Vessel ID	Contents	Contents details	Fermentation status (Fermentation experiment)	pH*
22	Dough/bread	Bread dough: The bread dough used in the experiment consisted of 350 g naked barley flour, 25 g whole naked barley grains, 350 g emmer flour, 25 g whole emmer grains, 370 ml water and 50 ml sourdough starter.	—	—
23	Dough/bread	Bread dough: The bread dough used in the experiment consisted of 350 g naked barley flour, 25 g whole naked barley grains, 350 g emmer flour, 25 g whole emmer grains, 370 ml water and 50 ml sourdough starter.	—	—
18	—	—	—	—
A	Milk	Freshly milked unpasteurised raw milk from Red Danish cows at Mannerup Møllegård, Osted, Denmark. Dairy product not intentionally fermented. The unpasteurised raw milk soured and developed extensive mould growth. Although it was not a fermented product when placed in the vessel, natural fermentation may have begun during the experiment.	Fresh unpasteurised dairy comparator, which may have undergone natural microbial fermentation.	6.4–6.8
B	Vinegar	Clear organic vinegar purchased ready-made and manufactured from water and fermented alcohol. Purchased vinegar poured directly into the vessel. No fermentation took place in the vessel.	Acetic end product of double fermentation.	2–3
C	Beer	Beer wort prepared the previous day in a reconstructed Neolithic pot on open fire through mashing with germinated barley for 2 hours at 62–68 °C , followed by brief boiling for 10 minutes. On the following day, a small amount of brewing yeast (KVEIK Yeastery K22) was added to the filtered and cooled wort, and the liquid was poured directly into the vessel to initiate fermentation. Fermentation was carried out inside the vessel and proceeded successfully.	Fermented, with fermentation taking place in the vessel.	3.8–5
D	Whey	Whey produced by heating a mixture of circa 1/3 raw milk (Vessel A), 1/3 cultured milk product (tykmælk), and 1/3 buttermilk for 1 hour at low temperature in a metal pot on a modern hob. After separation, the whey was strained from the fresh cheese and poured into the clay vessel. Dairy by-product (whey from cheese-making) prepared immediately before being poured into the vessel. Fermentation was therefore not taking place in the vessel at the start of the experiment.	Acidic dairy by-product.	4.3–5
E	Mead	Mead. circa 200 g of Danish organic honey was mixed with 1 litre of boiling water, stirred, and left to cool. When the honey-water had become lukewarm, circa 10 g of baking yeast was added, and the liquid was poured into the clay vessel. Fermentation was carried out inside the vessel and appeared successful, as indicated by bubbling and a sweet yeasty smell during the process.	Fermented, with fermentation taking place in the vessel.	3.7–4.6
F	Water	Tap water poured into the vessel in two separate filling episodes.	Not fermented.	7
47	Kefir	Organic kefir purchased from Arla Unika. Made from fermented organic whole milk with added kefir culture. The product had a consistency similar to drinking yoghurt. Dairy product fermented by the manufacturer using kefir culture. As the kefir developed into a cheese-like substance over the 10-week period, fermentation appears to have continued inside the vessel.	Fermented product. Fermentation appears to have continued in the vessel, as the kefir separated into curd and whey and developed into a cheese-like substance.	4–4.6
6	Crushed grain and water	Simmering and boiling of water and crushed grain	—	—
7	Crushed grain and water	Simmering and boiling of water and crushed grain	—	—
33	Crushed grain and water	Simmering and boiling of water and crushed grain	—	—
49	Crushed grain and water	Simmering and boiling of water and crushed grain	—	—
12	Porridge	Porridge of emmer, barley, crushed hazelnuts and water	—	—
30	Porridge	Porridge of emmer, barley, crushed hazelnuts and water	—	—
31	Porridge	Porridge of emmer, barley, crushed hazelnuts and water	—	—
56	—	—	—	—

**pH values indicate the approximate recorded pH range during the experiment*

Table S5. Contents, preparation details and pH values.