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## BIOCHEMICAL SOLUTION OF THE PROBLEM OF MALNUTRITION IN WOMEN OF RURAL AREA

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### ABSTRACT

Undernourishment is also termed as malnutrition, which is because of an insufficient or poorly balanced diet or faulty digestion or utilization of foods. The health of women is linked to their status in the society. The demographic consequence of the women has formed expression in various forms, such as female infanticide, higher death rate, lower sex ratio, low literacy level and lower level of employment of women in the non-agricultural sector as compared to men. Generally, at household level, cultural norms and practices and socio-economic factors determine the extent of nutritional status among women. National Nutrition Monitoring Bureau has been carrying out regular surveys on diet and nutritional status of different population groups since 1972. For the purpose of present investigation, the data collected during 1998-99 and 2005-06 on diet and nutritional status of tribal and rural population respectively in nine States of India was utilized.

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### I. INTRODUCTION

The intake of all the foods except for other vegetables and roots and tubers was lower than the suggested level among rural as well as tribal women. The study revealed inadequate dietary intake, especially micronutrient deficiency (hidden hunger) during pregnancy and lactation. **A third of women of reproductive age in India are undernourished, with a body mass index (BMI) of less than 18.5 kg/m<sup>2</sup> . It is well known that an undernourished mother inevitably gives birth to an undernourished baby, perpetuating an intergenerational cycle of under nutrition.** The villages covered by National Sample Survey Organization (NSSO) for its 54th round of consumer expenditure survey carried out during 1998 formed the sample frame (NSSO 1998). Based on agro-climatic criteria, NSSO divided each State into several strata, each strata consisting of 1.8 million rural population. Out of these strata NNMB covered 16 strata from each State, keeping in view the manpower and other available resources. From each selected village, a total of 40 households (HHs) were covered, by adopting probability proportion to size of different tribes. For this purpose, in each village households were grouped according to tribe and from each tribe required number of HHs were covered for survey.

### II. METHODOLOGY

#### TO RESOLVE THE PROBLEM AFTER SURVEY REGARDING MAL NUTRITION

Samples of wheat, gram, rice, jwar, bajra have been collected and nutritional values of samples have been checked. Results thus obtained are highly surprising and shocking. The nutritional values of those samples are much lower than the standard parameters.

Food is an essential part of our lives and trees are the main provider of the food. Trees are an integral part of our landscape. They play many roles and confer a multitude of benefits to society such as food, shelter, shade, timber, natural beauty to the countryside, conservation of our soil and water resources and improved air quality. Malnutrition continues to be a major public health problem throughout the developing world, particularly in southern Asia and sub-Saharan Africa. Diets in populations there are frequently deficient in macronutrients (protein, carbohydrates and fat, leading to protein-energy malnutrition), micronutrients (electrolytes, minerals and vitamins, leading to specific micronutrient deficiencies) or both.

The high prevalence of bacterial and parasitic diseases in developing countries contributes greatly to malnutrition there. Similarly, malnutrition increases one's susceptibility to and severity of infections, and is thus a major component of illness and death from disease. Malnutrition is consequently the most important risk factor for the burden of disease in developing countries.<sup>12</sup> is the direct cause of about 300 000 deaths per year and is indirectly responsible for about half of all deaths in young children. The risk of death is directly correlated with the degree of malnutrition.

With the recent approval and launch of a National Forest Management and Conservation Plan, and the greater awareness of forest and tree values, indications are that there will be an increased demand for tree seedlings to ensure that these benefits continue to contribute to the nation's well-being. Making survey, making awareness, Pranayama techniques. Organization of camp for various pathological test. Organization of workshop Training program for tarries farming and kitchen garden, Use of Bio fertilizers.

Following are the nutritional ingredients required to full fill the nutritional parameters.

- Iron
- Folate & B12
- Vitamin D
- Iodine
- Vitamin A
- Calcium
- Protein

### III. RESULT AND DISCUSSION

#### Survey of rural areas

50 % of Indian women in the age group of 15- 49 year are malnourished.

Micronutrient deficiencies are seen across women of different age groups. Anaemia prevalence among pregnant women varies from 50% to 90%. Nutritional intake of pregnant and lactating women is lesser than the required intake. Combination of early pregnancies and poor maternal diet leads to a vicious cycle of "Malnutrition of Two". Malnutrition due to protein deficiency is caused by starvation. It is the disease that develops when protein intake or energy intake, or both, chronically fail to meet the body's requirements for these nutrients. It is always been a common disease, and humans have adaptive mechanisms for slowing and, in most cases, arresting its progress. Fat loss is slowed by a reduction in energy expenditure that the body accomplishes both by reducing the metabolic rate per unit of the metabolically active tissues and by jettisoning some of the body's lean tissue (protein) store. Such a protein-depleted body also requires less dietary protein. Muscle protein, which normally accounts for about 80% of the lean tissue mass, bears the brunt of the loss, whereas the "central" lean tissues (liver, gastrointestinal tract, kidneys, blood and immune cells) are relatively spared.

### IV. CONCLUSION

As long as the starvation ration of energy and protein is not too low, successful adaptation will reduce energy and protein requirements to match it, restoring homeostasis and maintaining key physiologic functions. The physiologic cost of this adaptation is a lowered metabolic rate and reduced muscle mass (including reduced cardiac and respiratory muscle mass); its clinical consequences include muscular weakness and functional disability, reduced cardiac and respiratory capacity, mild hypothermia and a reduced body protein reserve.

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