

## **Study on the Indigenous Smoked Fish of Meitei Community Ngaphak**

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**Abstract:** *Ngaphak is a type of smoked fish, common in Meitei community and prepared by dissecting the fresh fish dorsally from head to tail. It is highly demanded by local people and used in preparing many dishes in households. Making Ngaphak is mainly done by women fishers at their homes and sold at the retailed shop or nearby markets at the rate of Rs. 55-65 per piece made from about 1/2 Kg body weight fresh fish. It can make an earning source of income for a family but needs skill, time and proper management. The fish should be fresh and good or else it may cause hazard to our health if it is made from rotten fish. So far no case of food poisoning in Ngaphak has ever been reported. The species which are mainly used in preparing “Ngaphak” are *Cyprinus sp.*, *Ctenopharyngodon idella*, *Hypophthalmichthys molitrix*, *Chana striata*. Availability of Ngaphak is becoming less day by day though its demand is so high. Thus, it is required to preserve this indigenous food to keep and maintain traditional value of preservation of fish.*

**Keywords:** *smoking, Ngaphak, processing, indigenous, food poisoning*

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### **1. INTRODUCTION**

Processing of fish involves primarily the application of preservation techniques in order to retain quality and increased shelf life protecting from decomposition. It may also deal with the value adding to produce a wide variety of products. A number of methods are used to preserve fish. Some employ techniques are based on temperature control, icing, refrigeration or freezing; others on the control of water activity which includes drying, salting, smoking and freeze drying. But the method used in making “Ngaphak” is of indigenous type, less costly and no chemical is used without any modern equipment. The Food and Agricultural Organisation (FAO) reported that fish accounted for about one-fifth of the world total supply of animal protein sources [1]. The importance of fish in human nutrition in particular and for animal feed (fish-meal) as well as for other purposes cannot be gainsaid [8]. Its biological value in terms of high nitrogen and other nutrient retention in the fish flesh, bones and scales is responsible for the consumption of fish products for health reasons and also for its high protein, which is easily assimilated when compared with other protein sources [6] & [2]. Fish has also been found to be low in cholesterol content, which allows for the enhancement of improved human nutrition [3]. In addition, fish is noted to be one of the safest sources of calories, protein, fat, calcium, iron, vitamin and essential amino acids [9].

### **2. METHODOLOGY**

The method involves the review of relevant document, carrying out in-depth interviews with local fisherwomen and photographs are taken. Materials reviewed are based on gender policy reviews, surveys and reports in the fishery sector, documents, journals, research articles, etc.

### **3. PREPARATION OF NGAPHAK**

The species which are mainly used in preparing Ngaphak are *C. carpio*, *Cyprinus sp.*, *Ctenopharyngodon idella*, *Hypophthalmichthys molitrix*, *Chana striata*. The most common used is *C. carpio*. Ngaphak is made by dissecting the fresh fish dorsally from head to tail. The intestinal parts are removed and washed the body neat and clean. Then the dissected fish is treated with some amount of common salt to lower its decomposition rate and increase in taste. The fish is kept on a sieve and smoked into flames at *leirang* (a place where flame is burnt) for about half an hour. It is said that

smoking is continued until the colour of the fish is changed to yellowish brown. This depends highly on the skill of the person smoking the fish. When the smoking is completed the fish is removed from the *leirang* and kept in open air for an overnight and then sundried on the next 2 or 3 days. Ngaphak thus formed is highly demanded. The price is Rs.55-65 per piece made from around  $\frac{1}{2}$  Kg body weight fresh fish. They used firewood as smoking fuel which is bought from nearby places at the rate of Rs. 100 per 6 bundles containing 4 pieces of stick in each bundles.



Figure 1 : Dissection of fish



Figure 2 :Ngaphak on sieve



Figure 3 :Ngaphak while smoking



Figure 4 : Firewoods



Figure 5 : Drying in Sun

#### 4. RESULT AND DISCUSSION

Smoking of fish is an indigenous method to process fish, widely followed by Meitei community. Ngaphak is a traditional food which is inherited from forefathers in the state. Indigenous knowledge is the community based knowledge which every culture has evolved over a considerable period of time in many generations [5]. Indigenous knowledge is an enabling component of development from which local people can tap for their livelihood [4]. Worth of studying indigenous knowledge is well emphasised by Mundy and Compton [7]. Women do much of the primary and secondary processing of fish for home use and sale in the market. Fish processing is the act of changing the natural form of fish in order to extent its shelf life. Processing is necessary because all fish have bacteria in their intestines which begin to multiply immediately after the death of fish, causing fast rate in decay. This result to remove the intestine soon after the fish is killed.

Ngaphak is locally made product which can used in different purposes. It is added in cooking to increase its nutritive value and taste of dish. It is also consumed after frying or roasting. Meitei communities are very fond of Ngaphak but it is not available easily because preparation of Ngaphak needs skill, time and experience but gain little profit. The technique is so simple but anybody cannot do it as such. It needs regular exposure to sunlight or flame unless it will degrade. Sometimes people used diseased or rotten fish to make Ngaphak taking the advantage of changing colour in smoking

which is invisible with our naked eye in preparation. This may be harmful to the consumers if proper treatment is not carried out. Ngaphak is a traditional and indigenous food of Meitei community which has inherited from our forefathers. So far no case has ever been reported of death due to consumption of this indigenous food. If any case of poisoning or death after consumption of Ngaphak is reported or found then it could be addition of any poisonous substance or chemicals in preparation with the intention to cause food poisoning. Such food sample should be sent to Forensic Science Laboratory or any chemical testing laboratory for detection of poisonous substance or chemicals present in it.

## **5. CONCLUSION**

Ngaphak is an indigenous food for Meitei community having high demand which can be used in many purposes. Smoking of fish prevents from wastage and may keep for future use. It can be a source of earning by local people. Besides it keeps traditional value of fish preservation. Availability of Ngaphak is less; not necessarily due to the lack of consumption but it may be the less number of labours to make it. So, it is necessary to preserve both the traditional techniques and food value of this method.

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