

RUJUKAN



## FINAL REPORT OF SHORT TERM RESEARCH PROJECT

304/PPSK/61310004

15 Jan 2010 - 14 Jan 2012

# Development of Food Composition Database of Kelantanese Foods

### Researchers:

*Dr Sakinah Harith*

*Assoc. Prof. Dr. Shariza Abdul Razak*

*Mr. Nor Azmi Zainal*

## **PENENTUAN MAKRONUTRIEN DALAM SEBAHAGIAN MAKANAN**

### **TERPILIH YANG TERDAPAT DI KELANTAN**

#### **ABSTRAK**

Kajian ini dijalankan untuk memberikan informasi yang khusus mengenai komposisi nutrien makanan tempatan bagi negeri Kelantan. Makanan Kelantan dikatakan lebih manis berbanding dengan makan dari negeri lain di Malaysia. Oleh itu, kajian terhadap komposisi nutrien makanan Kelantan akan memberikan informasi yang sebenar dan seterusnya memberikan faedah kepada pesakit, keluarga, masyarakat dan ahli profesional kesihatan. Sebanyak 100 makanan Kelantan telah dipilih untuk dijadikan sampel kajian. Pemilihan ini dijalankan setelah mengambil kira dari aspek kemasyhuran makanan tersebut dan kebolehdapatan makanan tersebut di sekitar negeri Kelantan. Makanan yang telah dipilih dibeli daripada tiga tempat penjualan makanan yang berbeza. Penentuan kandungan karbohidrat, air, protein, lemak, abu dan kalori ditentukan dengan menggunakan kaedah standard AOAC (1995). Didapati bahawa, kebanyakan makanan Kelantan mengandungi karbohidrat yang tinggi berbanding makronutrien lain. Walaupun begitu, makanan ini masih boleh diambil dalam diet seharian, tetapi dalam kuantiti yang terhad dan terkawal. Hasil kajian ini dapat dijadikan panduan kepada masyarakat Kelantan khususnya untuk merancang pengambilan makanan harian mengikut amalan pemakanan yang sihat.

## **DETERMINATION OF MACRONUTRIENTS IN SELECTED FOODS FOUND IN KELANTAN**

### **ABSTRACT**

This study was conducted to determine nutrient composition, based on foods, which are widely available and popular among the people of Kelantan. This study will be very important in establishing reliable data on the nutrient composition of foods consumed by the community. Hundred types of foods that are served in Kelantan had been chosen in this study. Food samples for analysis were purchased from three different places of production. Macronutrients such as calorie, carbohydrate, moisture, protein, fat and ash were analyzed using the standard methods of AOAC (1995). The results showed that the foods analyzed generally high in carbohydrate. Although these foods are high in carbohydrates, Kelantanese still able to consume them by controlling the amount of food intake. These results will be used in the estimation of nutrient intake in relation to study of diet and health relationship for Kelantan population.

## **INTRODUCTION**

The Malaysian Food Composition database is the output of many years of work of the Malaysian Food Composition Programme which was initiated in 1980. A comprehensive Food Composition Table for use in Malaysia, with data generated entirely by the researchers in the country was published in 1988. There is a total of 783 foods with complete nutrient composition in this database. Out of this total, 580 items are listed for raw and processed foods, and another 203 items on cooked foods.

Reliable data on the nutrient composition of foods consumed by people are critical in many areas such as health assessment, the formulation of appropriate institutional and therapeutic diets, nutrition education, food and nutrition training, epidemiological research on relationships between diet and disease, plant breeding, nutrition labeling, food regulations, consumer protection, and agricultural goods and products, as well as for a variety of applications in trade, research, development, and assistance.

In response to the increasing concern on health, the research on the association of chronic diseases and dietary habits has been carried out actively, and the importance of the food composition database for various nutrients and foods is emphasized more than ever. Currently, the food composition data for Kelantanese foods are not been documented. Further research and development on nutrient composition database of Kelantan foods are urgently required. No reference data of Kelantan foods are available in the Malaysian Food Composition.

Considering that the nutrient composition of food varies widely depending on the cultural, it is necessary to have a food composition database for the foods consumed in Kelantan. For this, we have analyzed food items consumed most, routinely, and frequently by Kelantanese for their food composition.