

Medicinal Value of Vegetable Consumption Among Berom Pregnant Women

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Abstract: The experiment was aimed at investigating the medicinal value of vegetable consumption among Berom pregnant women at four local government areas namely (Barkin-ladi, Jos south, Jos north and Riyom LGAS) of plateau state, Nigeria in the Southern guinea savanna ecological zone in 2011 was considered. Data were collected using structured questionnaire. Multi stage random sampling of four autonomous communities in the areas was employed in selecting 120 Berom pregnant women who consume vegetable as a staple food. Simple descriptive statistics (frequencies, percentages) and correlation analysis were used in data analysis. The result of the finding revealed that women in the areas had experienced very little health complications due to pregnancy related problems (9%). It revealed that vegetables are cheap sources of proteins; vitamins and minerals that help the women to meet their daily protein requirement and as well improve the living standard of the women but as well supplement their starchy diets, hence making the women healthy. Considering these benefits vegetable consumption should be encouraged.

Keywords: Berom, consumption, pregnant, vegetable, women

INTRODUCTION

Many women die yearly in Africa as a result of pregnancy related illnesses (NDHS, 2012). Researchers had shown that such problems could be due to malnutrition or unbalance nature of the food of the people (Bailey, 1992; Akpe, 2007). Most of the diets of people of Africa are starchy in nature and little of fruits and vegetable that contains more vitamins and minerals needed in the diet of children, the sick and pregnant women.

Vegetable are widely eaten among the Berom of Barkin-ladi, Jos south, Jos north and Riyom L.G.A of Plateau State. Great varieties of leaves were probably eaten in the days before agriculture among the people as herbs are widely distributed throughout the areas where the early Beroms lived and hunted. Nutrition studies in the 1950s stated that green leaves were considered substitute for meat. Eating a large variety of leaves is a good practice as no particular leaf contains everything that is needed for good health (Bailey, 1992). Vegetables have low calories and dry matter content. The crude protein content of the leafy vegetables has been reported to be high and the amounts usually increase with nitrogen fertilization. Auwalu and Karikari (1989) Auwalu and Tenebe (1997).

Vegetables are consumed as “tere”, “kodo” and soup or even mixed with meat. The Beroms eat these

vegetables only as a traditional food, not much is known about their importance, what they could derive from each of vegetables and the role vegetables play in food security of the area. Many mothers are ignorant of the nutritional benefit of locally grown food. If the Importance of these common edible vegetables is brought to bare, the people will appreciate it more, better still, the vegetables can be improved upon, diversified into other continents of the world and adopted.

In view of the above, the present study was undertaken with the following objectives:

- To investigate the medicinal value of vegetables among Berom pregnant women in this study area.
- To identify types of vegetable consumed among the Berom.
- To highlight the economic importance of these vegetables in the study area.

METHODOLOGY

The study was conducted in 2010, with 120 Berom pregnant women using multi-stage random sampling to identify medicinal value of vegetable consumption among them. Data were collected using structured questionnaire distributed to four Local Government Areas of Plateau State namely; Barkin Ladi, Jos North, Jos South and Riyom L.G.A's. Results collected were analyzed using

simple descriptive statistics and correlation analysis. Correlation analysis was used to examine the relationship between success in the use of these vegetables and some variables.

RESULTS AND DISCUSSION

The result of this investigation revealed that all the women do eat vegetables (Table 1). Vegetables are taken as soups, salads or in combination with other foods. This finding is true as human beings eat food every day of their lives. It is similar with the study of Auwalu (2006), who reported that people eat vegetables that are cheap and common to meet daily protein need.

Table 2 Showed that most of the respondents eat vegetables when steamed. This is because of the eating culture of the people. On the contrary, (Bailey, 1992) reported that vegetables are eaten raw in some Asian countries as a traditional food pattern. Consumption of raw vegetables helps in retaining the vitamins and mineral that could easily be destroyed from heat.

The types of vegetable grown and consumed include vegetable amaranth, Lettuce, carrot, Roselle, Garden egg, Okra, Sweet potato leaves and Cassava leaves (Table 3). These vegetables are common in the temperate and subtropical region of the world (Karikari, 1990). They are produced all year round as rain fed crops and as irrigated vegetables in the dry season. An average annual rainfall of 750 mm is adequate for their growth (Dikwahal, 2003). Tindal (1986) reported that most of these vegetables contain approximately 86.1% water, 2.2% protein, 0.2% fibre. This may not be readily available from other sources.

Table 4 Showed that most of the women interviewed had given birth to four or more children (80%). Only 9% of the respondents had complications arising from pregnancy related problems despite the number of times at delivery. The fact that most women (73%) had babies, given birth at 2.5-9.2 kg on delivery is a further proof to good nutrition (Table 5). Saidu and Pam (2009) reported that most infant deaths are caused by malnutrition. The Nigeria Demographic and Health Surveys (NDHS) revealed that Nigeria continues to have very high rate of malnutrition with stunting affecting 41% of children under five, 14% wasted 23% are under weight, 13.7% of new born are born with birth weight below 2500 g.

It was reported that undernourished children and pregnant women live in just 36 countries including Nigeria (NDHS, 2012). Some of the problems encountered by the women were Infant mortality, Underweight children at birth, body swelling, breathlessness when pregnant as well as pelvic malfunction at delivery (Table 6). Thornhill (2012) reported that low dose of carbon monoxide can increase the growth of blood vessel in placenta and establish blood

Table 1: Frequency of vegetable consumption

| Frequency | Respondents |
|-------------|-------------|
| Everyday | 120 (100) |
| Weekly | 0 (0) |
| Once a week | 0 (0) |
| Monthly | 0 (0) |

The figures in parenthesis show the percentage of the respondents' frequency in vegetable consumption

Table 2: Preparation method

| Preparation method | Respondents |
|--------------------|-------------|
| Frying | 6 (8) |
| Steaming | 85 (70) |
| Raw | 20 (17) |
| Boiling | 9 (5) |

The figures in parenthesis show the percentage of the respondents' vegetables preparation method

Table 3: Some common vegetables consumed

| English name | Local name (berom) | Respondents |
|---------------------|--------------------|-------------|
| Vegetable amaranth | Nepel | 42 (35) |
| Lettuce | Honong | 19 (7.5) |
| Carrot | Pear | 3 (2.5) |
| Roselle | Shit | 7 (6) |
| Garden egg | Piyal | 11 (9) |
| Okra | Leng | 42 (35) |
| Sweet potato leaves | Dankali | 3 (2.5) |
| Cassava leaves | Bebohono | 3 (2.5) |

The figures in parenthesis show the percentage of the respondents' common vegetables

Table 4: Number of children of the respondents

| Number of children | Respondents |
|--------------------|-------------|
| One | 10 (8.5) |
| Two | 10 (8.5) |
| Three | 20 (17) |
| Four & above | 80 (67) |

The figures in parenthesis show the respondent's number of children

Table 5: Weight of babies at delivery

| Weight | Respondents |
|------------|-------------|
| 1.0-2.4 kg | 0 (0) |
| 2.5-2.9 kg | 72 (60) |
| 3.0-3.5 kg | 28 (23) |
| 3.6-4.0 kg | 20 (17) |

The figures in parenthesis show the percentage of the respondents' weight of babies at delivery

Table 6: Pregnancy related problem (s) encountered

| Problems | Respondents |
|--------------------|-------------|
| Infant mortality | 2 (2) |
| Pelvic malfunction | 2 (2) |
| Underweight | 2 (2) |
| Body swelling | 2 (2) |
| Breathlessness | 1 (1) |
| None | 109 (91) |

The figures in parenthesis show the percentage of the respondent's problem encountered

flow in the umbilical cord. Problem in placental malfunction can result in miscarriages or death. Body swelling after birth could be due to changes that take place during pregnancy and partially due to delivery processes itself. The body produces higher than normal levels of progesterone at pregnancy, which cause the body to retain both sodium and water. At the same time, the

Table 7: Correlation matrix of problems encountered due to pregnancy and vegetable consumption

| Parameters | PE | UN | PM | No | B |
|------------|---------|-------|-------|--------|-------|
| MN | -0.103` | 1.000 | | | |
| PM | -0.152 | 0.312 | 1.000 | | |
| NO | -0.772 | 0.449 | 2.292 | 1.000 | |
| B | -0.066 | 0.728 | 0.655 | -0.511 | 1.000 |

PE: Problems encountered; UN: Underweight; PM: Pelvic malfunction; NO: None, Breathlessness

expanding uterus presses against the veins in the legs, restricting flow of blood to legs, feet and ankles, which leads to fluid accumulation in the lower part of the body. Eating enough fruit and vegetables can help flush out excess fluids.

Correlation analysis of problems encountered and vegetable consumption with underweight, pelvic malfunction and zero problem (Table 7) showed that vegetable consumption is strongly correlated to zero problem. This is true as leafy vegetables contribute much in alleviating the protein deficiency symptoms associated with starchy diets and so play a vital role in providing the health and well-being of the people.

CONCLUSION

Based on these findings therefore, it is concluded that vegetables are cheap sources of protein at the reach of a common person. Vegetables like Amaranth, Lettuce, Carrot, Roselle, Garden egg, Okra, Sweet potato and Cassava leaves are common stable foods among the Beroms, which are locally and cheaply grown among them. These vegetables help in alleviating the protein deficiency symptoms associated with starchy diets and so play a vital role in improving the health and well-being of the people. These vegetables should be improved upon, diversified into other countries of Africa where poverty is endemic and their consumption encouraged.

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