

C1F05 - NOTES AND COMPUTED VARIABLES

(Phlebotomy)

The phlebotomists recorded any food and/or drink that the participants had in the previous 12 hours. The food item(s) and/or beverage(s) were recorded on the form and then coded for data entry (C05CODE). The codes are provided below. If the participant had observed the 12 hour fast, the code recorded on the form was 99.

CODES FOR FOODS EATEN

| <u>Code</u> | <u>Food and/or Beverages</u> |
|-------------|------------------------------------|
| 0 | Coffee or tea w/o cream or sugar |
| 1 | Coffee or tea w/ cream or sugar |
| 2 | Juice or fruit |
| 3 | Milk or milk product |
| 4 | Candy or breakfast cake (doughnut) |
| 5 | Cereal |
| 6 | Eggs and/or meat |
| 7 | Pancakes or waffles |
| 8 | Other non-breakfast food |

There are nine participants with values of 0 for C05FSTMN. These have been verified with the clinical centers; all participants were either chewing gum or eating candy at the time of the blood draw.

Computed Variables

C05FSTMN: total number of minutes fasting based on time and date an individual last ate and time and date blood drawn

C05FAST: fasting status based on the calculated variable C05FSTMN. C05FAST was generated using the following statements to indicate a 12 hour fast:

```
IF 720<=C05FSTMN<=2940 THEN C05FAST = 'YES';  
IF 0 < C05FSTMN < 720 THEN C05FAST = 'NO';
```

REAL-TIME EDITS PERFORMED ON VARIABLES IN FILE C1F05

IF C05BLDYR < 90 OR > 91;
IF C05BLDMO > 12;
IF C05BLDDY > 31;
IF C05EATYR < 90 OR > 91;
IF C05EATMO > 12;
IF C05EATDY > 31;
IF C05CODE > 8 AND NE 99;
IF C05HEMO GT 2 AND C05HEMO NE 8;
IF C05BLDDW > 2;
IF C05EAT_H GT 12;
IF C05EAT_M GT 60;
IF C05AMPM2 = 0 OR > 2;
IF HH1 GT 12;
IF MM1 GT 60;
IF C05AMPM5 = 0 OR > 2;
IF HH2 GT 12;
IF MM2 GT 60;
IF C05AMPM6 = 0 OR > 2;
IF HH3 GT 12;
IF MM3 GT 60;
IF C05AMPM7 = 0 OR > 2;
IF C05QC GT 2;
IF C05TB1A NE 0 OR 1;
IF C05TB1B NE 0 OR 1;
IF C05TB1C NE 0 OR 1;
IF C05TB1D NE 0 OR 1;
IF C05TB1E NE 0 OR 1;
IF C05TB1F NE 0 OR 1;
IF C05TB1G NE 0 OR 1;
IF C05TB1H NE 0 OR 1;
IF C05TB1I NE 0 OR 1;
IF C05TB1J NE 0 OR 1;
IF C05TB1K NE 0 OR 1;
IF C0515MLA NE 0 OR 1;
IF C0515MLB NE 0 OR 1;
IF C0505MLA NE 0 OR 1;
IF C0505MLB NE 0 OR 1;

```

*****
* THIS PROGRAM CREATES THE SAS DATA SET C1F05
* VERSION 3.1 OF THE CARDIA SAS FILES
* SEPTEMBER 1991
*****;
LIBNAME H 'H:\';
LIBNAME F 'F:\VER_CO\VER1';
OPTIONS PS=59 NODATE NONUMBER;

DATA TEMP;
  INFILE 'H:\FORM05.SEQ' LRECL=88;

  INPUT CENTER 1 ID 1-12 C05BLDYR 13-14 C05BLDMO 15-16
        C05BLDDY 17-18 C05PHLID 44-46
        C05EAT_H 47-48 C05EAT_M 49-50 C05AMPM2 51
        C05EATYR 52-53 C05EATMO 54-55 C05EATDY 56-57
        C05CODE 58-59 C05HEMO 60 C05BLDDW 61 HH1 62-63
        MM1 64-65 C05AMPM5 66 @;

  *CHANGING HOUR VARIABLES TO 24-HOUR TIME;
  IF C05AMPM2 = 2 AND 0 < C05EAT_H < 12 THEN C05EAT_H = C05EAT_H + 12;
  IF C05AMPM5 = 2 AND 0 < HH1 < 12 THEN HH1 = HH1 + 12;

  IF C05AMPM2 = 1 AND C05EAT_H = 12 THEN C05EAT_H = 0;
  IF C05AMPM5 = 1 AND HH1 = 12 THEN HH1 = 0;

  C05TMEAT = HMS( C05EAT_H, C05EAT_M, 0 );
  C05DTEAT = MDY( C05EATMO, C05EATDY, C05EATYR );
  C05DTBLD = MDY( C05BLDMO, C05BLDDY, C05BLDYR );
  C05TMBLD = HMS( HH1, MM1, 0 );
  DROP C05EATMO C05EATDY C05EATYR
        C05BLDMO C05BLDDY C05BLDYR;

  INPUT HH2 67-68 MM2 69-70 C05AMPM6 71
        HH3 72-73 MM3 74-75 C05AMPM7 76 @;

  C05TMSPN = HMS(HH2, MM2, 0);
  C05TMFRZ = HMS(HH3, MM3, 0);

  INPUT C05TB1A 77 C05TB1B 78 C05TB1C 79 C05TB1D 80 C05TB1E 81
        C05TB1F 82 C05TB1G 83 C05TB1H 84 C05TB1I 85 C05TB1J 86
        C05TB1K 87 C05QC 88;

  FORMAT C05DTEAT C05DTBLD DATE7.
        C05TMEAT C05TMBLD C05TMSPN C05TMFRZ TIME5.;

  LABEL C05PHLID='PHLEBOTOMIST ID'
        C05TMEAT='TIME LAST ATE (SAS TIME VALUE)'
        C05DTEAT='DATE LAST ATE (SAS DATE VALUE)'
        C05CODE ='IF LAST ATE <12 HRS -TYPE OF FOOD/DRINK'
        C05HEMO ='HAVE ANY BLEEDING DISORDERS'
        C05DTBLD='DATE BLOOD DRAWN (SAS DATE VALUE)'
        C05BLDDW='ANY BLOOD DRAWN?'
        C05TMBLD='TIME BLOOD DRAWN (SAS TIME VALUE)'
        C05TMSPN='TIME BLOOD WAS SPUN'
        C05TMFRZ='TIME BLOOD WAS FROZEN'
        C05TB1A ='15ML LAVENDER TUBE, 5ML PLASMA ALIQUOT'
        C05TB1B ='15ML LAVENDER TUBE, 1.5ML PLASMA ALIQUOT'
        C05TB1C ='5ML BLUE TUBE, .5 ML PLASMA ALIQUOT'

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C05TB1D ='5ML BLUE TUBE, .5 ML PLASMA ALIQUOT'
C05TB1E ='5ML BLUE TUBE, .5 ML PLASMA ALIQUOT'
C05TB1F ='10ML LAVENDER TUBE, 1.5 ML PLASMA ALIQUOT'
C05TB1G ='10ML LAVENDER TUBE, 1.5 ML PLASMA ALIQUOT'
C05TB1H ='10ML LAVENDER TUBE, 1.5 ML PLASMA ALIQUOT'
C05TB1I ='10ML RED TUBE, 1.5 ML SERUM ALIQUOT'
C05TB1J ='10ML RED TUBE, 1.5 ML SERUM ALIQUOT'
C05TB1K ='LAVENDER AND BLUE TUBES, RED CELLS'
C05QC   ='IS PARTICIPANT QUALITY CONTROL';

```

```

*****
* NOW TO DETERMINE WHETHER INDIVIDUALS WERE FASTING OR NOT.
* THIS SECTION CREATES TWO VARIABLES C05FAST (FASTING: YES, NO) AND
* C05FSTMN (THE NUMBER OF MINUTES BETWEEN LAST ATE AND BLOOD DRAW.
*****;

```

```

SS1=0;
SS2=0;
EATTM=DHMS(C05DTEAT,C05EAT_H,C05EAT_M,SS1);
BLDTM=DHMS(C05DTBLD,HH1,MM1,SS2);
DTDIF=BLDTM-EATTM;
C05FSTMN=DTDIF/60;
C05FSTMN=ROUND(C05FSTMN,1);
IF C05FSTMN<0 THEN C05FSTMN=.;
IF 720<=C05FSTMN<=2940 THEN C05FAST='YES';
IF 0<C05FSTMN<720 THEN C05FAST='NO';
IF C05FSTMN=. THEN C05FAST='';

```

```

LABEL C05FSTMN='NUMBER OF MINUTES FASTING'
      C05FAST='12 HR FAST BEFORE BLOOD DRAWN';

```

```

DROP C05EAT_M C05EAT_H DTDIF BLDTM EATTM HH1 HH2 HH3 MM1 MM2 MM3 SS1 SS2
      C05AMPM2 C05AMPM5 C05AMPM6 C05AMPM7;

```

```

PROC SORT SORTSIZE=1000; BY ID;

```

```

DATA TEMPQC;

```

```

  INFILE 'H:\FORM05QC.SEQ' LRECL=33;

```

```

  INPUT ID 1-12 C05QCID 18-29 C0515MLA 30 C0515MLB 31 C0505MLA 32
         C0505MLB 33;

```

```

LABEL C05QCID = 'QUALITY CONTROL ID, FORM05QC'
      C0515MLA ='15ML LAVENDER TUBE, 5 ML PLASMA ALIQUOT'
      C0515MLB ='15ML LAVENDER TUBE, 1.5ML PLASMA ALIQUOT'
      C0505MLA ='5 ML BLUE TUBE, .5 PLASMA ALIQUOT'
      C0505MLB ='BOTH TUBES, RED CELLS';

```

```

PROC SORT; BY ID;

```

```

DATA F.C1F05;

```

```

  MERGE TEMP TEMPQC F.EX3ID(KEEP=ID IN=INID);

```

```

  BY ID;

```

```

  IF INID;

```

```

PROC CONTENTS;

```

```

TITLE1 'CONTENTS OF EXAM 3 V.1';

```

```

TITLE2 'FORM 5 - PHLEBOTOMY AND FORM 5 QC (QUALITY CONTROL)';

```

CONTENTS OF EXAM 3 VERSION 1
FORM 5 - PHLEBOTOMY AND FORM 5 QC (QUALITY CONTROL)

CONTENTS PROCEDURE

| | |
|------------------------|-----------------|
| Data Set Name: G.C1F05 | Type: |
| Observations: 4352 | Record Len: 247 |
| Variables: 31 | |
| Label: | |

-----Alphabetic List of Variables and Attributes-----

| # | Variable | Type | Len | Pos | Format | Label |
|----|----------|------|-----|-----|--------|------------------------------------------|
| 30 | C0505MLA | Num | 8 | 231 | | 5 ML BLUE TUBE, .5 PLASMA ALIQUOT |
| 31 | C0505MLB | Num | 8 | 239 | | BOTH TUBES, RED CELLS |
| 28 | C0515MLA | Num | 8 | 215 | | 15ML LAVENDER TUBE, 5 ML PLASMA ALIQUOT |
| 29 | C0515MLB | Num | 8 | 223 | | 15ML LAVENDER TUBE, 1.5ML PLASMA ALIQUOT |
| 6 | C05BLDDW | Num | 8 | 44 | | ANY BLOOD DRAWN? |
| 4 | C05CODE | Num | 8 | 28 | | IF LAST ATE <12 HRS -TYPE OF FOOD/DRINK |
| 9 | C05DTBLD | Num | 8 | 68 | DATE7. | DATE BLOOD DRAWN (SAS DATE VALUE) |
| 8 | C05DTEAT | Num | 8 | 60 | DATE7. | DATE LAST ATE (SAS DATE VALUE) |
| 26 | C05FAST | Char | 3 | 204 | | 12 HR FAST BEFORE BLOOD DRAWN |
| 25 | C05FSTMN | Num | 8 | 196 | | NUMBER OF MINUTES FASTING |
| 5 | C05HEMO | Num | 8 | 36 | | HAVE ANY BLEEDING DISORDERS |
| 3 | C05PHLID | Num | 8 | 20 | | PHLEBOTOMIST ID |
| 24 | C05QC | Num | 8 | 188 | | IS PARTICIPANT QUALITY CONTROL |
| 27 | C05QCID | Num | 8 | 207 | | QUALITY CONTROL ID, FORM05QC |
| 13 | C05TB1A | Num | 8 | 100 | | 15ML LAVENDER TUBE, 5ML PLASMA ALIQUOT |
| 14 | C05TB1B | Num | 8 | 108 | | 15ML LAVENDER TUBE, 1.5ML PLASMA ALIQUOT |
| 15 | C05TB1C | Num | 8 | 116 | | 5ML BLUE TUBE, .5 ML PLASMA ALIQUOT |
| 16 | C05TB1D | Num | 8 | 124 | | 5ML BLUE TUBE, .5 ML PLASMA ALIQUOT |
| 17 | C05TB1E | Num | 8 | 132 | | 5ML BLUE TUBE, .5 ML PLASMA ALIQUOT |
| 18 | C05TB1F | Num | 8 | 140 | | 10ML LAVENDER TUBE, 1.5 ML PLASMA ALIQUO |
| 19 | C05TB1G | Num | 8 | 148 | | 10ML LAVENDER TUBE, 1.5 ML PLASMA ALIQUO |
| 20 | C05TB1H | Num | 8 | 156 | | 10ML LAVENDER TUBE, 1.5 ML PLASMA ALIQUO |
| 21 | C05TB1I | Num | 8 | 164 | | 10ML RED TUBE, 1.5 ML SERUM ALIQUOT |
| 22 | C05TB1J | Num | 8 | 172 | | 10ML RED TUBE, 1.5 ML SERUM ALIQUOT |
| 23 | C05TB1K | Num | 8 | 180 | | LAVENDER AND BLUE TUBES, RED CELLS |
| 10 | C05TMBLD | Num | 8 | 76 | TIME5. | TIME BLOOD DRAWN |
| 7 | C05TMEAT | Num | 8 | 52 | TIME5. | TIME LAST ATE (SAS TIME VALUE) |
| 12 | C05TMFRZ | Num | 8 | 92 | TIME5. | TIME BLOOD WAS FROZEN |
| 11 | C05TMSPN | Num | 8 | 84 | TIME5. | TIME BLOOD WAS SPUN |
| 1 | CENTER | Num | 8 | 4 | | |
| 2 | ID | Num | 8 | 12 | | |

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/* FORM05.DD          "C" struct tag is f05                               */
/* Data dictionary for PHLEBOTOMY FORM (8.0) FOR CARDIA EXAM III         */
/* FLD NAME TYPE BYTES  FIELDS  DESCRIPTION                               */
/*
id          c  12  /*  1 subject id number                                               */
c05exmdt   c   6  /*  13 Exam date, Viking subroutine DATECK is used                       */
/*          /*          to check for valid range                               */
c05num     c   2  /*  19 form number                                                       */
c05ver     c   1  /*  21 form version, "3" for Exam 3                                       */
c05dtent   c   5  /*  22 last date of entry for this record, updated each                 */
/*          /*          time the record is updated. stored in YYMMDD format        */
c05deid    c   3  /*  27 data entry person's id number; updated each time                 */
/*          /*          the record is updated                                       */
c05mod     c   1  /*  30 indicates record has been modified                               */
c05tment   c   4  /*  31 amount of time taken for data entry for this record             */
/*          /*          computed by system on the initial entry of the             */
/*          /*          record. stored in MMSS format                         */
c05totky   c   3  /*  35 total number of keystrokes for initial entry of                 */
/*          /*          the record                                               */
c05valky   c   3  /*  38 number of valid keystrokes for initial entry of                 */
/*          /*          the record                                               */
filler     c   3  /*  41 left for future requirements                                       */
/*          /*          bytes total in header                                       */
/*----- END HEADER -----*/
c05phlid   c   3  /*  44 Q.1  Phlebotomist ID number, numeric only, range                 */
/*          /*          not checked                                                 */
c05tmeat   c   4  /*  47 Q.2.1 Time last ate in HHMM format, hr range: 0-12             */
/*          /*          min range : 0-59, Viking subroutine IRANGE                 */
/*          /*          used                                                       */
c05pmam2   c   1  /*  51 Allowable code : 1 = pm. 2 = am. for Q. 2                       */
c05dteat   c   6  /*  52 Q.2.2 Date last ate in YYMMDD format, Viking                     */
/*          /*          subroutine DATECK used                                       */
c05code    c   2  /*  58 Q.2  numeric, Viking TABLES subroutine used.                   */
/*          /*          99 = missing value                                         */
c05hemo    c   1  /*  60 Q.3  Bleeding disorders? allowable code : 1,2,or 8             */
c05blddw   c   1  /*  61 Q.4  Any blood drawn ? allowable code : 1, or 2                 */
c05tmbld   c   4  /*  62 Q.5  Time blood drawn in HHMM, hr range : 0 - 12                */
/*          /*          min range : 0-59, Viking subroutine IRANGE                 */
/*          /*          used                                                       */
c05pmam5   c   1  /*  66 Allowable code : 1 = pm. 2 = am. for Q. 5                       */
c05tmspn   c   4  /*  67 Q.6  Time specimen was spun in HHMM format, hr                   */
/*          /*          range : 0-12, min range : 0-59, Viking                     */
/*          /*          subroutine IRANGE used                                       */
c05pmam6   c   1  /*  71 Allowable code : 1 = pm. 2 = am. for Q. 6                       */
c05tmfrz   c   4  /*  72 Q.7  Time specimen was frozen in HHMM format, hr                 */
/*          /*          range : 0-12, min range : 0-59, Viking                     */
/*          /*          subroutine IRANGE used                                       */
c05pmam7   c   1  /*  76 Allowable code : 1 = pm. 2 = am. for Q. 7                       */
/*
/* The allowable code for the following 11 fields is either 1, or 0, where
/* 1 = filled, 0 = empty.
c05tbla    c   1  /*  77 15ml purple tube, 5 ml plasma aliquot                             */
c05tblb    c   1  /*  78 15ml purple tube, 1.5 ml plasma aliquot                             */
c05tblc    c   1  /*  79 5ml blue tube, 0.5 ml plasma aliquot                               */
c05tbld    c   1  /*  80 5ml blue tube, 0.5 ml plasma aliquot                               */
c05tblf    c   1  /*  81 5ml blue tube, 0.5 ml plasma aliquot                               */
/*

```

```

*/
c05tblf c 1 /* 82 10ml purple tube, 1.5 ml plasma aliquot */
c05tblg c 1 /* 83 10ml purple tube, 1.5 ml plasma aliquot */
c05tblh c 1 /* 84 10ml purple tube, 1.5 ml tube */
c05tbli c 1 /* 85 10ml red tube, 1.5 ml serum aliquot */
c05tblj c 1 /* 86 10ml red tube, 1.5 ml serum aliquot */
c05tblk c 1 /* 87 purple & blue tubes, red cells */

c05qc c 1 /* 88 Quality control ? Allowable code : 1, or 2 */

```

```

keys
1: id

```

```

/* Total number of bytes : 88, Total number of fields : 36 */

```

```

/* FORM05QC.DD   QUALITY CONTROL FORM "C" struct tag is f05qc          */
/* FOR CARDIA EXAM III                                               */
/* FLD NAME TYPE BYTES  FIELDS  DESCRIPTION                            */
/*                                                                    */
id           c  12  /*   1 subject id number                                             */
c05num       c   4  /*  13 form number                                                  */
c05ver       c   1  /*  17 form version, "3" for Exam 3                                */
c05qcid      c  12  /*  18 Quality control id number                                    */
/*                                                                    */
/* The following fields have allowable code : 1, 0, 1 = filled, 0 = empty */
/*                                                                    */
c0515mla     c   1  /*  30 15 ml lavender tube, 5 ml plasma aliquot                    */
c0515mlb     c   1  /*  31 15 ml lavender tube, 1.5 ml plasma aliquot                  */
c0505mla     c   1  /*  32  5 ml blue tube, 0.5 ml plasma aliquot                       */
c0505mlb     c   1  /*  33  5 ml both tube - red cells                                  */
/*                                                                    */
keys
1: id
2: c05qcid

/* Total number of bytes : 33, Total number of fields : 8 */

```