ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #598a

1. Full Title: Weight change among self-reported dieters and non-dieters in the ARIC study
    Abbreviated Title (length 26): Dieting and weight change

2. Writing Group:
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3. Timeline:
The analyses have been completed.

4. Rationale:
The literature of weight change has been plagued by the issue of whether or not the weight change is intentional (1). Intention to lose weight may explain why studies have shown that weight loss was associated with an increased mortality (2,4). In those studies, weight loss might be associated with pre-existing illness responsible for a higher mortality, especially in the early follow-up period.

There is a high prevalence of intention to lose weight or dieting in the United States (5). Although our knowledge of weight change has been incomplete and limited, much less is known about the role of dieting on weight change. Among the few studies of dieting and weight change that have been conducted, the methodology of assessing weight change has been inconsistent (6-8). The inconsistency of the methodology may explain why results have been inconsistent (6-8). Among these studies, only one examined the association among African Americans (6-8). The purpose of this study was to examine the annual weight change over a 6-year period in self-reported dieters and non-dieters across ethnicity-gender groups who were participants of the ARIC Study. Results from this study may influence the importance of including intention to lose weight as a potential confounder or effect modifier on the association between weight change and health outcomes.

5. Hypothesis:
Mean weight change is different in self-reported dieters and in non-dieters.

6. Design:
Dieting (intention to lose weight using a special diet was assessed by first asking "Are you currently on a special diet? Yes/no. Participants who answered affirmatively were asked to identify the type of diet from a checklist (weight loss, low salt, diabetic, low cholesterol, weight gain, and other diet). Dieters were defined as participants who chose "weight loss" from the checklist; those who chose other types were excluded. Weight change was calculated as the slope of the simple linear regression between weight and date of examination.

Crude and adjusted mean weight change among dieters and non-dieters were calculated. Covariates included baseline age, study center, BMI, height, WHR, smoking status, educational level, and physical activity. A quadratic term for age was tested in all groups but was not significant, and therefore not included in models. Results were compared before and after exclusions of diabetic subjects due to the possibility that weight change could be different in diabetics (9).

A general linear model was used for all analyses (10). Analyses were performed using SAS statistical software (PROC GLM and REG) (11).

7. Data Requirement:
We used data from the ARIC baseline, visit 2 and visit 3.

Identification information:
    Participant identification number
    Visit date
    ARIC field center

Demographics:
    Ethnicity
    Gender
    Date of birth
    Age

Anthropometrics:
    Weight
    Height
    Waist circumference
    Hip circumference

Others (baseline only):
    Smoking
    Physical activity
    Education

Dieting status
Type of dieting
Dietary intakes
History of CVD

8. Manuscript Requests with Overlap:
Proposal #598 "The putative determinants of weight change"
This manuscript is a subset of manuscript #598. We decided to examine self-reported dieting as a predictor of weight change first because if we find that dieting is associated with weight loss than we will examine other predictors of weight change stratified by dieting status. The association between self-reported dieting and weight change is very important and it is appropriate to examine the association in a separate manuscript.

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