

**FOOD AND MALAYSIAN CLIMBERS AT HIGH ALTITUDES**



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#### **4. Enhanced Research Title and Objectives**

**Original Title as Proposed:** Types of Food Influenced Appetite and General Health of Climbers' (Malaysian) At High Altitudes Environment

**Improved/Enhanced Title:** Food and Malaysian Climbers at High Altitudes

**Original Objectives as Proposed:**

- i. To identify the most suitable types of food for Malaysians athletes for rough sports or activities especially at high altitude
- ii. To develop a commonly acceptable food menu with appropriate nutritional values for high altitudes activities
- iii. To prepare a written documentation to at least provides some useful information for future climbers with regards to types food and nutrition content in high altitude environment,

**Improved/Enhanced Objectives:**

- i. To examine Malaysian climbers general experience of Everest expedition
- ii. To reveal the difficulties faced by the climbers during the expedition.
- iii. To discover the problems relating to food consumption during the expedition
- iv. To identify the most suitable types of food for Malaysian climbers at last phase of the expedition or before reaching the peak of Mount Everest
- v. To develop the food products based on suggestion given by Malaysian Everest climbers and validate it through the local climbers at Mount Kinabalu, Sabah.

# 1. Report

## 1.1 Proposed Executive Summary

Research curiosity in high altitude namely in the mountain range has attracted scientists over the globe to understand how the physiological and biochemical changes occurs to the human body during expeditions. These studies are very important in providing information to those who are actively involved in rough outdoor activities like mountain climbing and trekking. Physiological scientists have discovered evidences on the effects of high altitude environment to human respiratory, cardiovascular and general health. These evidences in fact have extending the body of knowledge in the concerned areas. Besides physiological aspects, another significant area, which also a central focus among the researchers is nutritional aspect. Nutrition scientists such as Rose et al, (1988); Butterfield et al, (1992); Reynolds, (1998) and Reynolds et al, (1999) have contributed to altitudes literature. However, all of them are among the western researchers. There is no available data or attemp made by Malaysian researchers on nutritional or food at high altitudes despite of our success in conquering many mountains peaks including the Mount Everest. Based on experience of Fauzan Hj Hassan and Dr. Anuar Suum as a first (1997) and second (2004) batches of Malaysian Everest expedition team, besides other rudiments, foods are considered one of the most vital elements at high altitude. As reported during expeditions all Malaysian climbers were losing a lot body weight, diarrhoea due to food consumed not suited to their appetite. This occurrence raises a critical question of what is the best food for our climbers or those from equators regions in high altitudes environment.

## 1.2 Enhanced Executive Summary

The suitability of food taking besides others provisions is one of the vital elements to be considered for the high altitude mountain climbers to combat with the common symptoms of physiological changes like Acute Mountain Sickness, nauseous, breathing difficulties including appetite suppression and reduction of taste. Based on interview with Malaysian Everest expedition teams, this paper report their experiences with regard to the types of food consumed during the expedition and at the last phase of the expedition before conquering the peak of the mountain. Results revealed that dietary habits of Malaysian climbers are found to be still the same although they were in different climate regions and their palate would not be attractive to other types of food. Consuming a common eating to live food even in small quantity is necessary despite the presence of an effect of the extreme environment. In addition, the needs of energy from commonly eaten or improvised food with the local taste are even significant in the last phase of expedition. Dates or and raisin are claimed to be the most suitable kind of energy food for the Malaysia climbers and most importantly it's slightly contribute and maintaining their energy in reaching the top of the mountains. These results serve as baseline information for further investigations not only among the Malaysian climbers but climbers from a similar region.