

Wave V Glucose Homeostasis

Title

Wave V Glucose Homeostasis

Abstract

This file contains assay results of glucose and hemoglobin A1c (HbA1c) based on venous blood collected via phlebotomy at the Wave V home exam. There are classifications for fasting glucose and non-fasting glucose, as well as an HbA1C classification. Other variables included are flags based on a self-reported diabetes medical history, anti-diabetic medication use, and a diabetes joint classification variable.

Variables: 11

Observations: 5,381

Variables

Wave V Glucose Homeostasis

- [H5GLUCOS - GLUCOSE \(MG/DL\) -W5](#)
- [H5HBA1C - HEMOGLOBIN A1c \(%\) -W5](#)
- [H5FASTTM - HOURS SINCE LAST ATE -W5](#)
- [H5FASTGL - FLAG: FASTED FOR 8+ HOURS -W5](#)
- [H5CFGLU - CLASS OF FASTING GLUCOSE \(ADA\) -W5](#)
- [H5CNFGLU - CLASS OF NON-FASTING GLUCOSE \(ADA\) -W5](#)
- [H5CHBA1C - CLASSIFICATION OF HbA1c \(ADA\) -W5](#)
- [H5Q045B - Q045b EVER DX WITH DIABETES -W5](#)
- [H5C_MED - FLAG: ANTI-DIABETIC MED USE -W5](#)
- [H5DIABJC - DIABETES JOINT CLASSIFICATION -W5](#)

H5GLUCOS - GLUCOSE (MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5GLUCOS	Glucose assay results (mg/dl)

H5HBA1C - HEMOGLOBIN A1c (%) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5HBA1C	HbA1c assay results (%)

H5FASTTM - HOURS SINCE LAST ATE -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5FASTTM	Number of hours since the last time the respondent ate

H5FASTGL - FLAG: FASTED FOR 8+ HOURS -W5

Type	Code
Measurement Unit	Numeric
H5FASTGL	FLAG indicating respondent fasted for eight or more hours
0	no
1	yes

H5CFGLU - CLASS OF FASTING GLUCOSE (ADA) -W5

Type	Code
Measurement Unit	Numeric
H5CFGLU	The classification of glucose concentrations among respondents who were fasting (≥ 8 hours) at the time of blood collection. It was constructed according to the 2020 American Diabetes Association clinical practice recommendations for the diagnosis and classification of diabetes.
1	Normal: glucose is < 100 mg/dl
2	Impaired Fasting Glucose (IFG)/Pre-Diabetes: glucose is 100-125 mg/dl
3	Diabetes: glucose is > 125 mg/dl
4	Non-fasting
5	Fasting status unknown

H5CNFGLU - CLASS OF NON-FASTING GLUCOSE (ADA) -W5

Type	Code
Measurement Unit	Numeric
H5CNFGLU	The classification of glucose concentrations among respondents who were non-fasting (< 8 hours) at the time of blood collection. It was constructed according to the 2020 American Diabetes Association clinical practice recommendations for the diagnosis and classification of diabetes.
1	Normal: glucose is < 200 mg/dl
2	Diabetes: glucose is ≥ 200 mg/dl
3	Fasting
4	Fasting status unknown

 H5CHBA1C - CLASSIFICATION OF HbA1c (ADA) -W5

Type	Code
Measurement Unit	Numeric
H5CHBA1C	The classification of HbA1c among respondents was constructed without regard to fasting status at the time of blood collection according to the 2020 American Diabetes Association clinical practice recommendations for the diagnosis and classification of diabetes.
1	Normal: HbA1c (%) is < 5.7
2	Pre-Diabetes: HbA1c (%) is 5.7 - 6.4
3	Diabetes: HbA1c (%) is > 6.4

 H5Q045B - Q045b EVER DX WITH DIABETES -W5

Type	Code
Measurement Unit	Numeric
H5Q045B	Has a doctor, nurse or health care provider ever told you that you have high blood sugar or diabetes (if female, when you were NOT pregnant)?
0	no
1	yes

 H5C_MED - FLAG: ANTI-DIABETIC MED USE -W5

Type	Code
Measurement Unit	Numeric
H5C_MED	FLAG indicating respondent took an anti-diabetic medication in the past 4 weeks
0	no
1	yes

 H5DIABJC - DIABETES JOINT CLASSIFICATION -W5

Type	Code
Measurement Unit	Numeric
H5DIABJC	FLAG indicating respondent has EITHER fasting glucose \geq 126 mg/dl (H5CFGLU=3) OR non-fasting glucose \geq 200 mg/dl (H5CNFGLU=2) OR HbA1c \geq 6.5% (H5CHBA1C=3) OR a self-reported history of diabetes except during pregnancy (H5Q045B=1) OR has taken an anti-diabetic medication in the past 4 weeks (H5C_MED=1)
0	no evidence of diabetes

1	evidence of diabetes
---	----------------------

Logical Products

Data Layouts

Wave V Glucose Homeostasis

Wave V Glucose Homeostasis

H5GLUCOS - GLUCOSE (MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5GLUCOS	Glucose assay results (mg/dl)

H5HBA1C - HEMOGLOBIN A1c (%) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5HBA1C	HbA1c assay results (%)

H5FASTTM - HOURS SINCE LAST ATE -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5FASTTM	Number of hours since the last time the respondent ate

H5FASTGL - FLAG: FASTED FOR 8+ HOURS -W5

Type	Code
Measurement Unit	Numeric
H5FASTGL	FLAG indicating respondent fasted for eight or more hours
0	no
1	yes

H5CFGLU - CLASS OF FASTING GLUCOSE (ADA) -W5

Type	Code
Measurement Unit	Numeric
H5CFGLU	The classification of glucose concentrations among respondents who were fasting (≥ 8 hours) at the time of blood collection. It was constructed according to the 2020 American Diabetes Association clinical practice recommendations for the diagnosis and classification of diabetes.
1	Normal: glucose is < 100 mg/dl

2	Impaired Fasting Glucose (IFG)/Pre-Diabetes: glucose is 100-125 mg/dl
3	Diabetes: glucose is > 125 mg/dl
4	Non-fasting
5	Fasting status unknown

 H5CNFGLU - CLASS OF NON-FASTING GLUCOSE (ADA) -W5

Type	Code
Measurement Unit	Numeric
H5CNFGLU	The classification of glucose concentrations among respondents who were non-fasting (< 8 hours) at the time of blood collection. It was constructed according to the 2020 American Diabetes Association clinical practice recommendations for the diagnosis and classification of diabetes.
1	Normal: glucose is < 200 mg/dl
2	Diabetes: glucose is >= 200 mg/dl
3	Fasting
4	Fasting status unknown

 H5CHBA1C - CLASSIFICATION OF HbA1c (ADA) -W5

Type	Code
Measurement Unit	Numeric
H5CHBA1C	The classification of HbA1c among respondents was constructed without regard to fasting status at the time of blood collection according to the 2020 American Diabetes Association clinical practice recommendations for the diagnosis and classification of diabetes.
1	Normal: HbA1c (%) is < 5.7
2	Pre-Diabetes: HbA1c (%) is 5.7 - 6.4
3	Diabetes: HbA1c (%) is > 6.4

 H5Q045B - Q045b EVER DX WITH DIABETES -W5

Type	Code
Measurement Unit	Numeric
H5Q045B	Has a doctor, nurse or health care provider ever told you that you have high blood sugar or diabetes (if female, when you were NOT pregnant)?
0	no
1	yes

 H5C_MED - FLAG: ANTI-DIABETIC MED USE -W5

Type	Code
Measurement Unit	Numeric
H5C_MED	FLAG indicating respondent took an anti-diabetic medication in the past 4 weeks
0	no
1	yes

 H5DIABJC - DIABETES JOINT CLASSIFICATION -W5

Type	Code
Measurement Unit	Numeric
H5DIABJC	FLAG indicating respondent has EITHER fasting glucose \geq 126 mg/dl (H5CFGLU=3) OR non-fasting glucose \geq 200 mg/dl (H5CNFGLU=2) OR HbA1c \geq 6.5% (H5CHBA1C=3) OR a self-reported history of diabetes except during pregnancy (H5Q045B=1) OR has taken an anti-diabetic medication in the past 4 weeks (H5C_MED=1)
0	no evidence of diabetes
1	evidence of diabetes

Physical Instances

 Wave V Glucose Homeostasis

Title	Wave V Glucose Homeostasis
File Name	bglua1c5.sas7bdat
Case Quantity	5381
Variable Count	10

 H5GLUCOS - GLUCOSE (MG/DL) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5GLUCOS	Glucose assay results (mg/dl)

			Frequency	% of total	% of valid
Missing	.	missing	593	11.02%	
	9999	implausible value < 40 mg/dl	5	0.09%	
Total			598	11.11%	

Valid	Invalid	Minimum	Maximum	Mean	StdDev
4783	598	41	618	95.361906...	35.726780...

 H5HBA1C - HEMOGLOBIN A1c (%) -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5HBA1C	HbA1c assay results (%)

			Frequency	% of total	% of valid
Missing	.	missing	679	12.62%	
		Total	679	12.62%	

Valid	Invalid	Minimum	Maximum	Mean	StdDev
4702	679	4.1	14	5.3720544...	0.9059269...

 H5FASTTM - HOURS SINCE LAST ATE -W5

Type	Numeric (Double)
Measurement Unit	Numeric
H5FASTTM	Number of hours since the last time the respondent ate

			Frequency	% of total	% of valid
Missing	.	not applicable (no blood draw)	370	6.88%	
	-999	implausible value < 0 hours	11	0.2%	
	999	implausible value >= 24 hours	49	0.91%	
		Total	430	7.99%	

Valid	Invalid	Minimum	Maximum	Mean	StdDev
4951	430	0	23.9	9.3817511...	5.5283044...

 H5FASTGL - FLAG: FASTED FOR 8+ HOURS -W5

Type	Code
Measurement Unit	Numeric
H5FASTGL	FLAG indicating respondent fasted for eight or more hours

			Frequency	% of total	% of valid
Valid	0	no	1790	33.27%	36.15%
	1	yes	3161	58.74%	63.85%
		Total	4,951	92.01%	100%
Missing	.	not applicable (no fasting hours)	430	7.99%	
		Total	430	7.99%	

Valid	Invalid	Minimum	Maximum
4951	430	0	1

 H5CFGLU - CLASS OF FASTING GLUCOSE (ADA) -W5

Type	Code
Measurement Unit	Numeric
H5CFGLU	The classification of glucose concentrations among respondents who were fasting (≥ 8 hours) at the time of blood collection. It was constructed according to the 2020 American Diabetes Association clinical practice recommendations for the diagnosis and classification of diabetes.

			Frequency	% of total	% of valid
Valid	1	Normal: glucose is < 100 mg/dl	2512	46.68%	52.52%
	2	Impaired Fasting Glucose (IFG)/Pre-Diabetes: glucose is 100-125 mg/dl	368	6.84%	7.69%
	3	Diabetes: glucose is > 125 mg/dl	139	2.58%	2.91%
	4	Non-fasting	1709	31.76%	35.73%
	5	Fasting status unknown	55	1.02%	1.15%
		Total	4,783	88.89%	100%
Missing	.	not applicable (no glucose result)	598	11.11%	
		Total	598	11.11%	

Valid	Invalid	Minimum	Maximum
4783	598	1	5

H5CNFGLU - CLASS OF NON-FASTING GLUCOSE (ADA) -W5

Type	Code
Measurement Unit	Numeric
H5CNFGLU	The classification of glucose concentrations among respondents who were non-fasting (< 8 hours) at the time of blood collection. It was constructed according to the 2020 American Diabetes Association clinical practice recommendations for the diagnosis and classification of diabetes.

			Frequency	% of total	% of valid
Valid	1	Normal: glucose is < 200 mg/dl	1665	30.94%	34.81%
	2	Diabetes: glucose is ≥ 200 mg/dl	44	0.82%	0.92%
	3	Fasting	3019	56.1%	63.12%
	4	Fasting status unknown	55	1.02%	1.15%
		Total	4,783	88.89%	100%
Missing	.	not applicable (no glucose result)	598	11.11%	
		Total	598	11.11%	

Valid	Invalid	Minimum	Maximum

4783	598	1	4
------	-----	---	---

H5CHBA1C - CLASSIFICATION OF HbA1c (ADA) -W5

Type	Code
Measurement Unit	Numeric
H5CHBA1C	The classification of HbA1c among respondents was constructed without regard to fasting status at the time of blood collection according to the 2020 American Diabetes Association clinical practice recommendations for the diagnosis and classification of diabetes.

			Frequency	% of total	% of valid
Valid	1	Normal: HbA1c (%) is < 5.7	4112	76.42%	87.45%
	2	Pre-Diabetes: HbA1c (%) is 5.7 - 6.4	376	6.99%	8%
	3	Diabetes: HbA1c (%) is > 6.4	214	3.98%	4.55%
		Total	4,702	87.38%	100%
Missing	.	not applicable (no HbA1c result)	679	12.62%	
		Total	679	12.62%	

Valid	Invalid	Minimum	Maximum
4702	679	1	3

H5Q045B - Q045b EVER DX WITH DIABETES -W5

Type	Code
Measurement Unit	Numeric
H5Q045B	Has a doctor, nurse or health care provider ever told you that you have high blood sugar or diabetes (if female, when you were NOT pregnant)?

			Frequency	% of total	% of valid
Valid	0	no	5015	93.2%	93.27%
	1	yes	362	6.73%	6.73%
		Total	5,377	99.93%	100%
Missing	94	exam stopped prior to question Q045	1	0.02%	
	95	not asked of everyone	1	0.02%	
	96	refused	2	0.04%	
		Total	4	0.07%	

Valid	Invalid	Minimum	Maximum
5377	4	0	1

H5C_MED - FLAG: ANTI-DIABETIC MED USE -W5

Type	Code
------	------

Measurement Unit	Numeric
H5C_MED	FLAG indicating respondent took an anti-diabetic medication in the past 4 weeks

			Frequency	% of total	% of valid
Valid	0	no	5014	93.18%	95.21%
	1	yes	252	4.68%	4.79%
		Total	5,266	97.86%	100%
Missing	94	exam stopped prior to the medication questions	23	0.43%	
	96	refused	3	0.06%	
	98	medication could not be classified	1	0.02%	
	99	respondent reported taking prescription medication(s), but specific medication(s) not reported	88	1.64%	
		Total	115	2.14%	

Valid	Invalid	Minimum	Maximum
5266	115	0	1

H5DIABJC - DIABETES JOINT CLASSIFICATION -W5

Type	Code
Measurement Unit	Numeric
H5DIABJC	FLAG indicating respondent has EITHER fasting glucose \geq 126 mg/dl (H5CFGLU=3) OR non-fasting glucose \geq 200 mg/dl (H5CNFGLU=2) OR HbA1c \geq 6.5% (H5CHBA1C=3) OR a self-reported history of diabetes except during pregnancy (H5Q045B=1) OR has taken an anti-diabetic medication in the past 4 weeks (H5C_MED=1)

			Frequency	% of total	% of valid
Valid	0	no evidence of diabetes	4911	91.27%	91.32%
	1	evidence of diabetes	467	8.68%	8.68%
		Total	5,378	99.94%	100%
Missing	.	missing on all components of joint classification	3	0.06%	
		Total	3	0.06%	

Valid	Invalid	Minimum	Maximum
5378	3	0	1