DEPARTMENT OF FOODS & NUTRITION

Faculty research

- Total amount of grant funds over the past one year i.e. 2009- Rs. 55 Lakhs
- Research project highlights:

Community Nutrition

- o Nutritional surveillance of agricultural labourer families
- o Time-use and energy expenditure pattern of women and its effect on their children
- o Nutritional iodine deficiency and assessment of mental development of children
- Women's work pattern and nutritional status of children
- o Diet related degenerative diseases: A case study
- Utility of spot testing kit in the assessment of iodine content of salt
- o Gender perspective in farm and home management and utilization of underutilized foods towards household nutrition security
- Study of the nutritional adequacy of hostel foods services in Pantnagar
- Industrial foods services: An evaluation
- o Nutrition and Immune response complex: Studies in children of lower socioeconomic group
- Screening of the nutritional status of the aged
- o Effect of parent education on nutrition and childcare in farm labour colonies
- o Dietary fibre content of foodstuffs and intake among adults
- Organization and impact of community childcare on farm families of rural Uttar Pradesh hills
- o Household food and nutritional security for tribal, backward and hilly areas (NATP)
- Impact of intervention programme in nutrition and family life education on adolescent girls under ICDS

- o Review of an intervention programme in nutrition and family life education on adolescent girls under ICDS: A follow up.
- o All India Coordinated Research Project on: Nutritional implication for human health in agrarian ecosystem (ICAR) (2009; Rs. 17 Lakhs approx./ Ongoing project annum)
- o Creation of Nutrition Awareness among Rural Population of Uttarakhand to improve food and Nutrition Security (UCOST) (2009; Rs. 5.784 Lakhs)
- o Comparative Study to Assess the Impact of Mid Day Meal Scheme on Quality of Education and Health of Children (GoU) (2009; Rs. 15.864 Lakhs)

Nutrition Education

- Study of the impact of food nutrition and health related advertisement in mass media.
- o Impact of nutrition and health education on mother's knowledge regarding growth in relation to feeding practices.
- o Nutrition education and communication support in hill areas of Uttar Pradesh.
- Nutrition education in Group Feeding Programmers. HSAI.
- o Capacity Building Project on Street Food Services.

Quality Analysis:

- o Quality evaluation of improved varieties of pulses.
- Studies on alkali treatment of maize.
- o Exploratory studies in cyanogenic glycosides of various plant food stuffs.
- o Determination of iodine in different types of cooking processes.
- o Processing and storage of sorghum: Changes in nutritional and food quality.
- Evaluation of natural products for control of storage pests in pulses and their effect on nutritive value of seeds.

- Functional constituents of some foods known for cardiovascular disease prevention.
- Use of □-carotene rich foodstuffs for control of vitamin A deficiency in children.
- o Development of food products based on minor millets for diversified uses.
- o Sustainable mulberry sericulture: Suitability of mulberry leaves for human nutrition and silk production.
- o Processing of millets for value addition and development of health foods.
- o Development of diversified food formulation based on millets suitable for groups at risk particularly Kumaon hills.
- o Product formulation with solvent extracted soy flour
- o Food formulation based on extruded soy flour
- Exploring use of defatted soy flour in foods suitable for young children and invalids.
- o Development of appropriate technology for utilization of roots and tuber crops.
- o Biochemical, microbiological physical and sensory qualities of organic mandua baby food.
- o Acceptability of supplementary fortified food using finger millet.
- o Nutraceuticals in Finger Millet and Development of Functional Foods.

Department of Family Resource Management

Research Areas

- Ø Resource management
- Ø Occupational Ergonomics and Safety Principles
- Ø Women's Empowerment and Gender studies

- Ø Family and Environment
- Ø Consumerism
- Ø Traditional art and craft

Research Projects Undertaken

- Ø All India Co-coordinated Research Project on "Resource management for farm families"
- Ø A study on gender role differentiation in farm households
- Ø Ergonomic assessment of farm activities performed by women farmers of farm households of hill region of Uttar Pradesh
- Ø A study of selected consumer products quality and marketing in two types of village markets in Lalkuan
- Ø Assessment of water quality and water management problems in Lauhriasal- Malla village
- Ø Study of existing rural housing conditions and effecting improvements in household activities
- Ø Study of family resource management of rural households and impact of adoption/non-adoption of appropriate management of technologies on the selected resources
- Ø A study to evaluate the performance of smokeless chulha installed and satisfaction derived from use by the labour class families of Pantnagar
- Ø A study of kitchen design for home effectiveness among selected rural families
- Ø Extent and determinants of child labour in rural areas of Haldwani block
- Ø To study the efficiency of three different fireless cookers with three insulators
- Ø To study the energy requirement of rural households
- Ø A comparative study of household storage methods
- Ø Testing efficiency of Mamta smokeless chulha and its acceptability in the villages of hill region
- Ø To survey the existing skills and needs of rural women in preparation for taking up income generating activities in Uttar Pradesh
- Ø Accessibility and availability of credit to rural women and its impact on their economic status
- Ø Empowerment status of women in management of farm households in hill region of Nainital District

Ø A study of work analysis in existing kitchens of rural homes in Nainital District

Ø A study of female headed households in two districts of Uttar Pradesh

Ø Ergonomic assessment of farm activities performed by women of farm households in hill region of Nainital District

Ø Ergonomical evaluation of critical activities and work-rest allowance for women farmers

Ø Studies on occupational disorders of farm women and measures for their control in Haldwani block

Ø Impact of Packaging Material on Health and Environment

Ø Home Automation Technology for Family and Personal Life Management

Ø Assessment of discomfort level of selected SIDCUL industry workers toward workstation design and work environment

Ø Physical Fitness test of employees of Bajaj Auto Limited., Pantnagar

On going research projects/funding agency/details of work

All India Coordinated Research Project, ICAR

Title: Ergonomics of Farm Women Drudgery

This ongoing project is being undertaken in five adopted villages of Tarai and Hill region of Uttarakhand. It has seen that difficult operations in agricultural production, post harvest as well as household activities are performed using simple rudimentary tool/implement or with no tool. Considering the multiple demand of workers in both reproductive and productive tasks, system approach of combining ergonomically designing/development of equipment/implements alongwith application of training programme involving participatory field level skill training were undertaken. Repeated field demonstrations in the proper use of ergonomically improved farm implements as to reduce the disproportionate workload was also considered. As an impact of the project there are 5800 direct beneficiaries/workers.

Department of Human Development and Family Studies

Research Areas

- Ø Study of effectiveness of comprehensive childcare through pretest-post test experimental and control group design research
- Ø Organizing 'Farm Crèche' as a rural model of care of infants and pre-schoolers
- Ø Development of mothers' education package, its delivery at community level and testing its effectiveness
- Ø Study on family planning information needs assessment
- Ø Self Help Group (SHGs) of women and family empowerment issues in rural families
- Ø Home stimulation for mothers and its effectiveness
- Ø Identification of disabilities in early childhood in rural families and development of intervention package
- Ø SHGs' linkages with ICDS and community partnership

Research Projects Undertaken

- Ø Organization and impact of community childcare in farm families of Uttar Pradesh
- Ø Evolving a single functional model for delivery of child development services
- Ø Monitoring the social component of ICDS in tribal blocks in Nainital
- Ø Effect of on-site training in conduction of pre-school activities in government run ICDS programme
- Ø Assessment of the effectiveness of nutrition intervention services for pregnant women and lactating mothers in ICDS blocks
- Ø Nutrition and pre-school education activities for intervention in ICDS
- Ø Evaluation of delivery of non-formal pre-school education and nutrition services in ICDS
- Ø Effect of parent education in nutrition and childcare in University farm labour colonies
- Ø Nutritional iodine deficiency and assessment of mental development of children
- Ø Impact of an intervention programme in nutrition and family life education on adolescent girls under ICDS

- Ø Production and testing of teaching aids among the rural pre-schools/anganwadis of ICDS programme
- Ø Impact of non -formal preschool education and nutrition intervention in ICDS
- Ø Evaluation of parent education in childcare and nutrition in University farm labour colonies
- Ø A study of child rearing practices among university farm labour families
- Ø All India Co-ordinated Research Project on Home Science (Child Development Unit)
- Ø Developing a strategy for convergence of services for family support through development programme in selected/ adopted villages of *tarai* and hills of Uttaranchal

Department of Home Science Extension

Research Projects Undertaken

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☐ All India Coordinated Research Project on "Data base on rural women"
☐ Development of sustainable rice-wheat system
☐ Lab to land programme
☐ An action project on training of rural women and adolescent girls on improved home practices
☐ Participation of rural women in agricultural operations
☐ Functioning of DWCRA programme in Gadarpur block, Udham Singh Nagar
☐ Swayamsiddha- Uttarakhand Mahila Sasaktikaran and Bal Vikas Vibhag.
☐ Promotion of integrated weed management in the Gangetic plains of India
☐ Biogas development and training centre
☐ Creating Nutrition awareness among the adolescent girls.
☐ Assessment of acceptability of alternative supplementary fortified food using finger millets.
On-going Projects
☐ All India Coordinated Research Project
☐ Healthy kids programme in schools.

Department of Clothing and Textiles

Research Areas

- Ø Natural dyes
- Ø Unconventional fibres
- Ø Income generation through textile handicrafts
- Ø Fibre blending
- Ø Standardization of basic bodice block
- Ø Textile dyeing and printing
- Ø Textile processing
- Ø Textile structure

Research Projects Undertaken

- Ø Standardization of body measurements of children ages 3 to 7 years, to develop basic bodice block and create designed garments
- Ø Study on carpet units of selected areas of Uttar Pradesh and development of designs
- Ø Study of non-textile fibrous materials and their utilization
- Ø Evaluation of cleansing properties of synthetic detergents
- Ø Process development for extraction and standardization of natural dyes and their applications
- Ø Blending and processing of wool with specialty hair fibres to empower rural women
- Ø Value addition of agro and animal based fibres
- Ø Evolution of textile articles through processing of wool with silk waste and cotton to create entrepreneurial skills in rural women

Ongoing research projects/ funding agency/ details of work

- Ø All India Coordinated Research Project on "Value addition of agro and animal based fibres"
- Ø National Fellow project on "Evolution of textile articles through processing of wool with silk waste and cotton to create entrepreneurial skills in rural women"