

Supplemental materials

Supplementary Table 1. Characteristics of 11645 participants not having known diabetes, according to glycemic categories ascertained at baseline. The Brazilian Longitudinal Study of Adult Health (ELSA-Brasil), 2008-10.

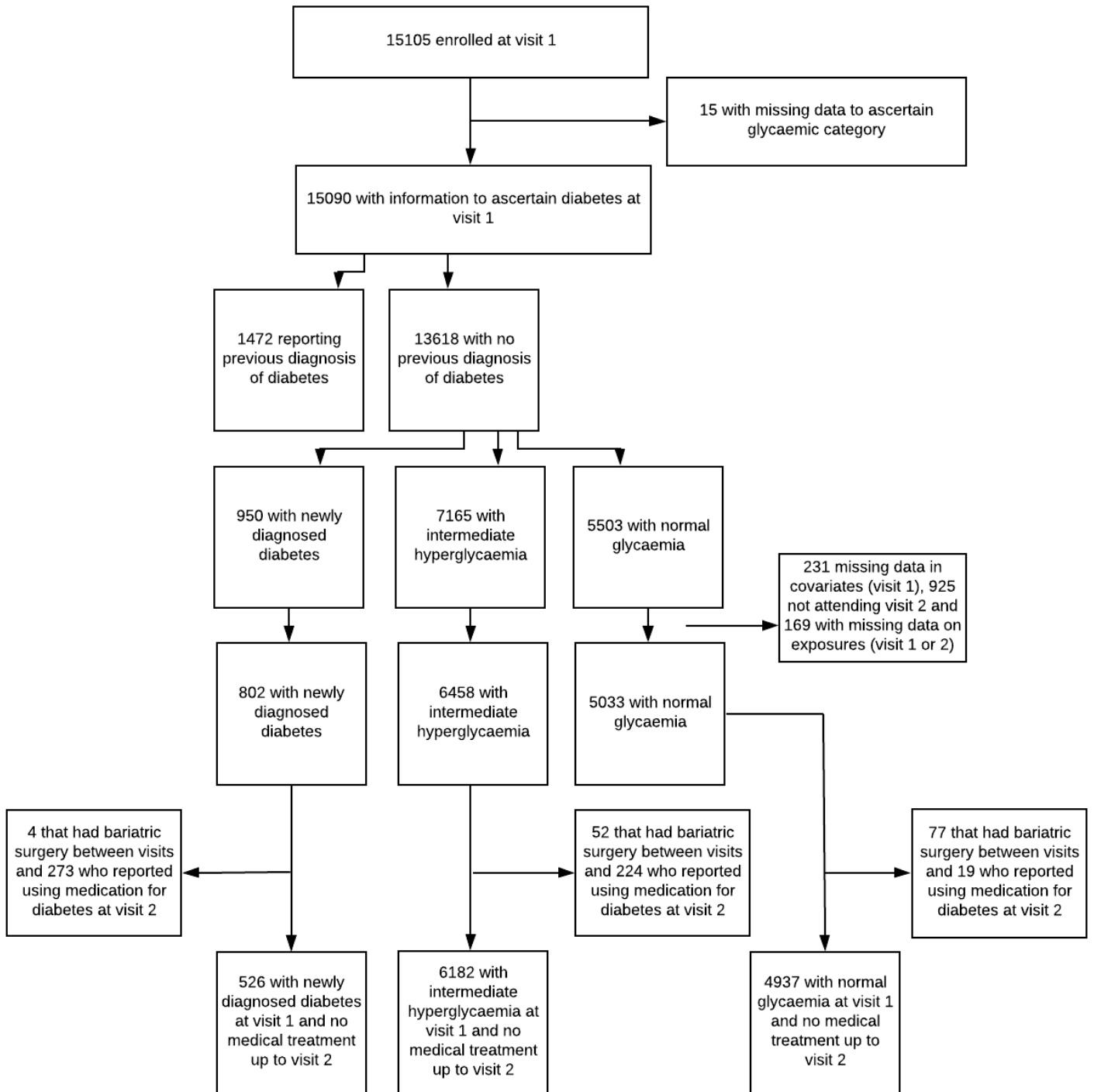
	All N = 11645	Diabetes N = 526	IH ADA N = 6182	Normoglycaemia N = 4937
	% (95%CI)	% (95%CI)	% (95%CI)	% (95%CI)
Sex				
Men	44.8 (43.9 - 45.7)	54.9 (50.7 - 59.2)	51.7 (50.4 - 52.9)	35.0 (33.7 - 36.4)
Women	55.2 (54.3 - 56.1)	45.1 (40.8 - 49.3)	48.3 (47.1 - 49.6)	65.0 (63.6 - 66.3)
Age				
35-44	24.7 (23.9 - 25.5)	9.9 (7.3 - 12.4)	18.6 (17.7 - 19.6)	33.9 (32.6 - 35.2)
45-54	40.8 (39.9 - 41.7)	35.9 (31.8 - 40.0)	40.5 (39.3 - 41.7)	41.6 (40.2 - 43.0)
55-64	26.1 (25.3 - 26.9)	36.5 (32.4 - 40.6)	30.2 (29.0 - 31.3)	19.9 (18.8 - 21.0)
65-74	8.4 (7.9 - 8.9)	17.7 (14.4 - 20.9)	10.7 (9.9 - 11.5)	4.6 (4.0 - 5.2)
Skin color/ race				
Black	15.3 (14.6 - 15.9)	24.8 (21.1 - 28.5)	15.6 (14.7 - 16.5)	13.8 (12.9 - 14.8)
Brown ("pardo")	27.7 (26.9 - 28.5)	29.0 (25.1 - 32.9)	28.0 (26.9 - 29.1)	27.2 (25.9 - 28.4)
White	53.6 (52.7 - 54.5)	42.1 (37.8 - 46.4)	52.6 (51.4 - 53.9)	56.1 (54.7 - 57.5)
Asian	2.4 (2.1 - 2.6)	2.5 (1.3 - 4.2)	2.6 (2.2 - 3.0)	2.1 (1.7 - 2.5)
Indigenous	1.0 (0.8 - 1.2)	1.5 (0.5 - 2.6)	1.2 (0.9 - 1.4)	0.8 (0.5 - 1.1)
Educational level				
Less than secondary school	10.6 (10.0 - 11.1)	20.3 (16.9 - 23.8)	13.0 (12.2 - 13.8)	6.5 (5.8 - 7.2)
Secondary school	33.9 (33.1 - 34.8)	37.8 (33.7 - 42.0)	33.5 (32.3 - 34.6)	34.2 (32.8 - 35.4)
University degree	55.5 (54.6 - 56.4)	41.8 (37.6 - 46.0)	53.5 (52.3 - 54.8)	59.4 (58.0 - 60.8)
Body Mass Index (kg/m²)				
Underweight/Normal (<25)	40.3 (39.4 - 41.2)	19.8 (16.4 - 23.2)	32.6 (31.4 - 33.7)	52.1 (50.7 - 53.5)
Overweight (25-29.9)	40.6 (39.7 - 41.4)	42.0 (37.8 - 46.2)	43.9 (42.7 - 45.1)	36.2 (34.9 - 37.6)
Obesi (≥30)	19.1 (18.5 - 19.9)	38.2 (34.1 - 42.4)	23.5 (22.5 - 24.6)	11.7 (10.8 - 12.5)
Family history of diabetes				
Yes	35.7 (34.8 - 36.6)	44.0 (39.7 - 48.3)	38.0 (36.8 - 39.2)	32.0 (31.0 - 33.3)
	Mean (95%CI)	Mean (95%CI)	Mean (95%CI)	Mean (95%CI)
Baseline weight (kg)	72.5 (72.3 - 72.8)	78.6 (77.3 - 79.8)	75.2 (74.8 - 75.5)	68.6 (68.2 - 69.0)
Follow up weight (kg)	74.1 (73.8 - 74.3)	78.2 (77.0 - 79.5)	76.4 (76.0 - 76.8)	70.7 (70.3 - 71.1)
Baseline physical activity*	698 (678 - 718)	597.4 (512 - 682)	693 (664 - 721)	716 (686 - 746)
Follow up physical activity*	776 (754 - 798)	670 (600 - 800)	765 (734 - 796)	797 (764 - 831)
Baseline waist (cm)	89.8 (89.5 - 89.9)	98.0 (97.0 - 99.1)	92.5 (92.2 - 92.7)	85.4 (85.1 - 85.7)
Follow up waist (cm)	92.6 (92.4 - 92.8)	99.1 (98.1 - 100.1)	95.1 (94.7 - 95.4)	88.8 (88.4 - 89.2)
Baseline insulin resistance (HOMA2 IR)	1.5 (1.5 - 1.5)	2.2 (2.1 - 2.3)	1.6 (1.6 - 1.7)	1.2 (1.1 - 1.2)
Follow up insulin resistance (HOMA2 IR)	1.6 (1.6 - 1.6)	2.1 (2.0 - 2.2)	1.8 (1.7 - 1.8)	1.3 (1.3 - 1.4)
Baseline Beta cell secretion (HOMA2 β)	97.2 (96.6 - 97.9)	91.4 (87.8 - 95.0)	96.4 (95.5 - 97.3)	99.0 (98.0 - 99.9)
Follow up Beta cell secretion (HOMA2 β)	98.4 (97.7 - 99.2)	87.3 (83.5 - 91.1)	99.5 (98.5 - 100.6)	98.3 (97.2 - 99.4)
Baseline Disposition Index (DI)	74.8 (74.4 - 75.2)	47.4 (45.8 - 49.1)	65.0 (64.6 - 65.4)	89.9 (89.4 - 90.5)
Follow up Disposition Index (DI)	72.7 (72.2 - 73.2)	49.1 (47.0 - 51.1)	65.4 (64.8 - 66.1)	84.3 (83.7 - 85.0)
Baseline FPG (mmol/L)	5.6 (5.6 - 5.6)	6.7 (6.6 - 6.8)	5.8 (5.7 - 5.8)	5.15 (5.14 - 5.15)
Follow up FPG (mmol/L)	5.7 (5.7 - 5.7)	6.9 (6.8 - 7.1)	5.8 (5.7 - 5.8)	5.3 (5.3 - 5.4)
Baseline 2h PG (mmol/L)	6.8 (6.7 - 6.9)	11.3 (10.9 - 11.5)	7.2 (7.1 - 7.2)	5.8 (5.7 - 5.8)
Follow up 2h PG (mmol/L)	7.0 (6.9 - 7.0)	10.9 (10.5 - 11.3)	7.3 (7.3 - 7.4)	6.2 (6.1 - 6.2)
Baseline HbA1c (mmol/mol)	33.2 (33.1 - 33.3)	41.6 (40.8 - 42.4)	34.4 (34.3 - 34.5)	30.8 (30.7 - 30.9)
Follow up HbA1c (mmol/mol)	34.1 (34.0 - 34.2)	42.1 (41.1 - 43.2)	35.0 (34.8 - 35.2)	32.1 (32.0 - 32.3)

*MET-minutes per week

IH: Intermediate hyperglycemia. FPG: fasting plasma glucose. PG: plasma glucose

DI: HOME2-B/1*HOMA2-IR

Supplementary Figure 1. Flow diagram for the selection of the analytic sample.



Supplementary Figure 2. Changes in the disposition index (DI) from baseline to follow-up according to categories of glycemic change. Left panel for those meeting diabetes and right panel for those meeting intermediate hyperglycemia (IH) cut-offs at baseline. Differences of median DIs (bottom of panels) between paired samples were calculated using the Hodges-Lehmann estimate and presented with their asymptotic 95% confidence intervals (CI).

