

# **TECHNICAL REPORT**

# FOR

Pattern of healthy and unhealthy food consumption among Pakistani population and estimating the price difference

> Prepared By Ibrar Rafique Dr. Muhammad Arif Nadeem Saqib

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#### **Technical Report**

#### 1 BACKGROUND& RATIONALE

Non communicable diseases (NCDs) include diabetes, hypertension, cancers, mental disorders, arthritis, injuries and accidents<sup>1, 2</sup>.NCDs cause a substantial number of premature deaths (under 60 years) in low (41%),lower middle (28%), middle (25%) and high (13%) income countries<sup>3</sup>. In Pakistan, NCDs fall in the top 10 causes of morbidity and mortality. It is estimated that NCDs and injuries account for 77% of age standardized deaths in Pakistan<sup>4</sup>.

The risk factors for NCDs are characterized into behavioral and metabolic/physiological factors. The behavioral risk factors include tobacco use, physical inactivity, unhealthy diet and the harmful use of alcohol whereas metabolic risk factors include raised blood pressure, overweight/obesity, hyperglycemia and hyperlipidemia<sup>5-7</sup>

A recent Non-communicable diseases survey carried out by Pakistan Health Research Council has revealed that overall 96.5% consumed less than five servings of fruits and vegetables per day and 41% were not meeting WHO recommendations on physical activity. About 15% were obese and 26% overweight. Almost 37% population having stage I hypertension and32% were not taking any treatment for hypertension. Similarly, 15.9% population having stage II hypertension and9.9% were not taking any treatment<sup>8</sup>.

The prices and affordability of foods are important determinants for food choices. The differences in the prices of healthy and unhealthy diets can make a contribution to NCDs<sup>9</sup>. A study conducted in Australia assessed price and affordability of healthy and unhealthy diet and reported that people spend more on unhealthy diets as compared to healthy diets. They have assessed by using INFORMAS (International Network for Food and Obesity / non-communicable Diseases Research, Monitoring and Action Support) approach<sup>10</sup>.

INFORMAS is a network of organizations that collectively work for better healthy environment and to reduce risk factors like obesity, intake of unhealthy diets. It proposes a step-wise framework, comprising 'minimal', 'expanded' and 'optimal' approaches, to monitor price and affordability of the components of 'healthy' and 'less healthy' diets.<sup>11, 12</sup>.

In the minimal approach, difference in prices of healthy and unhealthy foods and also tax component of the food prices is calculated. In the expanded approach, price difference between healthy and unhealthy diets and meals is calculated however in optimal, affordability is calculated for 'healthy' and 'less healthy' diets as % income of reference household<sup>11</sup>. It has been reported from Pakistan that unhealthy life style and poor dietary habits are major contributor to NCDs<sup>13,14</sup>.

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As Pakistan is a developing country and there is lack of knowledge about healthy foods and young generation is mostly consuming fast food and junk foods as compared to healthy diet. There is lack of evidence based data on healthy and unhealthy diets and comparison of their prices from Pakistan. Therefore this study is planned to assess the pattern of diets and the comparison of prices. This will help us to inform the Policy makers regarding the increase in tax on unhealthy diet and subsidies the healthy foods.

## 2 **OBJECTIVES**

#### 2.1 General objective:

To calculate the consumption of healthy and unhealthy diets by the community and the money spent on these diets.

#### 2.2 Specific objectives:

- To assess the average consumption of healthy and unhealthy diets in the different socioeconomic groups of the community.
- To calculate the difference in prices paid for healthy and unhealthy diets

#### 3 METHODOLOGY AND FRAMEWORK

It is a community based cross sectional survey which is being done in 15 Union Councils (UCs) of Federal Capital (Islamabad) and Provincial Capitals i.e. Lahore, Karachi, Peshawar and Quetta to generate national level data covering different geographical areas of the country. The Union Council (UCs) has been selected.

Adults  $\geq 18$  years of both genders from study areas who agree to give consent to participate will be included in the study. The total sample size is 384. The participant will be introduced to the study, its purpose, details about the objectives, procedures of the study.

The information related to food consumption will be covered using recall based approach.

#### **Data collection**

There will be data collection team for each city comprising of enumerator, data collector (male) and data collector (female). The enumerator will mark the houses and data collector will interview the households. The filled questionnaire will be entered and analyzed. The final report will be drafted and disseminated.

## 4 KEY DELIVERABLES

| S.# | Deliverables  | Activities   | Timeline    |
|-----|---|--|-------------|
| 1.  | Data collection tool/ Ethical<br>Clearance/ Selection of PSU and<br>Teams | Development of data collection tool<br>Finalization of data collection toolTaking of<br>ethical clearance from NBC, Pakistan<br>Finalization of list of Union Councils | 1-3 Months  |
| 2   | Data collection   | Identifying data collectors<br>Training of data collectors<br>Data collection in Field   | 4- 6 months |
| 4   | Data Entry/Analysis and Final<br>Report                                   | Entry of data and its analysis<br>Drafting report and printing<br>Dissemination  | 6-9 months  |

## 5 DURATION OF ASSIGNMENT

The total assignment duration is 9 months and estimated to be completed by end November 2017.

## 6 **PROGRESS REPORT:**

## i. Finalization of the questionnaire

a. The questionnaire has been finalized for data collection.

## ii. Ethical Clearance from National Bioethics Committee

a. As it is mandatory for every national study/foreign funded to take clearance from National Bioethics Committee. Therefore the project was submitted to National Bioethics Committee. The committee has reviewed and raised some queries which were addressed and Ethical Clearance was granted.

## iii. Selection of Union Councils:

a. As in the approved methodology, the Union Councils were selected as low, middle and high socioeconomic groups. Therefore list of Union Councils was selected.

## iv. Awaiting for release of Funds:

- a. The funds has not yet been released. The training and data collection will be started once funding received.
- b. It is requested that 1st and 2nd installment i.e. 75% of the project may be released so that project can be completed in time.