



Institute of Home Science University of Kashmir



Hazratbal Srinagar-190006-(Kashmir) J&K

[NAAC Accredited Grade A+].



Nutritional Biochemistry Lab – Institute of Home Science

The **Nutritional Biochemistry Lab** is equipped for basic qualitative and quantitative analysis related to nutrition and health sciences. It provides a hands-on learning environment for students and researchers to conduct fundamental biochemical tests, including macronutrient and micronutrient analysis, pH measurement, and sample preparation. The lab supports practical demonstrations, routine experiments, and essential research work required for academic learning and applied nutrition studies.

| S. No. | Name & Description of the Instrument/ Equipment | Picture |
|--------|---|--|
| 1. | Hot Plate – Used for heating samples during experiments. |  A white and black electric hot plate with a digital display showing "8888" and a control knob. It is placed on a white base. |
| 2. | Vortex Mixer – Mixes small liquid samples quickly and efficiently. |  A blue vortex mixer with a black control knob and a digital display. It is placed on a dark surface. |

3.

Pipetus – Aids in easy and accurate liquid transfer.



4.

Monocular Compound Microscope – Used for basic microscopic examination of samples.



5.

Colorimeter – Measures color intensity in solutions for basic biochemical tests.



6.

Centrifuge – Separates components in liquid samples by spinning.



7.

Hot Air Oven – Used for sterilization and drying of lab materials.



8.

Heating Mantle – Provides even heating for liquid samples.



9.

Solvent Extraction System (Soxhlet Apparatus) – Used for extracting specific compounds from solid samples.



10.

Triple Beam Balance – Measures the mass of solids accurately.



11.

Water Bath – Maintains samples at a constant temperature during experiments.



12.

Double Distillation Apparatus – Produces purified water for laboratory use.



13.

Top Load Balance – A digital balance for general weighing needs.



14.

Magnetic Stirrer – Mixes liquid samples efficiently with a rotating magnetic field.



15.

UV-Vis Spectrophotometer – Measures absorbance for basic biochemical estimations.



16.

Digital pH Meter – Determines the acidity or alkalinity of liquids.



17.

Research Centrifuge – A high-speed centrifuge for more refined sample separation.



18.

Skin Fold Caliper – Measures skinfold thickness to estimate body fat percentage.



19.

Eppendorf Micropipette – Allows precise measurement and transfer of small liquid volumes.



20.

Refractometer – Used for measuring the concentration of solutions.



21.

Bottle Top Dispenser – Dispenses liquids accurately from storage bottles.



22.

Digital Weighing Scale – Provides precise digital weight measurements.



23.

Manual Weighing Scale – A traditional scale for weight measurement.



24.

Accu-Chek Glucometer – Measures blood glucose levels for basic health assessments.



25.

BP Apparatus (Sphygmomanometer & Stethoscope) – Used for manual blood pressure measurement.



26.

Clock Type Sphygmomanometer
– A dial-based BP measuring instrument.



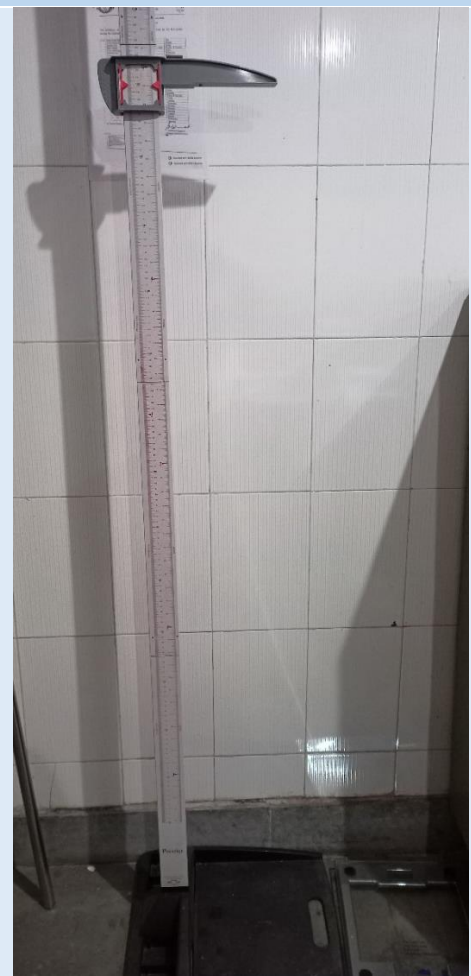
27.

Geyser – Provides hot water for lab use.



28.

Stadiometer – Measures an individual's height for basic anthropometric studies.



29.

Muffle Furnace – Used for heating and ashing samples at high temperatures.



30.

Hot Air Oven – (Duplicate Entry)
Used for sterilization and drying.





31.

Infantometer – Measures the length of infants for growth studies.



Cookery Lab – Institute of Home Science

The **Cookery Lab** serves as a practical learning space for students to develop fundamental culinary skills and understand the principles of food preparation, nutrition, and dietetics. Equipped with essential kitchen appliances and tools, the lab facilitates hands-on training in cooking techniques, recipe formulation, food preservation, and meal planning. It provides an interactive environment for conducting basic experiments on food science, sensory evaluation, and dietary modifications, supporting both academic and research activities in the field of nutrition and home science.

| S. No. | Name & Description of the Instrument/ Equipment | Picture |
|--------|---|--|
| 32. | High Speed Blender – A powerful appliance used to blend, puree, or emulsify ingredients quickly and efficiently, ideal for smoothies and sauces. |  |
| 33. | Food Processor – A versatile machine designed to chop, slice, shred, and mix ingredients, speeding up food prep tasks. |  |

34.

Dishwasher – An automatic appliance used to clean and sanitize dishes, utensils, and cookware with minimal manual effort.



35.

Induction Cooktop – A cooktop that uses electromagnetic fields to heat pots and pans directly, offering fast and precise cooking.



36.

Ice Cream Maker – A machine used to churn and freeze ingredients to make smooth, homemade ice cream and frozen desserts.



37.

Deep Fryer – A kitchen appliance used for frying food by immersing it in hot oil, ideal for crisp, golden results.



38.

Air Fryer – A compact appliance that cooks food by circulating hot air, producing crispy textures with little to no oil.



39.

Water Purifier – A device used to remove contaminants from water, ensuring safe and clean drinking water.





40.

Coffee Maker – A machine that brews coffee by heating water and passing it through ground coffee, commonly used for quick preparation.



General Equipment for the Smooth Functioning of the Institute of Home Science

The **Institute of Home Science** is equipped with various essential devices and systems that ensure the smooth operation of academic, research, and administrative activities. These facilities support documentation, digital learning, security, and overall efficiency in the institute. Additionally, the **Day Care Center** within the institute is well-furnished with appliances that help maintain a comfortable, hygienic, and child-friendly environment.

| S. No. | Name & Description of the Instrument/ Equipment | Picture |
|--------|--|--|
| 41 | Photostat Machine – Enables quick and efficient photocopying of documents for academic and administrative purposes. |  |
| 42 | Printers – Used for printing essential documents, reports, and study materials. |  |

43

Systems and PCs – Facilitate digital learning, research work, and office tasks.



44

CCTV Monitor – Ensures security by providing surveillance across the institute.



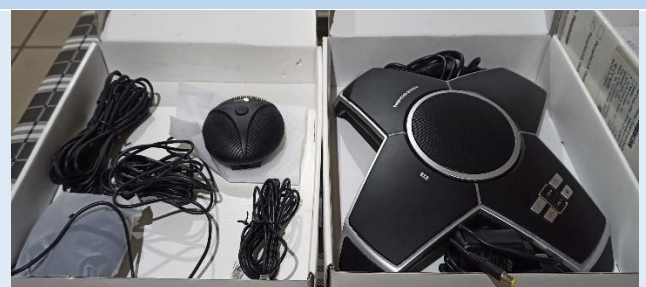
45

HD Camera for Conference – Used for virtual meetings, webinars, and high-quality video recording.



46

Speakers and Mic Sets – Support audio-visual presentations, seminars, and conferences.



47

Digital Whiteboard –

Enhances interactive learning through multimedia teaching tools.



48

Gensets (15 kV) – Provides backup power to ensure uninterrupted operations during electricity outages.



49

Servo Stabilizer – Regulates voltage fluctuations to protect electronic equipment.



50

Wall Mount Heater – Provides localized heating for maintaining warmth in workspaces.



51

Gas Heaters – Ensures additional heating, especially in cold weather conditions



Equipment in the Day Care Center

52

Air Conditioner – Maintains a comfortable indoor temperature for children and staff.



53





Air Purifier – Ensures clean and fresh air, promoting a healthy environment.



54

Water Purifier – Provides safe drinking water for children and caregivers.



| | | |
|----|--|--|
| 55 | Refrigerator – Used for storing food, milk, and perishable items safely. |  |
| 56 | LCD/TV – Supports educational and recreational activities for children. |  |
| 57 | Microwave Oven – Helps in warming food and preparing quick meals. |  |
| 58 | Vacuum Cleaner – Maintains cleanliness and hygiene in the Day-Care space. |  |

This compilation of the equipment and instruments available at the **Institute of Home Science** underscores our commitment to maintaining a well-equipped and functional environment for academic, research, and practical learning. We aim to continuously enhance our facilities to support the growth and development of our students and staff.


Director
Prof. Hummera Azim