Dt: 11-12-2023

Corrigendum: Tender for Automated Glycemic Index Analyser

Corrigendum Title: Revised Technical Specification based on PBC

Tender Ref: CFTRI/52341A/2023 Date: 24th Nov, 2023

Tender ID: 2023_CSIR_175665_1

The revised specification based on the proceeding of the Pre Bid Conference held on 01-12-2023 @ 11. 00A.M is uploaded herewith.

All the prospective bidders are requested to take cognizance of the revised specification and submit their bids accordingly on or before 20/Dec/2023 by 02.00 p.m.

All other terms and conditions of the tender remain unaltered.

Stores &Purchase officer
CSIR-CFTRI, Mysore

Revised Technical Specifications for Automated Glycemic Index Analyser

1. The system should be fully automated equipment that can simulate gastro-intestinal digestion of foods that can monitor release of glucose at timely intervals from food samples that is of nutritional importance correlating with *in vivo* glycemic response.
2. The system should be fitted with a glucose analyser that can provide data on the percentage of starch hydrolysed along with results on starch kinetics.
3. The equipment should simulate the natural gut system of digesting plant based food. It should simulate the enzymatic digestion under series of incubations at physiologic pH and temperature that mimics the buccal, gastric and pancreatic phases of food digestion
4. It should be fully programmable with around 15 or more sample capacity along with automation of the internationally accepted protocol, using glucose as standard.
5. A system suitable for determination of carbohydrate digestibility in cereals, pulses, millets, oilseeds in raw and cooked forms.
6. A system that can determine starch hydrolysis with low and high starch content with same precision and reproducibility
7. Clear sample preparation protocols for raw and cooked samples
8. The enzymatic digestion comprising of addition of buffers, filtration and rinsing steps be performed automatically
9. Calibration protocols shall be provided, The standard deviation between duplicates or triplicates of sample should be below 5%.
10. Online UPS to counter power shut down during the analysis. UPS with 30 min back up with full load
11. Reference material/ standards and enzymes and chemicals shall be provided
12. Attached with computer (desktop) preferably HP/Dell with Intel Core I5 with 13th generation with DDR5 RAM (16GB), Operating system (factory preloaded) Windows 11Professional, with 256GB SSD and 1TB HDD, LED monitor size 21.5 inches, monitor resolutions (PIXELS) 1920X1080. Wired mouse and keyboard.
13. Laser printer with print, scan, copy and automatic two sided printing with wireless connectivity.
14. Sample quantity to be specified for analysing the GI
15. The food samples of the GI prediction must corroborate well with *invivo* testing and must be evident through correlation plots and value
16. Enzyme kits and glucose oxidase sufficient for 500 samples
17. Warranty for one year from the date of satisfactory installation
18. Training by an application specialist initially for a week (five working days) following installation and assistance for trouble shooting
19. Faster analysis of samples, with multiple samples at a given time.