

# National Health and Nutrition Examination Survey

## 2011-2012 Data Documentation, Codebook, and Frequencies

### Taste & Smell (CSQ\_G)

**Data File:** CSQ\_G.xpt

**First Published:** September 2013

**Last Revised:** NA

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## Component Description

The Taste & Smell Questionnaire Section (variable name prefix CSQ) collected interview data on taste and smell ability and related health conditions. The senses of taste and smell mediate all the body's food intake. These two senses work together to provide food flavor perception and palatability. Self-reported data on taste and smell may therefore be relevant to the analysis of NHANES nutritional, blood pressure, obesity, and health measures data. Also, the CSQ questionnaire was designed to provide data to support the Healthy People 2020 objectives for taste and smell disorders (Healthy People, 2020).

In the healthy normal population, genetic and functional variation in taste and smell ability may help explain part of individual differences in food preferences and consumption. This could assist in our understanding of diet-related health conditions. There are also age-related changes in smell and flavor perception that may affect food palatability and nutrient intake. Metabolic rate and energy intake are known to decrease with age, so food selection in older persons can be important for maintaining nutrition and energy balance. With age, some persons may consume more in response to a reduced ability to smell, while others may consume less.

Prior national-level U.S. data on taste and smell includes the 1994 National Health Interview Survey– Disability Supplement (NHIS, 1994), a population-based questionnaire survey which estimated that among U.S. adults, there was a 1.4% prevalence of chronic smell problems and a 0.6% prevalence of chronic taste problems. With combined data, 1.65% of adults reported either a chronic smell or a chronic taste problem. In the survey, prevalence rates increased exponentially with age and almost 40% of those with a self-reported smell or taste problem were 65 years of age or older (Hoffman et al., 1998). Another national level questionnaire survey of olfactory dysfunction has recently been reported (Lee et al, 2013).

The NHANES 2011-12 household interview taste and smell questionnaire collected data on self-reported taste and smell ability, selected symptoms of and medical treatment for taste and smell disorders, and data on conditions that may represent risk factors for taste and smell disorders. These questionnaire items may be helpful to describe self-reported variation in taste and smell ability, and to estimate the prevalence of self-reported medical provider diagnosed smell and taste disorders among U.S. adults.

## Eligible Sample

Adults of both genders ages 40+ years were eligible to participate. There were no exclusions for the CSQ taste & smell questionnaire.

## Interview Setting and Mode of Administration

These questions were asked, in the home, by trained interviewers using the Computer-Assisted Personal Interviewing (CAPI) system.

## Quality Assurance & Quality Control

The CAPI system is programmed with built-in consistency checks to reduce data entry errors. CAPI also uses online help screens to assist interviewers in defining key terms used in the questionnaire.

## Data Processing and Editing

The 2011–12 NHANES taste and smell questionnaire data was verified against the main data collection file prior to public release.

## Analytic Notes

These data were collected as a part of the NHANES Household Questionnaire Interview. For data analysis, NHANES Household Interview weights should be used if only questionnaire data is being studied. However, if CSQ questionnaire data is merged with MEC examination or laboratory data, then NHANES MEC examination weights should be used for the analyses (or if applicable, subsample laboratory weights). Please refer to the NHANES Analytic Guidelines and the on-line NHANES Tutorial for further details on the use of sample weights and other analytic issues.

The CSQ questionnaire was specially developed for NHANES use and had not been previously used elsewhere. Despite prior cognitive testing of the instrument, when the CSQ questionnaire was fielded, one question did not perform as intended. CSQ030 was intended to capture a history of an altered, typically unpleasant perception of smell in the presence of an ordinary odor (parosmia). In the field most participants who answered “yes” to this question did not believe that they had any problem with their ability to smell. However, CSQ030 was retained in the public data release because of the possibility that it might have some analytic use where there was other questionnaire or examination data to suggest an abnormality of smell.

Decreased taste and smell ability may be transient (for example, from a recent temporary illness) or chronic. The variable CSQ070 captures this dimension for abnormalities of smell. Duration of taste or smell symptoms is captured by the variables CSQ140 and CSQ060, respectively. Taste and smell ability may be adversely affected by a number of chronic health conditions and by the side effects of prescription medications. A recently published community study indicates that smoking may also adversely affect the ability to smell and taste (Vennemann et al., 2008).

A number of NHANES 2011-12 datasets may be pertinent to the analysis of taste and smell data. These include NHANES datasets on medical conditions (MCQ, KIQ, DIQ, BPQ); blood sugar (BIOPRO, GHG); blood pressure (BPX); body weight (BMQ, WHQ); diet and nutrition (DTQ, DRXDOC, DSQDOC, DBQ); smoking (SMQ, COTNAL); osteoporosis (OSQ, DXX); oral health (OHXDEN, OHXPER); and prescription medication use (RXQ\_RX).

The variables CSQ200 through CSQ260 identify a history of some co-morbid conditions not captured in other NHANES questionnaires that could potentially affect taste and smell. These include the history of a recent prolonged head cold or flu; persistent dry mouth; chronic nasal congestion resulting from allergies; recurrent sinusitis, a history of tonsillectomy or of wisdom teeth extraction; and loss of consciousness or nasal fracture due to head injury. Also the AUQ\_G Household Interview Audiometry questionnaire collected 2 additional questions: a history of repeated ear infections (AUQ136) and a history of ear tube placement (AUQ138).

## References

- Healthy People 2020. Objectives ENT-VSL HP2020–16; 17; and 18. P. 138-9. . Available from: <http://healthypeople.gov/2020/topicsobjectives2020/pdfs/HP2020objectives.pdf>
- Hoffman HJ, Ishii EK, Macturk RH. Age-related changes in the prevalence of smell/taste problems among the United States adult population: results of the 1994 disability supplement to the National Health Interview Survey (NHIS). Ann NY Acad Sci. 1998. 855:716-722.

- Lee WH, Wee JH, Kim DK, et al. Prevalence of subjective olfactory dysfunction and its risk factors: Korean National Health and Nutrition Examination Survey. PLoS One. 2013 May 9;8(5):e62725.
- National Health Interview Survey (NHIS) 1994. Adult Disability Supplement. Tape Locations 545-554. Available from:  
[ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Dataset\\_Documentation/NHIS/1994/DIS1PERS.pdf](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/1994/DIS1PERS.pdf)
- Vennemann MM, Hummel T, Berger K. The association between smoking and smell and taste impairment in the general population. J Neurology 2008. 255:1121–1126.

## Codebook and Frequencies

### SEQN - Respondent sequence number

|                       |   |
|-----------------------|---|
| <b>Variable Name:</b> | SEQN  |
| <b>SAS Label:</b>     | Respondent sequence number                  |
| <b>English Text:</b>  | Respondent sequence number.                 |
| <b>Target:</b>        | Both males and females 40 YEARS - 150 YEARS |

## CSQ010 - Had problem with smell past 12 months?

**Variable Name:** CSQ010

**SAS Label:** Had problem with smell past 12 months?

**English Text:** The next questions are about {your/SP's} sense of smell. During the past 12 months, {have you/has he/has she} had a problem with {your/his/her} ability to smell, such as not being able to smell things or things not smelling the way they are supposed to?

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 374   | 374        |              |
| 2             | No                | 3220  | 3594       |              |
| 7             | Refused           | 1     | 3595       |              |
| 9             | Don't know        | 8     | 3603       |              |
| .             | Missing           | 0     | 3603       |              |

## CSQ020 - Had change ability to smell since age 25

**Variable Name:** CSQ020

**SAS Label:** Had change ability to smell since age 25

**English Text:** How would {you/SP} rate {your/his/her} ability to smell now as compared to when {you were/he was/she was} 25 years old? Is it better, worse or is there no change?

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Better Now        | 216   | 216        |              |
| 2             | Worse Now         | 586   | 802        |              |
| 3             | No Change         | 2788  | 3590       |              |
| 7             | Refused           | 1     | 3591       |              |
| 9             | Don't know        | 12    | 3603       |              |
| .             | Missing           | 0     | 3603       |              |

## CSQ030 - Smells bother you, but not others

**Variable Name:** CSQ030

**SAS Label:** Smells bother you, but not others

**English Text:** Do some smells bother {you/SP} although they do not bother other people?

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 940   | 940        |              |
| 2             | No                | 2635  | 3575       |              |
| 7             | Refused           | 1     | 3576       |              |
| 9             | Don't know        | 27    | 3603       |              |
| .             | Missing           | 0     | 3603       |              |

## CSQ040 - Had phantom odor?

**Variable Name:** CSQ040

**SAS Label:** Had phantom odor?

**English Text:** {Do you/Does SP} sometimes smell an unpleasant, bad or burning odor when nothing is there?

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 260   | 260        |              |
| 2             | No                | 3331  | 3591       |              |
| 7             | Refused           | 1     | 3592       |              |
| 9             | Don't know        | 11    | 3603       |              |
| .             | Missing           | 0     | 3603       |              |



## CSQ050 - CHECK ITEM

**Variable Name:** CSQ050

**English Instructions:** BOX 1. CHECK ITEM. IF CSQ010 = 1 OR CSQ020 = 2 OR CSQ040 = 1 then CONTINUE. OTHERWISE, GO TO CSQ080.

**Target:** Both males and females 40 YEARS - 150 YEARS

## CSQ060 - When noticed change in ability to smell

**Variable Name:** CSQ060

**SAS Label:** When noticed change in ability to smell

**English Text:** How long ago {did you/did SP} first notice a problem with, or a change in, {your/his/her} ability to smell?

**English Instructions:** INTERVIEWER INSTRUCTION: READ CATEGORIES IF NECESSARY  
CAPI INSTRUCTION: DISPLAY REASON GOT TO THIS QUESTION ABOVE QUESTION TEXT FOR INTERVIEWER REFERENCE. IF CSQ020 = 2 DISPLAY "SMELL WORSE THAN WHEN 25" IF CSQ040 = 1 DISPLAY "SMELL ODOR WHEN NOT THERE"

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description           | Count | Cumulative | Skip to Item |
|---------------|-----------------------------|-------|------------|--------------|
| 1             | Less than 3 Months Ago      | 88    | 88         |              |
| 2             | 3 to 12 months (1 year) ago | 86    | 174        |              |
| 3             | 1 to 4 years ago            | 201   | 375        |              |
| 4             | 5 to 9 years ago            | 166   | 541        |              |
| 5             | Ten or more years ago       | 245   | 786        |              |
| 7             | Refused                     | 1     | 787        |              |
| 9             | Don't know                  | 52    | 839        |              |
| .             | Missing                     | 2764  | 3603       |              |

## CSQ070 - Frequency of problem w/ ability to smell

**Variable Name:** CSQ070

**SAS Label:** Frequency of problem w/ ability to smell

**English Text:** Is the problem with {your/SP's} ability to smell always there or does it come and go?

**English Instructions:** INTERVIEWER INSTRUCTION: PLEASE INCLUDE TEMPORARY PROBLEMS WITH THE SPs SENSE OF SMELL DUE TO ALLERGIES BUT DO NOT INCLUDE ANY PROBLEMS WITH SMELL DUE TO A HEAD COLD. CAPI INSTRUCTION: DISPLAY REASON GOT TO THIS QUESTION ABOVE QUESTION TEXT FOR INTERVIEWER REFERENCE. IF CSQ020 = 2 DISPLAY "SMELL WORSE THAN WHEN 25" IF CSQ040 = 1 DISPLAY "SMELL ODOR WHEN NOT THERE"

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description                 | Count | Cumulative | Skip to Item |
|---------------|-----------------------------------|-------|------------|--------------|
| 1             | It is always there                | 354   | 354        |              |
| 2             | It comes and goes                 | 431   | 785        |              |
| 3             | I have a problem only with a cold | 31    | 816        |              |
| 7             | Refused                           | 1     | 817        |              |
| 9             | Don't know                        | 22    | 839        |              |
| .             | Missing                           | 2764  | 3603       |              |

## CSQ080 - Had problem with taste past 12 months?

**Variable Name:** CSQ080

**SAS Label:** Had problem with taste past 12 months?

**English Text:** The next questions are about {your/SP's} sense of taste. During the past 12 months, {have you/has he/has she} had a problem with {your/his/her} ability to taste sweet, sour, salty or bitter foods and drinks?

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 219   | 219        |              |
| 2             | No                | 3376  | 3595       |              |
| 7             | Refused           | 1     | 3596       |              |
| 9             | Don't know        | 7     | 3603       |              |
| .             | Missing           | 0     | 3603       |              |

## CSQ090A - Ability to Taste Salt

**Variable Name:** CSQ090A

**SAS Label:** Ability to Taste Salt

**English Text:** I am going to read you a list of tastes in everyday foods. How {is your/is SP's} ability to taste each one of these now compared to when {you were/he was/she was} 25 years old? Would you say it is better, worse, or is there no change? salt in foods like potato chips or pretzels.

**English Instructions:** INTERVIEWER INSTRUCTION: PLEASE DO NOT INCLUDE TEMPORARY PROBLEMS WITH THE SPs SENSE OF SMELL DUE TO A HEAD COLD. HAND CARD CSQ1

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Better            | 274   | 274        |              |
| 2             | Worse             | 220   | 494        |              |
| 3             | No Change         | 3092  | 3586       |              |
| 7             | Refused           | 1     | 3587       |              |
| 9             | Don't know        | 16    | 3603       |              |
| .             | Missing           | 0     | 3603       |              |

## CSQ090B - Ability to Taste Sourness

**Variable Name:** CSQ090B

**SAS Label:** Ability to Taste Sourness

**English Text:** I am going to read you a list of tastes in everyday foods. How {is your/is SP's} ability to taste each one of these now compared to when {you were/he was/she was} 25 years old? Would you say it is better, worse, or is there no change? sourness in foods like lemons or vinegar.

**English Instructions:** INTERVIEWER INSTRUCTION: PLEASE DO NOT INCLUDE TEMPORARY PROBLEMS WITH THE SPs SENSE OF SMELL DUE TO A HEAD COLD. HAND CARD CSQ1

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Better            | 174   | 174        |              |
| 2             | Worse             | 178   | 352        |              |
| 3             | No Change         | 3235  | 3587       |              |
| 7             | Refused           | 1     | 3588       |              |
| 9             | Don't know        | 15    | 3603       |              |
| .             | Missing           | 0     | 3603       |              |

## CSQ090C - Ability to Taste Sweetness

**Variable Name:** CSQ090C

**SAS Label:** Ability to Taste Sweetness

**English Text:** I am going to read you a list of tastes in everyday foods. How {is your/is SP's} ability to taste each one of these now compared to when {you were/he was/she was} 25 years old? Would you say it is better, worse, or is there no change? sweetness in foods like peaches or ice cream.

**English Instructions:** INTERVIEWER INSTRUCTION: PLEASE DO NOT INCLUDE TEMPORARY PROBLEMS WITH THE SPs SENSE OF SMELL DUE TO A HEAD COLD. HAND CARD CSQ1

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Better            | 210   | 210        |              |
| 2             | Worse             | 155   | 365        |              |
| 3             | No Change         | 3224  | 3589       |              |
| 7             | Refused           | 2     | 3591       |              |
| 9             | Don't know        | 12    | 3603       |              |
| .             | Missing           | 0     | 3603       |              |

## CSQ090D - Ability to Taste Bitterness

**Variable Name:** CSQ090D

**SAS Label:** Ability to Taste Bitterness

**English Text:** I am going to read you a list of tastes in everyday foods. How {is your/is SP's} ability to taste each one of these now compared to when {you were/he was/she was} 25 years old? Would you say it is better, worse, or is there no change? bitterness in drinks like unsweetened black coffee.

**English Instructions:** INTERVIEWER INSTRUCTION: PLEASE DO NOT INCLUDE TEMPORARY PROBLEMS WITH THE SPs SENSE OF SMELL DUE TO A HEAD COLD. HAND CARD CSQ1

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Better            | 171   | 171        |              |
| 2             | Worse             | 161   | 332        |              |
| 3             | No Change         | 3246  | 3578       |              |
| 7             | Refused           | 2     | 3580       |              |
| 9             | Don't know        | 23    | 3603       |              |
| .             | Missing           | 0     | 3603       |              |



## CSQ100 - Change in ability to taste food flavors?

**Variable Name:** CSQ100

**SAS Label:** Change in ability to taste food flavors?

**English Text:** Is {your/SP's} ability to taste food flavors such as chocolate, vanilla or strawberry as good as when {you were/he was/she was} 25 years old?

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 3176  | 3176       |              |
| 2             | No                | 399   | 3575       |              |
| 7             | Refused           | 3     | 3578       |              |
| 9             | Don't know        | 25    | 3603       |              |
| .             | Missing           | 0     | 3603       |              |

## CSQ110 - Persistent taste in mouth past 12 months

**Variable Name:** CSQ110

**SAS Label:** Persistent taste in mouth past 12 months

**English Text:** During the past 12 months {have you/has SP} had a taste or other sensation in {your/his/her} mouth that does not go away?

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 226   | 226        |              |
| 2             | No                | 3368  | 3594       | CSQ130       |
| 7             | Refused           | 2     | 3596       | CSQ130       |
| 9             | Don't know        | 7     | 3603       | CSQ130       |
| .             | Missing           | 0     | 3603       |              |

## CSQ120A - Taste in mouth, Sweet

**Variable Name:** CSQ120A

**SAS Label:** Taste in mouth, Sweet

**English Text:** Please describe the taste or other sensation in {your/SP's} mouth that does not go away. Would {you/he/she} say it is...

**English Instructions:** HAND CARD CSQ2. CODE ALL THAT APPLY.

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Sweet             | 11    | 11         |              |
| 77            | Refused           | 0     | 11         |              |
| 99            | Don't know        | 2     | 13         |              |
| .             | Missing           | 3590  | 3603       |              |

## CSQ120B - Taste in mouth, Sour

**Variable Name:** CSQ120B

**SAS Label:** Taste in mouth, Sour

**English Text:** Please describe the taste or other sensation in {your/SP's} mouth that does not go away. Would {you/he/she} say it is...

**English Instructions:** HAND CARD CSQ2. CODE ALL THAT APPLY.

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 2             | Sour              | 24    | 24         |              |
| .             | Missing           | 3579  | 3603       |              |

## CSQ120C - Taste in mouth, Salty

**Variable Name:** CSQ120C

**SAS Label:** Taste in mouth, Salty

**English Text:** Please describe the taste or other sensation in {your/SP's} mouth that does not go away. Would {you/he/she} say it is...

**English Instructions:** HAND CARD CSQ2. CODE ALL THAT APPLY.

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 3             | Salty             | 14    | 14         |              |
| .             | Missing           | 3589  | 3603       |              |

## CSQ120D - Taste in mouth, Bitter

**Variable Name:** CSQ120D

**SAS Label:** Taste in mouth, Bitter

**English Text:** Please describe the taste or other sensation in {your/SP's} mouth that does not go away. Would {you/he/she} say it is...

**English Instructions:** HAND CARD CSQ2. CODE ALL THAT APPLY.

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 4             | Bitter            | 69    | 69         |              |
| .             | Missing           | 3534  | 3603       |              |

## CSQ120E - Taste in mouth, Metallic

**Variable Name:** CSQ120E

**SAS Label:** Taste in mouth, Metallic

**English Text:** Please describe the taste or other sensation in {your/SP's} mouth that does not go away. Would {you/he/she} say it is...

**English Instructions:** HAND CARD CSQ2. CODE ALL THAT APPLY.

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 5             | Metalic           | 47    | 47         |              |
| .             | Missing           | 3556  | 3603       |              |

## CSQ120F - Taste in mouth, Burning or Tingling

**Variable Name:** CSQ120F

**SAS Label:** Taste in mouth, Burning or Tingling

**English Text:** Please describe the taste or other sensation in {your/SP's} mouth that does not go away. Would {you/he/she} say it is...

**English Instructions:** HAND CARD CSQ2. CODE ALL THAT APPLY.

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description   | Count | Cumulative | Skip to Item |
|---------------|---------------------|-------|------------|--------------|
| 6             | Burning or Tingling | 12    | 12         |              |
| .             | Missing             | 3591  | 3603       |              |



## CSQ120G - Taste in mouth, Bad or Foul

**Variable Name:** CSQ120G

**SAS Label:** Taste in mouth, Bad or Foul

**English Text:** Please describe the taste or other sensation in {your/SP's} mouth that does not go away. Would {you/he/she} say it is...

**English Instructions:** HAND CARD CSQ2. CODE ALL THAT APPLY.

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 7             | Bad or Foul       | 46    | 46         |              |
| .             | Missing           | 3557  | 3603       |              |

## CSQ120H - Taste in mouth, Something else

**Variable Name:** CSQ120H

**SAS Label:** Taste in mouth, Something else

**English Text:** Please describe the taste or other sensation in {your/SP's} mouth that does not go away. Would {you/he/she} say it is...

**English Instructions:** HAND CARD CSQ2. CODE ALL THAT APPLY.

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 8             | or Something else | 38    | 38         |              |
| .             | Missing           | 3565  | 3603       |              |

## CSQ130 - CHECK ITEM

**Variable Name:** CSQ130

**English Instructions:** BOX 2. CHECK ITEM. IF CSQ080 = 1 OR ANY CSQ090a-d = 2 OR CSQ100 = 2 OR CSQ110 = 1, THEN CONTINUE. OTHERWISE, GO TO BOX 3.

**Target:** Both males and females 40 YEARS - 150 YEARS

## CSQ140 - When noticed change in ability to taste

**Variable Name:** CSQ140

**SAS Label:** When noticed change in ability to taste

**English Text:** How long ago {did you/did SP} first notice a problem with, or a change in, {your/his/her} ability to taste?

**English Instructions:** INTERVIEWER INSTRUCTION: THE ABILITY TO TASTE IS THE ABILITY TO TASTE SWEET, SOUR, SALTY OR BITTER FOODS OR DRINKS. READ CATEGORIES IF NECESSARY. CAPI INSTRUCTION: DISPLAY REASON GOT TO THIS QUESTION ABOVE QUESTION TEXT FOR INTERVIEWER REFERENCE. IF CSQ090A-D = 2 DISPLAY "TASTE OF EVERYDAY FOOD IS WORSE THAN WHEN 25" IF CSQ100 = 2 DISPLAY "CHOCOLATE, VANILLA, STRAWBERRY NOT TASTE AS GOOD AS WHEN 25" IF CSQ110 = 1 DISPLAY "TASTE OR SENSATION IN MOUTH THAT DOESN'T GO AWAY"

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description           | Count | Cumulative | Skip to Item |
|---------------|-----------------------------|-------|------------|--------------|
| 1             | Less than 3 Months Ago      | 127   | 127        |              |
| 2             | 3 to 12 Months (1 Yesr) Ago | 116   | 243        |              |
| 3             | 1 to 4 years ago            | 167   | 410        |              |
| 4             | 5 to 9 years ago            | 113   | 523        |              |
| 5             | Ten or more years ago       | 126   | 649        |              |
| 7             | Refused                     | 8     | 657        |              |
| 9             | Don't know                  | 99    | 756        |              |
| .             | Missing                     | 2847  | 3603       |              |

## CSQ150 - CHECK ITEM

**Variable Name:** CSQ150

**English Instructions:** BOX 3. CHECK ITEM. IF CSQ010 = 1 OR CSQ020 = 2 OR CSQ040 = 1 OR IF CSQ080 = 1 OR ANY CSQ090a-d = 2 OR CSQ100 = 2 OR CSQ110 = 1, THEN CONTINUE. OTHERWISE, GO TO CSQ200.

**Target:** Both males and females 40 YEARS - 150 YEARS

## CSQ160 - Discussed T/S problem with Dr.?

**Variable Name:** CSQ160

**SAS Label:** Discussed T/S problem with Dr.?

**English Text:** {Have you/Has SP} ever discussed any problem with, or change in {your/his/her} ability to taste or smell with a health care provider?

**English Instructions:** INTERVIEWER INSTRUCTION: INCLUDE DOCTORS, DENTISTS, DIETITIANS AND NUTRITIONISTS AS HEALTH CARE PROVIDERS.

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 156   | 156        |              |
| 2             | No                | 1079  | 1235       | CSQ180       |
| 7             | Refused           | 1     | 1236       | CSQ180       |
| 9             | Don't know        | 2     | 1238       | CSQ180       |
| .             | Missing           | 2365  | 3603       |              |

## CSQ170 - When T/S problem last discussed with Dr.

**Variable Name:** CSQ170

**SAS Label:** When T/S problem last discussed with Dr.

**English Text:** When was the last time {you/SP} /discussed any problem with {your/his/her} ability to taste or smell with a health care provider?

**English Instructions:** INTERVIEWER INSTRUCTION: READ CATEGORIES IF NECESSARY. INCLUDE DOCTORS, DENTISTS, DIETITIANS AND NUTRITIONISTS AS HEALTH CARE PROVIDERS.

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description     | Count | Cumulative | Skip to Item |
|---------------|-----------------------|-------|------------|--------------|
| 1             | In the Past 12 Months | 91    | 91         |              |
| 2             | 1 to 4 Years Ago      | 27    | 118        |              |
| 3             | 5 to 9 years ago      | 21    | 139        |              |
| 4             | Ten or more years ago | 17    | 156        |              |
| 7             | Refused               | 0     | 156        |              |
| 9             | Don't know            | 0     | 156        |              |
| .             | Missing               | 3447  | 3603       |              |

## CSQ180 - Treatment for T/S problem last 12 months

**Variable Name:** CSQ180

**SAS Label:** Treatment for T/S problem last 12 months

**English Text:** The next question refers to treatments {you/SP} may have tried to improve {your/his/her} ability to taste or smell. Please make sure to include any treatments that {your/his/her} health care provider recommended. Also include any other treatments {you/he/she} may have read about and tried. During the past 12 months, {have you/has SP} tried any treatments to improve {your/his/her} ability to taste or smell?

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 47    | 47         |              |
| 2             | No                | 1189  | 1236       |              |
| 7             | Refused           | 1     | 1237       |              |
| 9             | Don't know        | 1     | 1238       |              |
| .             | Missing           | 2365  | 3603       |              |



## CSQ190 - T/S problem interferes with daily life?

**Variable Name:** CSQ190

**SAS Label:** T/S problem interferes with daily life?

**English Text:** During the past 12 months, {have you/has SP} experienced a problem with {your/his/her} general health, work or {your/his/her} enjoyment of life because of a problem with {your/his/her} ability to taste or smell?

**English Instructions:** INTERVIEWER INSTRUCTION: INCLUDE PROBLEMS WITH DIET AND WEIGHT AS HEALTH PROBLEMS.

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 43    | 43         |              |
| 2             | No                | 1193  | 1236       |              |
| 7             | Refused           | 0     | 1236       |              |
| 9             | Don't know        | 2     | 1238       |              |
| .             | Missing           | 2365  | 3603       |              |

## CSQ200 - Persistent cold/flu last 12 months?

**Variable Name:** CSQ200

**SAS Label:** Persistent cold/flu last 12 months?

**English Text:** During the past 12 months, {have you/has SP} had any of the following ...a head cold or flu for longer than a month?

**English Instructions:** HAND CARD CSQ3

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 223   | 223        |              |
| 2             | No                | 3377  | 3600       |              |
| 7             | Refused           | 1     | 3601       |              |
| 9             | Don't know        | 2     | 3603       |              |
| .             | Missing           | 0     | 3603       |              |

## CSQ202 - Had persistent dry mouth in past 12 mth

**Variable Name:** CSQ202

**SAS Label:** Had persistent dry mouth in past 12 mth

**English Text:** During the past 12 months, {have you/has SP} had any of the following ... persistent dry mouth (not enough saliva)?

**English Instructions:** HAND CARD CSQ3

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 513   | 513        |              |
| 2             | No                | 3087  | 3600       |              |
| 7             | Refused           | 1     | 3601       |              |
| 9             | Don't know        | 2     | 3603       |              |
| .             | Missing           | 0     | 3603       |              |

## CSQ204 - Frequent nasal congestion in past 12 mth

**Variable Name:** CSQ204

**SAS Label:** Frequent nasal congestion in past 12 mth

**English Text:** During the past 12 months, {have you/has SP} had any of the following ...frequent nasal congestion from allergies?

**English Instructions:** HAND CARD CSQ3

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 924   | 924        |              |
| 2             | No                | 2676  | 3600       |              |
| 7             | Refused           | 1     | 3601       |              |
| 9             | Don't know        | 2     | 3603       |              |
| .             | Missing           | 0     | 3603       |              |

## CSQ210 - Ever had Wisdom Teeth Removed

**Variable Name:** CSQ210

**SAS Label:** Ever had Wisdom Teeth Removed

**English Text:** {Have you/Has SP} ever had any of the following? wisdom teeth removed.

**English Instructions:** HAND CARD CSQ4

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 2341  | 2341       |              |
| 2             | No                | 1217  | 3558       |              |
| 7             | Refused           | 2     | 3560       |              |
| 9             | Don't know        | 43    | 3603       |              |
| .             | Missing           | 0     | 3603       |              |

## CSQ220 - Ever had Tonsils Removed

**Variable Name:** CSQ220

**SAS Label:** Ever had Tonsils Removed

**English Text:** {Have you/Has SP} ever had any of the following? tonsils removed.

**English Instructions:** HAND CARD CSQ4

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 839   | 839        |              |
| 2             | No                | 2727  | 3566       |              |
| 7             | Refused           | 2     | 3568       |              |
| 9             | Don't know        | 35    | 3603       |              |
| .             | Missing           | 0     | 3603       |              |

## CSQ240 - Head Injury/Loss of consciousness

**Variable Name:** CSQ240

**SAS Label:** Head Injury/Loss of consciousness

**English Text:** {Have you/Has SP} ever had any of the following? a loss of consciousness because of a head injury.

**English Instructions:** HAND CARD CSQ4

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 422   | 422        |              |
| 2             | No                | 3172  | 3594       |              |
| 7             | Refused           | 1     | 3595       |              |
| 9             | Don't know        | 8     | 3603       |              |
| .             | Missing           | 0     | 3603       |              |

## CSQ250 - Broke Nose/Serious Injury to Face/Skull

**Variable Name:** CSQ250

**SAS Label:** Broke Nose/Serious Injury to Face/Skull

**English Text:** {Have you/Has SP} ever had any of the following? a broken nose or other serious injury to face or skull.

**English Instructions:** HAND CARD CSQ4

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 499   | 499        |              |
| 2             | No                | 3098  | 3597       |              |
| 7             | Refused           | 1     | 3598       |              |
| 9             | Don't know        | 5     | 3603       |              |
| .             | Missing           | 0     | 3603       |              |



## CSQ260 - Ever had two or more sinus infections

**Variable Name:** CSQ260

**SAS Label:** Ever had two or more sinus infections

**English Text:** {Have you/Has SP} ever had any of the following? two or more sinus infections.

**English Instructions:** HAND CARD CSQ4

**Target:** Both males and females 40 YEARS - 150 YEARS

| Code or Value | Value Description | Count | Cumulative | Skip to Item |
|---------------|-------------------|-------|------------|--------------|
| 1             | Yes               | 1015  | 1015       |              |
| 2             | No                | 2557  | 3572       |              |
| 7             | Refused           | 1     | 3573       |              |
| 9             | Don't know        | 30    | 3603       |              |
| .             | Missing           | 0     | 3603       |              |

