita	0.001		
Tannerella	0.001		
Micrococcus	0.001		
Ureaplasma	0.001		
Buchnera	0.001		
Pantoea	0.001		
Acidiphilium	0.001		
Granulibacter	0.001		
Octadecabacter	0.001		
Methylovorus	0.001		
Bdellovibrio	0.001		

Staphylococcus	0.001
Thermobacillus	0.001
Enterococcus	0.001
Clostridium	0.001
Lachnoclostridium	0.001
Peptoclostridium	0.001
Oscillibacter	0.001
Erysipelothrix	0.001
Chthonomonas	0.001
Parabacteroides	0.001
Prevotella	0.001
Desulfurispirillum	0.001
Bifidobacterium	0.001
Corynebacterium	0.001
Spiroplasma	0.001

Table S3. Relative abundance of identified bacterial communities' diversity in fermented beverages at the specie level.

Forcha		Champús		Chicha		Masato	
Specie	Relative abundance	Specie	Relative abundance	Specie	Relative abundance	Specie	Relative abundance
<i>Lactobacillus sanfranciscensis</i>	35.021	<i>Lactobacillus fermentum</i>	74.517	<i>Weissella koreensis</i>	68.632	<i>Lactobacillus fermentum</i>	46.025
<i>Oenococcus oeni</i>	29.153	<i>Weissella koreensis</i>	12.955	<i>Lactococcus lactis</i>	29.609	<i>Acetobacter pasteurianus</i>	29.707
<i>Lactobacillus reuteri</i>	16.315	<i>Lactobacillus buchneri</i>	2.898	<i>Acetobacter pasteurianus</i>	0.609	<i>Lactobacillus ruminis</i>	17.573
<i>Lactobacillus buchneri</i>	11.431	<i>Lactobacillus brevis</i>	2.642	<i>Leuconostoc citreum</i>	0.494	<i>Lactobacillus reuteri</i>	2.929
<i>Lactobacillus fermentum</i>	1.696	<i>Lactobacillus reuteri</i>	2.557	<i>Lactobacillus fermentum</i>	0.345	<i>Lactobacillus buchneri</i>	1.674
<i>Lactobacillus rhamnosus</i>	1.535	<i>Acetobacter pasteurianus</i>	2.273	<i>Gluconobacter oxydans</i>	0.149	<i>Lactobacillus delbrueckii</i>	0.837

<i>Lactobacillus brevis</i>	1.079	<i>Oenococcus oeni</i>	0.795	<i>Leuconostoc mesenteroides</i>	0.080	<i>Zymomonas mobilis</i>	0.418
<i>Lactobacillus casei</i>	0.794	<i>Lactobacillus casei</i>	0.540	<i>Klebsiella pneumoniae</i>	0.023	<i>Lactobacillus plantarum</i>	0.418
<i>Zymomonas mobilis</i>	0.646	<i>Lactobacillus sakei</i>	0.256	<i>Lactobacillus plantarum</i>	0.023	<i>Lactobacillus rhamnosus</i>	0.418
<i>Acetobacter pasteurianus</i>	0.523	<i>Leuconostoc citreum</i>	0.199	<i>Cronobacter sakazakii</i>	0.011		
<i>Lactobacillus sakei</i>	0.403	<i>Lactobacillus rhamnosus</i>	0.142	<i>Komagataeibacter medellinensis</i>	0.011		
<i>Candidatus Rickettsia amblyommii</i>	0.353	<i>Lactobacillus ruminis</i>	0.085	<i>Bacillus thuringiensis</i>	0.011		
<i>Lactobacillus paracasei</i>	0.267	<i>Leuconostoc mesenteroides</i>	0.057				
<i>Lactobacillus plantarum</i>	0.246	<i>Granulibacter bethesdensis</i>	0.028				
<i>Lactobacillus ruminis</i>	0.138	<i>Lactococcus lactis</i>	0.028				
<i>Lactobacillus delbrueckii</i>	0.095	<i>Lactobacillus sanfranciscensis</i>	0.028				
<i>Leuconostoc mesenteroides</i>	0.073						
<i>Pediococcus clausenii</i>	0.043						
<i>Lactobacillus helveticus</i>	0.029						
<i>Tetragenococcus halophilus</i>	0.023						
<i>Weissella koreensis</i>	0.019						
<i>Lactobacillus salivarius</i>	0.017						
<i>Lactobacillus kefiranofaciens</i>	0.017						
<i>Lactobacillus acidophilus</i>	0.015						
<i>Komagataeibacter medellinensis</i>	0.014						
<i>Lactococcus lactis</i>	0.006						

<i>Alteromonas macleodii</i>	0.005
<i>Brevibacillus</i>	0.005
<i>Pseudomonas resinovorans</i>	0.004
<i>Orientia tsutsugamushi</i>	0.003
<i>Salmonella enterica</i>	0.002
<i>Haemophilus parainfluenzae</i>	0.002
<i>Amphibacillus xylanus</i>	0.002
<i>Geobacillus thermoleovorans</i>	0.002
<i>Lysinibacillus sphaericus</i>	0.002
<i>Streptococcus thermophilus</i>	0.002
<i>Leuconostoc gelidum</i>	0.002
<i>Aerococcus urinae</i>	0.002
<i>Halothermothrix orenii</i>	0.002
<i>Buchnera aphidicola</i>	0.001
<i>Pantoea vagans</i>	0.001
<i>Granulibacter bethesdensis</i>	0.001
<i>Octadecabacter antarcticus</i>	0.001
<i>Staphylococcus saprophyticus</i>	0.001
<i>Bacillus sp</i>	0.001
<i>Bacillus sp 1NLA3E</i>	0.001
<i>Paenibacillus larvae</i>	0.001
<i>Paenibacillus sp JDR-2</i>	0.001
<i>Thermobacillus composti</i>	0.001
<i>Streptococcus mutans</i>	0.001

<i>Streptococcus pneumoniae</i>	0.001
<i>Enterococcus hirae</i>	0.001
<i>Carnobacterium maltaromaticum</i>	0.001
<i>Peptoclostridium difficile</i>	0.001
<i>Oscillibacter valericigenes</i>	0.001
<i>Erysipelothrix rhusiopathiae</i>	0.001

Table S4. Relative abundance of identified fungal communities' diversity in fermented beverages at the genus level.

Champús		Chicha		Masato		Forcha	
Genus	Abundance relative	Genus	Abundance relative	Genus	Abundance relative	Genus	Abundance relative
Hanseniaspora	66.481	Saccharomyces	84.79	Pichia	23.17	Saccharomyces	77.6
Saccharomyces	12.687	Hanseniaspora	11.19	Dekkera	19.82	Dekkera	22.3
Starmera	9.929	Candida	1.18	Candida	16.77	Pichia	0.04
Pichia	9.232	Wicherhamomyces	1.0	Saccharomyces	12.2	Saccharomycodes	0.01
Schwanniomyces	0.522	Pichia	0.9	Meyerozyma	9.45		
Clavispora	0.315	Kodamaea	0.9	Clavispora	9.45		
Meyerozyma	0.233	Meyerozyma	0.86	Geotrichum	7.01		
Diutina	0.228	Metschnikowia	0.08	Cryptococcus	2.13		
Wicherhamomyces	0.129	Lodderomyces	0.02				
Dipodascus	0.08						
Candida	0.069						
Kluyveromyces	0.046						
Torulaspora	0.015						
Saturnispora	0.013						
Debaryomyces	0.013						
Hyphopichia	0.006						
Fusarium	0.003						

Table S5. Relative abundance of identified fungal communities' diversity in fermented beverages at the specie level.

Champús		Chicha		Masato		Forcha	
Specie	Abundance relative	Specie	Abundance relative	Specie	Abundance relative	Specie	Abundance relative
<i>Hanseniaspora nectarophila</i>	66.468	<i>Saccharomyces cerevisiae</i>	84.79	<i>Pichia kudriavzevii</i>	24.84	<i>Saccharomyces cerevisiae</i>	77.646
<i>Saccharomyces cerevisiae</i>	12.687	<i>Hanseniaspora uvarum</i>	10.20	<i>Dekkera bruxellensis</i>	21.24	<i>Dekkera bruxellensis</i>	22.311
<i>Starmera stellimalicola</i>	9.929	<i>Hanseniaspora opuntiae</i>	0.99	<i>Saccharomyces cerevisiae</i>	13.07	<i>Pichia kluyveri</i>	0.039
<i>Pichia kudriavzevii</i>	5.006	<i>Wickerhamomyces anomalus</i>	0.97	<i>Candida famata</i>	10.78	<i>Saccharomycodes ludwigii</i>	0.003
<i>Pichia kluyveri</i>	4.226	<i>Kodamaea ohmeri</i>	0.92	<i>Meyerozyma guilliermondii</i>	10.13		
<i>Schwanniomyces occidentalis</i>	0.522	<i>clavisporus lusitaniae</i>	0.60	<i>Clavispora lusitaniae</i>	10.13		
<i>Clavispora lusitaniae</i>	0.315	<i>Meyerozyma guilliermondii</i>	0.86	<i>Geotrichum candidum</i>	7.52		
<i>Meyerozyma guilliermondii</i>	0.233	<i>Candida ethanolica</i>	0.55	<i>Candida tropicalis</i>	7.19		
<i>Diutina rugosa</i>	0.228	<i>Metschnikowia koreensis</i>	0.08	<i>Cryptococcus humicola</i>	2.29		
<i>Wickerhamomyces anomalus</i>	0.103	<i>Candida sergipensis</i>	0.03				
<i>Dipodascus australiensis</i>	0.080	<i>Lodderomyces elongisporus</i>	0.02				
<i>Candida sonorensis</i>	0.069						
<i>Kluyveromyces marxianus</i>	0.046						
<i>Wickerhamomyces pijperi</i>	0.026						
<i>Torulaspora delbrueckii</i>	0.015						
<i>Hanseniaspora hatyaiensis</i>	0.013						
<i>Saturnispora diversa</i>	0.013						
<i>Debaryomyces prosopidis</i>	0.013						
<i>Hyphopichia burtonii</i>	0.006						
<i>Fusarium oxysporum</i>	0.003						