

PMID	First Author	Title	Year	Study Type	Prospect./ Retrospect.	Study	CVD	RF by CQ	Country	Setting	Main Study Objective	N at Baseline (N at Follow-up)	Target Population	Eligibility Criteria	Patient Characteristics	Study Groups	n at Baseline (n at Follow-up) for Study Groups	Total Follow-up Duration	Outcomes Measured	Results	Main Reported Findings by Critical Question
10896837	McClain MR	Risk of type 2 diabetes mellitus in young adults from a biracial community: the Bogalusa Heart Study	2000	CrS	Retrospective	Bogalusa	None	Q5 (RF4,5,6,8,14) Q6 (RF4,5,6,8,14)	USA	Community (other)	Determine early abnormalities in young adult offspring of type 2 diabetics.	1,151	Pediatric/ Young adults	Of 1420 subjects aged 19-37 y examined in 1995-96, a total of 1151 were included. 881 had no parental hx of DM; 270 had (+) parental hx of DM (representing 1 randomly selected offspring/family)	Community-based cohort of B & W children and young adults - originally examined at 5-17 yrs; 52% F, 44% B. For this study, subjects were age:19-37 yrs. 72% W, 28% B.	(+) parental hx of DM=270 (-) parental hx of DM=881	N/A	N/A	Age Gender Ht Wt BMI Waist circumference (WC) & hip circumference Triceps & sub-scapular skin folds SBP DBP TC TG HDL LDL TC:HDL ApoA1 ApoB Fasting glucose (FG) Fasting insulin (INS) HOMA Metabolic syndrome (NCEP definition) Smoking status Alcohol use Parental hx of T2DM	(+) parental hx of T2DM was significantly ass'd with all measures of obesity & abdominal fat (BMI / SFs/ waist circumference)/ abdominal ht (all, p=S**) and with higher SBP (p=S**) & DBP(p=S). TC(p=S) and TGs, VLDL-C, HDL & glucose/insulin/insulin resistance index(all, p=S**) were all significantly more abnormal in offspring of diabetic parent. Magnitude of the differences in obesity/ abdominal fat/ plasma glucose between individuals with/without (+) fam hx of T2DM was significantly greater in Bs than Ws (p=S*-S**). B offspring of both diabetics & non-diabetics had unfavorable profiles of obesity & abdominal fat, BP, insulin & insulin resistance index (p=S**). In MVA, BMI (p=S) & plasma glucose (p=S*) were the 2 independent characteristics of those with (+) fam hx of T2DM. Insulin (p=S**) and the insulin resistance index (p=S**) were independently ass'd with impaired fasting glucose & T2DM. When grouped by nl FG vs FG > 110, BMI, SSFs,WC, abd ht, SBP, DBP,TGs & insulin resistance index were all significantly higher in elevated FG group (all,p=S**). Lipid abnormalities were also more prevalent with higher TC(p=S), VLDL(p=S)and lower HDL(p=S).	Q5. Bs have more significant abnormalities related to parental hx of DM than do Ws. Q6. Elevated obesity measures cluster with metabolic abnormalities of glucose metabolism, increased BP & lipid profile abnormalities. Association is stronger in Bs and with (+) parental hx of T2DM.
11347739	Fagot-Campagna A	Diabetes, impaired fasting glucose, and elevated HbA1c in U.S. adolescents: the Third National Health and Nutrition Examination Survey	2001	CrS	Retrospective	NHANES	None	Q5 (RF6) Q6 (RF6)	US	Clinical	Estimate the prevalence of diabetes, impaired fasting glucose, and elevated HbA _{1c} (>6%) levels in US adolescents.	2,867	Pediatric/ Young adults	12-19 yr old participants in the NHANES III survey for 1988-1994 in whom fasting serum glucose had been measured	Nationally representative sample.	Group 1: All adolescents who had glucose measured Group 2: Subsample of adolescents assigned to morning examination and fasting glucose	Group 1: 2,867 Group 2: 1,083	N/A	Fasting glucose (FG) HbA1c level BMI	(1) 13 of 2,867(0.41%[CI:0.0-0.86]) adolescents had a diagnosis of DM. 31% had T2DM and 69% had T1DM. (2) Of those 1,083 adolescents without DM, 20 had impaired FG and 22 of 2,852 had HbA1c > 6%. Both IFG and elevated HbA1c were more prevalent among non-Hispanic Bs and in males. 10 adolescents had both IFG & elevated HbA1c, all with BMI > 30 and all from minority groups. (3) Extrapolating from these data, 1.76% (CI:0.02-3.5) of adolescents have IFG and 0.39% (CI:0.04-0.74) have elevated HbA1c.	NHANES III data shows a very low prevalence of T2DM. Cases were all in obese adolescents and were non-Hispanic B or M-A.
16651496	Duncan GE	Prevalence of Diabetes and Impaired Fasting Glucose Levels Among US Adolescents: National Health and Nutrition Examination Survey, 1999-2002	2006	CrS	Retrospective	NHANES	None	Q6 (RF6,8,14)	US	Clinical	Estimate the prevalence of diabetes and impaired fasting glucose levels among US adolescents.	4,370	Pediatric/ Young adults	NHANES participants from the 1999-2000 and 2001-2002 surveys aged 12-19 y	Mean age (SD): 15.4 yr (0.1) Male: 52% Non-Hispanic white: 70.6% Non-Hispanic black: 16.6% Mexican American: 12.8%	Group 1: Respondents with self-reported diabetes Group 2: Subsample of respondents without self-reported diabetes who had fasted for at least 8 hr	Group 1: 4,370 Group 2: 1,496	N/A	BMI Fasting glucose (FG) Fasting insulin (INS) HbA1c level C-peptide levels Self-reported dx of DM	DM: (1) Based on self report, 0.50% (CI: 0.24-0.76) of the adolescent population are estimated to have DM. (2) Among this group, 70.91%(CI:55.99 -85.82) have T1DM and 29.09%(CI:14.19 - 44.01) have T2DM. (3) For T1DM, ~40% are F, and ~84% are non-Hispanic W, ~12% are B and ~4% are M-A. Sex and race/ethnic differences are significant(p=S**). (4) For T2DM, ~58% are F and ~ 65% are non-Hispanic W, ~18% are B and ~17% are M-A. Sex and race/ethnic differences are significant(p=S**). The relative percentage of T2DM is highest for M-A youth. Impaired FG: (1) 11.13%(CI: 8.09-14.17) of the subsample without DM had an impaired FG. (2) In this group, 68.3%(CI:57.68-78.91) were male and ~ 66% were non-Hispanic W, ~10% were B and ~ 16% were M-A. Sex and race/ethnic differences are significant (p=S**), more prevalent in M-As than Bs or non-Hispanic Ws. (3) FG, HbA1C abd C-peptide levels were significantly higher in the group with impaired FG(p=S* between groups). BMI and poverty-to-income ratio were not different between grps. (4) When BMI is expressed as a percentile for age & sex, there is a significant association between FG group & BMI status.	The prevalence of DM and impaired FG among US adolescents is substantial: based on self report, 0.50% of the adolescent population are estimated to have DM. Among this group, 71% have T1DM and 29% have T2DM. Roughly 11% of adolescents have an impaired FG.