



सीएसआईआर-केंद्रीय खाद्य प्रौद्योगिक अनुसंधान संस्थान
CSIR- CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE
मैसूरु / MYSURU-570 020, भारत / INDIA

(Constituent Laboratory of CSIR, New Delhi (Ministry of Science & Technology)
An ISO 9001:2008, ISO 14001:2004 & ISO 17025:2005, NABL Accredited Laboratory

Corrigendum: Tender for Automated Glycemic Index Analyser

Corrigendum Title: Revised Technical Specification based on PBC

Tender Ref: CFTRI/52341/2023 Date: 21-08- 2023

Tender ID: 2023_CSIR_165023_1

The revised specification based on the proceeding of the Pre Bid Conference held on 30-08-2023 @ 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/Sep/2023 by 02.00 p.m.

All other terms and conditions of the tender remain unaltered.

**Controller of Stores &Purchase
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 carbohydrate / 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 and animal 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 20 or more sample capacity along with automation of the internationally accepted protocol, using white bread and glucose as appropriate standards.
5. A system suitable for determination of carbohydrate digestibility in cereals, pulses, millets, oilseeds in raw and cooked forms. Suitability for fruit juices and milk samples
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 high moisture, protein and fat samples
8. The enzymatic digestion , followed by addition of buffers , filtration rinsing should be performed automatically
9. Calibration protocols shall be provided, The standard deviation between duplicates or triplicates of sample should be below 5%.
10. Methods to detect enzyme efficacy over different periods of time and should be fully programmable
11. Online UPS to counter power shut down during the analysis. UPS with 30 min back up with full load
12. Reference material/ standards and enzymes and chemicals shall be provided
13. Attached with computer (desktop) preferably HP/Dell with Intel Core I 12500, Operating system (factory preloaded) Windows 11Professional, with RAM DDR4size (GB) 16, total SSD capacity 1TB, LED backlit monitor size 21.5 inches, monitor resolutions (PIXELS) 1920X1080. Wired mouse and keyboard.
14. Laser printer with print, scan, copy and automatic two sided printing with wireless connectivity.
15. Sample holders suitable to hold 0.1 to 1.0g sample along with a refrigerated sample collection blocks should be provided to hold digested samples that are temperature labile
16. The food samples of the GI and RS prediction must corroborate well with *invivo* testing and must be evident through correlation plots and value
17. Consumables for 500 samples
18. Warranty for one year
19. Training by an application specialist initially for a week following installation and assistance for trouble shooting
20. Faster analysis of samples, with multiple samples at a given time.