

MINIMUM INCOME STANDARD

WORKING PAPER TWO

NOTES ON THE NUTRITIONAL ADEQUACY OF FOOD BUDGETS:

Background

Food is one of the largest components of budget standards and it is important that it meets a test of nutritional adequacy in order that the budgets are considered valid and adequate.

Previously the FBU have used a family based nutritional programme and the services of Dr. Michael Nelson of Kings College to develop and test household food budgets. His food budgets allowed deviations from the norm including acceptance of a measure below 100% of daily requirements for fat and saturated fatty acids to avoid obesity; and inclusion of the nutrients found in alcohol (if allocated), sweets and soft drinks into the nutritional adequacy analysis. In addition the FBU has established the importance of an element of social inclusion consumption by way of snacks, take-out meals and meals eaten outside the home. It has also been long established, that the optimum diet should not only meet adequacy but also the latest government guidelines for healthy eating (a diet that stands individuals in good stead in regard to fitness and weight ratios). The latest guidelines state that:

- 33% or less of dietary energy from fat, with no more than 10% from saturated fat and 0-20% from mono-unsaturated fat, and 3-15% from poly-unsaturated fat.
- Non-milk extrinsic sugar to provide no more than 10% of dietary energy.
- Dietary fibre intake between 12-18 grams per day (ideal 18grams)
- Energy from carbohydrates 50%
- At least five portions of fruit and vegetables per day (other than potatoes)
- Total diet to provide 100% of the DRVs (Dietary Reference Values) for energy.

A problem with the FBU approach to the family based test for adequacy was that once nutritional adequacy was set, it was set for a specific household type. The menus were not interchangeable when reconstituting new family types or to take account of additional family members. The CBS approach produces initial menus for individuals which overcomes this problem and will allow us to use Tinuviel software to measure nutritional adequacy.

Tinuviel is a Software Company, which Professor Gerry Morris used recently in his Age Concern budget standard dietary work. The nutritional adequacy of food consumption is measured by expressing a given food basket for an 'individual' rather than a 'family' as a percentage of DRVs. The aim would be that the food quantities and types provided sufficient energy to meet at least 100% of DRVs. In essence the foods consumed are broken down into their nutrient parts (Macronutrients, Vitamins and Minerals) and measured against the optimum needs of a particular body size, age and lifestyle. Provided the values for nutritional adequacy are above 100% the quantities and food types shown in the baskets will continue to provide a healthy and balanced diet. The advantage of Tinuviel is the saving of time and money by

building a range of individual balanced menus to suit the make-up of many different households. For example, a household with a live-in granny, an extra child or the event of an infant, lone parent household, the added cost of a young adult staying home for longer.

Lessons learned from the Irish Budgets

A healthy balanced diet should also aim to meet standard government guidelines on the distribution of energy sources from diets. The diets of some of the individuals tested that bordered on nutritional adequacy, were improved by advice from a nutritional expert without altering the type of food generally eaten. For example a general comment was that all families needed to increase their consumption of fruit and vegetables to at least five portions a day. This would not only satisfy government guidelines but also address some of the other deviations from the ideal. Among the helpful comments made by the experts were:

- the use of dried fruit added to cereal on a morning;
- tuna could be used as a sandwich filling once a week for added fish source nutrients;
- dried soup omitted to lower the salt levels;
- spread replaced by Flora or full cream replaced by skimmed to improve the mother's level of saturated fat intake etc.

By presenting the Irish Budgets for Tinuviel analysis as a 'pilot' study for the MIS food budgets:

- we have established the level of detail needed at menu level;
- identified what information is needed to breakdown menus into individual records (slices, grams, mls, spoons etc);
- identified that we need to submit weight, height measurements and activity rates for individuals; and
- recognised that there will be a need to submit the final menus to the check-back groups as developing a weekly menu by task groups would be a lengthy process.

Constructing food budgets for the MIS

Task groups will be asked to:

1. produce a menu for one day for their case study individual;
2. identify variations, e.g. how what is eaten at breakfast might vary across a week; and
3. list 'store cupboard' ingredients - items such as sugar and salt which would not necessarily appear in menus.

These menus will be checked for nutritional adequacy using the Tinuviel Software. If the menus do not meet adequacy, or if they do not meet government guidelines, this will be addressed in the checkback phase.

Appreciating that the menus for analysis for nutrient adequacy cover only foods consumed by the individual. Further stages in setting the food budgets are:

- developing individual food lists to take account of table and preparation waste;

- reconstituting households to give family shopping lists; and
- pricing items to establish a weekly shopping bill.

The final shopping lists will take account of whole packets and represent economies of scale in purchasing the weekly shop.