Qeios

Peer Review

Review of: "Optimization of Pre-Sampling Conditions for Salivary Genomic DNA Extraction: A Single-Donor Analysis"

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Title Adjustment: If the study remains with only one donor, I suggest adding the term 'pilot study' to the title, such as: 'Protocol Standardization Pilot Study'.

Fasting: Did the individual eat within one hour before collection? The presence of food can compromise the purity of the sample, potentially introducing non-human DNA (plant/animal). This information should be made clear.

Circadian rhythm: Was saliva collection performed at a standardized time? Samples collected in the morning are consistently more concentrated, while those collected throughout the day are more diluted, which can generate noise or require additional purification steps.

Collection Method: Passive drool (spitting) vs. stimulated saliva (paraffin chewing) vs. buccal swabs. Stimulated saliva tends to dilute the DNA concentration.

Description of the toothbrush: Provide a specific description of the type of toothbrush used (e.g., extra-soft, soft, medium, or hard). Medium and hard toothbrushes can lead to gingival bleeding, potentially compromising the fidelity of gene amplification.

Periodontitis/Gingivitis: Periodontal inflammation can influence the sample; the presence of periodontopathogenic bacteria can alter the ratio of human to bacterial DNA.

Declarations

Potential competing interests: No potential competing interests to declare.

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