

### **Text S1 Method of preparing tea beverages**

This method referred to China National Standards GB/T23776-2018. All the tea beverage samples were handled by the same way. First, 3g tea was weighed in beaker and pour 150mL boiling water into it. immersion time was 5min. Then, Saturated solution (25°C) of 1-hexadecyl-3-methyl imidazole chloride was added to tea beverage until sediment was no longer increased, and supernatant was treated followed by step of FE-LPME.