Effect of Rural Culture on Food Choices of Persons Diagnosed with Heart Failure
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Introduction

Five million people in the United States have heart failure. Different life styles and availability of food may have an impact on the recommended two gram sodium diet for persons with heart failure. Persons who live in a rural area may have more access to vegetable gardens, fruit trees/bushes, hunting, and fishing, and less access to shopping, restaurants, or fast food. Rural people may depend on family/friends for transportation for shopping or dining outside the home.

Objective

The objective of this study is to investigate the shopping habits, cooking, social activity with eating, and food sources from hunting, fishing, and garden foods of people with heart failure who lives in rural areas. The study will examine food consumption at public places as church banquets, senior centers, restaurants, fast food restaurants, and at family/friends' homes

Method

10 minute telephone survey to persons enrolled in the Marshfield Clinic Heart Failure Care Management Telephone Care Group. The survey included demographic information about age, gender, years with heart failure, distance to grocery store, and if they live alone or with someone. Survey questions included the following:

- How closely they follow the 2 Gram Na diet
- Who prepares most of their meals
- How they get to the grocery store
- Where other than home do they eat: restaurants, fast food, church banquets, relatives'/friends homes
- How does they get to the grocery store
- Other food sources such as gardening, fishing, and hunting
- Frequency of above
- How well their heart failure is controlled.
- If they garden, hunt, or fish, question of value of educational materials

Results

- 5.8% (20 people) in the Marshfield Clinic Heart Failure Telephone Care Management group were surveyed. (344 letters were sent.)
- 65% eat fruits and vegetables obtained from their gardens or family/friends gardens (frequency of daily to prn)
- 10% ate venison from hunting (frequency of weekly to monthly)
- 25% ate fish from fishing (frequency of weekly to prn)
- 75% eat at restaurants (frequency of weekly to prn)
- 45% eat at fast foods (frequency of weekly to 4x/year)
- 45% eat at church banquets (frequency of monthly to yearly)
- 25% eat at senior centers through meals on wheels
- 65% eat at relative's houses (frequency of 1 day/week to 1 month/year)
- 20% eat at friend's houses (frequency of 1 day/week to monthly)
- 20% eat at church banquets (frequency of 4x/year to yearly)

Conclusions

- Gardening is a common source of vegetable and fruits for rural people with heart failure.
- Hunting and fishing are less common food sources
- There is a weak correlation (0.01) between perception of good heart failure control and gardening.
- Despite the distance of 7 miles to the grocery store, people with heart failure visit the grocery store at least weekly and visit restaurants at least every 2 weeks.
- Fast food restaurants are frequented by fewer rural people and less often.
- No conclusions about the value of the educational materials.

Due to small sample of people surveyed, it is difficult to conclude much statistical significance about the rural population of those people who lives with heart failure.

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