

Supplemental Table 1. Skew for cardiometabolic risk factors before and after log transformation.

Cardiometabolic Risk Factor	Skew Before Log Transformation	Skew After Log Transformation <sup>a</sup>
BMI	7.29	0.57
WHR	-0.14	n/a
HDL	0.95	n/a
LDL	0.81	n/a
Trig	3.51	0.69
Glucose	4.22	1.53
HOMA-IR	5.05	0.31
SBP	1.23	n/a
DBP	0.56	n/a
MetS	0.84	n/a
Il-6	3.63	0.41
CRP	1.72	-0.37

Note. a. N/A indicates the variable was not log transformed.  
 BMI=body mass index. WHR=waist-hip ratio. HDL=high density lipoprotein. LDL=low density lipoprotein. Trig=triglycerides.  
 Glucose=fasting glucose. HOMA-IR=insulin resistance. SBP=systolic blood pressure. DBP=diastolic blood pressure. MetS=count of metabolic syndrome criteria. IL-6=interleukin 6. CRP=C-reactive protein.

Supplemental Table 2. Correlations between cardiometabolic risk factors.

Health Indicator	BMI	WHR	HDL	LDL	Trig	Glucose	HOMA-IR	SBP	DBP	MetS	IL-6	CRP
BMI	1.00											
WHR	<b>0.43</b>	1.00										
HDL	<b>-0.30</b>	<b>-0.26</b>	1.00									
LDL	<b>0.14</b>	<b>0.13</b>	<b>-0.16</b>	1.00								
Trig	<b>0.25</b>	<b>0.29</b>	<b>-0.40</b>	<b>0.27</b>	1.00							
Glucose	<b>0.27</b>	<b>0.19</b>	-0.11	-0.03	<b>0.25</b>	1.00						
HOMA-IR	<b>0.63</b>	<b>0.36</b>	<b>-0.34</b>	0.09	<b>0.43</b>	<b>0.64</b>	1.00					
SBP	<b>0.54</b>	<b>0.29</b>	-0.12	0.12	<b>0.22</b>	<b>0.32</b>	<b>0.43</b>	1.00				
DBP	<b>0.33</b>	<b>0.20</b>	-0.09	0.12	<b>0.25</b>	<b>0.20</b>	<b>0.35</b>	<b>0.75</b>	1.00			
MetS	<b>0.61</b>	<b>0.40</b>	<b>-0.50</b>	<b>0.17</b>	<b>0.62</b>	<b>0.46</b>	<b>0.66</b>	<b>0.59</b>	<b>0.48</b>	1.00		
IL-6	<b>0.28</b>	0.11	<b>-0.12</b>	0.03	<b>0.13</b>	0.09	<b>0.19</b>	0.13	0.08	<b>0.20</b>	1.00	
CRP	<b>0.45</b>	<b>0.22</b>	<b>-0.29</b>	<b>0.15</b>	<b>0.28</b>	<b>0.15</b>	<b>0.43</b>	<b>0.24</b>	<b>0.15</b>	<b>0.39</b>	<b>0.44</b>	1.00

Note. Statistically significant ( $p < .05$ ) correlations are shown in bold. The following risk factors were log-transformed: BMI, fasting glucose, HOMA-IR, IL-6, and CRP. BMI=body mass index. WHR=waist-hip ratio. HDL=high density lipoprotein. LDL=low density lipoprotein. Trig=triglycerides. Glucose=fasting glucose. HOMA-IR=insulin resistance. SBP=systolic blood pressure. DBP=diastolic blood pressure. MetS=count of metabolic syndrome criteria. IL-6=interleukin 6. CRP=C-reactive protein.

Supplemental Table 3. Associations between cannabis joint-years from ~age 12 to 32 and cardiometabolic risk factors at ~age 32. Analyses were based on ordinary least squares regression after removing outliers (unlike Table 3 in the main text, which used robust regression with MM estimation and did not remove outliers).

Risk Factor	Statistical Tests <sup>a</sup>											
	Model 1: Adjusted for Age, Race, and Medication Use			Model 2: + Adjustment for Tobacco Pack-Years			Model 3: + Adjustment for Childhood SES and Health			Model 4: + Adjustment for BMI		
	$\beta$	95% CI	p	$\beta$	95% CI	p	$\beta$	95% CI	p	$\beta$	95% CI	p
BMI (kg/m <sup>2</sup> )	<b>-0.32</b>	<b>-0.45, -0.19</b>	<b>&lt;.001</b>	<b>-0.23</b>	<b>-0.37, -0.10</b>	<b>&lt;.001</b>	<b>-0.23</b>	<b>-0.37, -0.10</b>	<b>&lt;.001</b>	-	-	-
WHR	<b>-0.22</b>	<b>-0.35, -0.10</b>	<b>&lt;.001</b>	<b>-0.21</b>	<b>-0.35, -0.08</b>	<b>.002</b>	<b>-0.21</b>	<b>-0.35, -0.07</b>	<b>.003</b>	-0.10	-0.23, 0.02	.11
HDL <sup>a</sup> (mg/dL)	0.13	0.00, 0.26	.059	0.12	-0.02, 0.26	.10	0.13	-0.02, 0.27	.09	0.06	-0.08, 0.20	.41
LDL (mg/dL)	<b>-0.14</b>	<b>-0.27, -0.01</b>	<b>.041</b>	-0.11	-0.25, 0.03	.14	-0.09	-0.24, 0.05	.20	-0.07	-0.22, 0.07	.33
Trig (mg/dL)	<b>-0.15</b>	<b>-0.28, -0.03</b>	<b>.019</b>	<b>-0.15</b>	<b>-0.29, -0.01</b>	<b>.041</b>	-0.14	-0.28, 0.00	.059	-0.08	-0.22, 0.06	.27
Glucose (mg/dL)	-0.11	-0.23, 0.00	0.06	-0.06	-0.18, 0.06	.37	-0.04	-0.16, 0.08	.50	0.00	-0.12, -0.12	.97
HOMA-IR	<b>-0.20</b>	<b>-0.33, -0.08</b>	<b>.002</b>	-0.12	-0.25, 0.02	.087	-0.11	-0.24, 0.03	.12	0.03	-0.09, 0.14	.64
SBP (mm Hg)	<b>-0.17</b>	<b>-0.28, -0.06</b>	<b>.002</b>	-0.11	-0.23, 0.01	.067	-0.10	-0.22, 0.02	.10	-0.02	-0.13, 0.09	.71

Supplemental Table 3. Associations between cannabis joint-years from ~age 12 to 32 and cardiometabolic risk factors at ~age 32. Analyses were based on ordinary least squares regression after removing outliers (unlike Table 3 in the main text, which used robust regression with MM estimation and did not remove outliers).

Risk Factor	Statistical Tests <sup>a</sup>											
	Model 1: Adjusted for Age, Race, and Medication Use			Model 2: + Adjustment for Tobacco Pack-Years			Model 3: + Adjustment for Childhood SES and Health			Model 4: + Adjustment for BMI		
	$\beta$	95% CI	p	$\beta$	95% CI	p	$\beta$	95% CI	p	$\beta$	95% CI	p
DBP (mm Hg)	<b>-0.14</b>	<b>-0.26, -0.02</b>	<b>.027</b>	-0.09	-0.22, 0.04	.17	-0.08	-0.21, 0.05	.23	-0.03	-0.16, 0.10	.65
MetS	<b>-0.30</b>	<b>-0.43, -0.17</b>	<b>&lt;.001</b>	<b>-0.25</b>	<b>-0.39, -0.12</b>	<b>&lt;.001</b>	<b>-0.25</b>	<b>-0.39, -0.11</b>	<b>&lt;.001</b>	<b>-0.12</b>	<b>-0.23, -0.01</b>	<b>.046</b>
Il-6 (mg/L)	-0.03	-0.17, 0.11	.68	-0.07	-0.22, 0.09	.39	-0.05	-0.20, 0.11	.54	0.00	-0.14, 0.15	.98
CRP (mg/L)	-0.07	-0.21, 0.07	.33	-0.07	-0.22, 0.08	.35	-0.07	-0.23, 0.08	.36	0.00	-0.14, 0.14	.97

Note. BMI, triglycerides, fasting glucose, insulin resistance, IL-6, and CRP were log-transformed for statistical tests. One outlier was removed in analyses of BMI; one outlier was removed in analyses of WHR; three outliers were removed in analyses of glucose; one outlier was removed in analyses of HOMA-IR; three outliers were removed in analyses of systolic blood pressure; two outliers were removed in analyses of diastolic blood pressure; one outlier was removed in analyses of MetS. Statistical analyses tested associations between cannabis joint-years (a log-transformed continuous variable) and cardiometabolic risk factors, and standardized beta coefficients are presented. a. Higher values indicate better health. Statistically significant associations are bolded. BMI=body mass index. WHR=waist-hip ratio. HDL=high density lipoprotein. LDL=low density lipoprotein. Trig=triglycerides. Glucose=fasting glucose. HOMA-IR=insulin resistance. SBP=systolic blood pressure. DBP=diastolic blood pressure. MetS=count of metabolic syndrome criteria. IL-6=interleukin 6. CRP=C-reactive protein.

Supplemental Table 4. Correlations between cannabis joint-years and childhood BMI and fruit and vegetable intake, physical activity, and alcohol use in adulthood.

Exposure	Childhood BMI			Vegetable Intake			Fruit Intake			Physical Activity			Alcohol Use		
	r	95% CI	p	r	95% CI	p	r	95% CI	p	r	95% CI	p	r	95% CI	p
Cannabis Joint-Years	-0.04	-0.17, 0.09	.54	0.01	-0.11, 0.14	.86	0.05	-0.08, 0.17	.46	-0.04	-0.16, 0.09	.54	<b>0.15</b>	0.03, 0.27	<b>.020</b>

Note. All variables were log-transformed due to skew. Statistically significant correlations are shown in bold.

Supplemental Table 5. Estimates of the amount of variance ( $R^2$ ) in each cardiometabolic risk factor accounted for by cannabis use (univariate model) and cannabis use plus additional covariates (multivariable model).

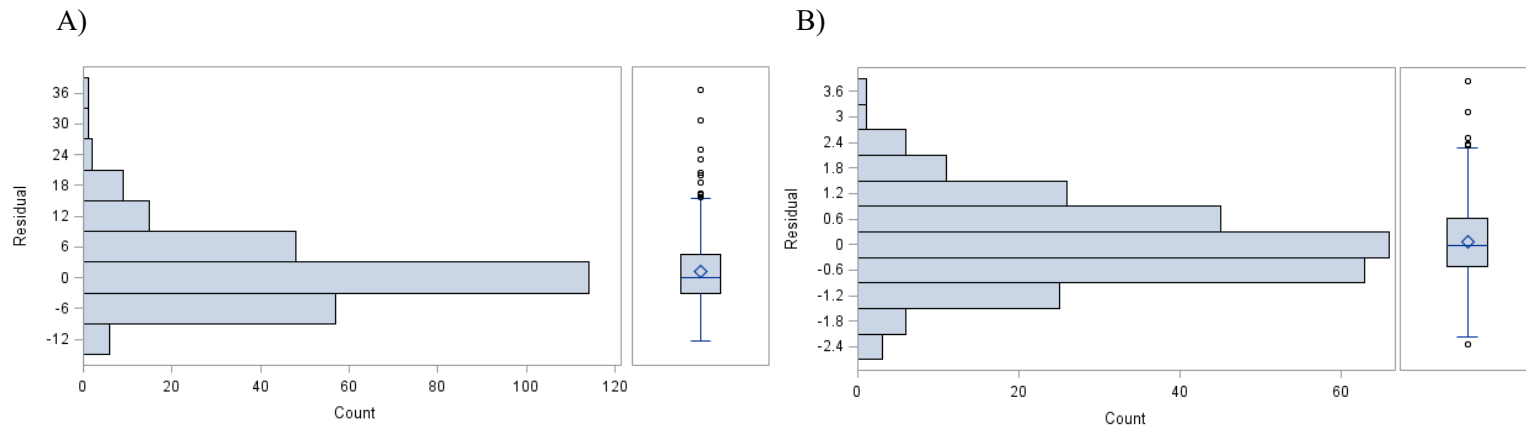
Cardiometabolic Risk Factors	$R^2$	
	Univariate Model	Multivariable Model
BMI <sup>a</sup>	5.31	10.62
WHR	2.56	24.19
HDL	2.23	8.01
LDL	2.14	5.84
Triglycerides	4.92	15.46
Glucose	3.91	13.89
HOMA-IR	4.58	37.72
SBP	2.76	28.38
DBP	0.73	16.74
MetS	5.68	30.37
IL-6	0.37	16.98
CRP	0.59	19.62

Note. The multivariable models includes covariates of age, race, medication use, childhood health, childhood SES, and adult BMI a. The multivariable model includes all covariates except adult BMI. BMI=body mass index. WHR=waist-hip ratio. HDL=high density lipoprotein. LDL=low density lipoprotein. Trig=triglycerides. Glucose=fasting glucose. HOMA-IR=insulin resistance. SBP=systolic blood pressure. DBP=diastolic blood pressure. MetS=count of metabolic syndrome criteria. IL-6=interleukin 6. CRP=C-reactive protein.

Supplemental Table 6. Results of mediation tests. Adult BMI mediates the association between cannabis use and cardiometabolic risk.

Cardiometabolic Risk			
Factor	Indirect Effect	95% CI	p
WHR	<b>-0.12</b>	<b>-0.19, -0.06</b>	<b>&lt;.001</b>
HDL	<b>0.08</b>	<b>0.03, 0.13</b>	<b>.002</b>
LDL	-0.03	-0.07, 0.10	.14
Trig	<b>-0.07</b>	<b>-0.13, -0.03</b>	<b>.001</b>
Glucose	<b>-0.06</b>	<b>-0.11, -0.01</b>	<b>.023</b>
HOMA-IR	<b>-0.17</b>	<b>-0.25, -0.09</b>	<b>&lt;.001</b>
SBP	<b>-0.13</b>	<b>-0.19, -0.07</b>	<b>&lt;.001</b>
DBP	<b>-0.07</b>	<b>-0.11, -0.03</b>	<b>.002</b>
MetS	<b>-0.16</b>	<b>-0.24, -0.09</b>	<b>&lt;.001</b>
Il-6	<b>-0.08</b>	<b>-0.13, -0.03</b>	<b>.001</b>
CRP	<b>-0.13</b>	<b>-0.20, -0.06</b>	<b>&lt;.001</b>

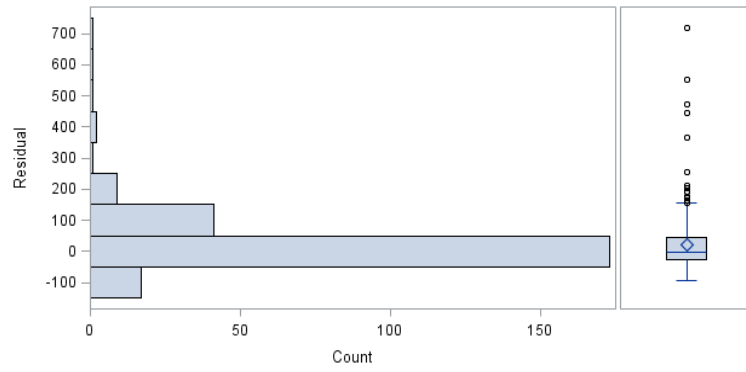
Note. Mediation tests were conducted in Mplus using maximum likelihood estimation and bootstrapped standard errors. Covariates included age, race, and medication use. Estimates represent standardized indirect effects. Mediation tests were conducted in the absence of a total effect (no evidence of an association between cannabis use and the cardiometabolic risk factor), consistent with recent recommendations (O'Rourke & MacKinnon, *J. Stud. Alcohol Drugs*, 79, 171–181, 2018). WHR=waist-hip ratio. HDL=high density lipoprotein. LDL=low density lipoprotein. Trig=triglycerides. Glucose=fasting glucose. HOMA-IR=insulin resistance. SBP=systolic blood pressure. DBP=diastolic blood pressure. MetS=count of metabolic syndrome criteria. IL-6=interleukin 6. CRP=C-reactive protein.



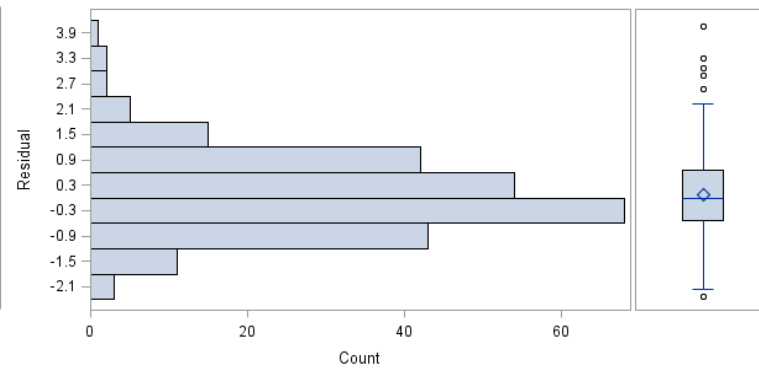
Supplemental Figure 1. The distribution of residuals for BMI (body mass index) before (A) and after (B) log transformation.



A)

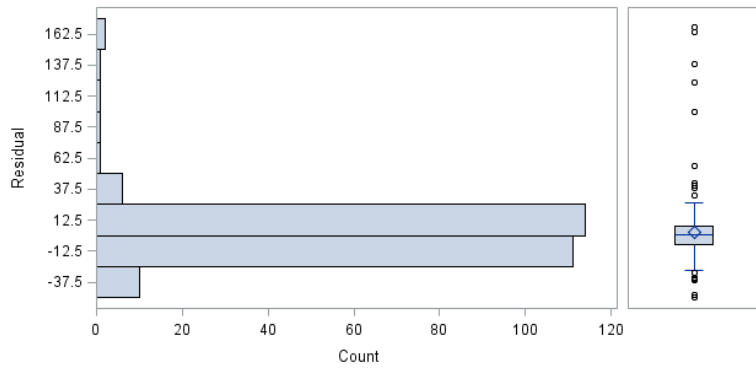


B)

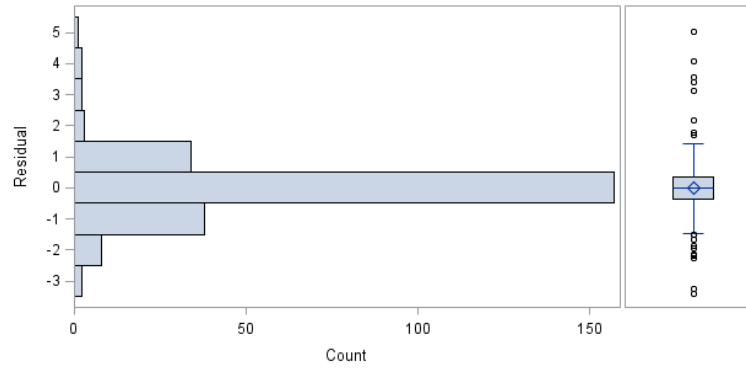


Supplemental Figure 2. The distribution of residuals for triglycerides before (A) and after (B) log transformation.

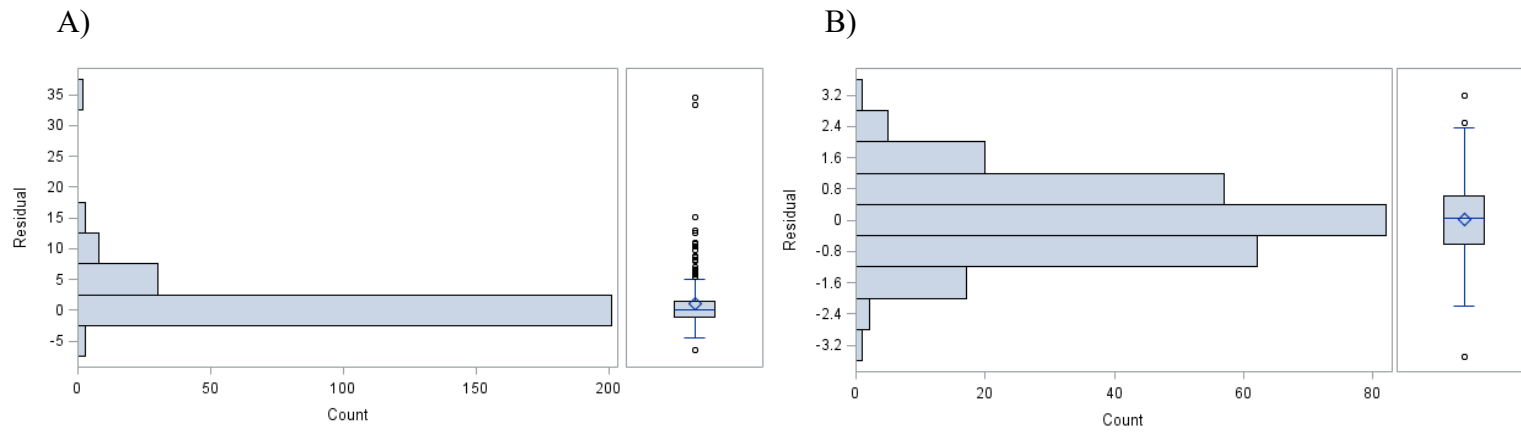
A)



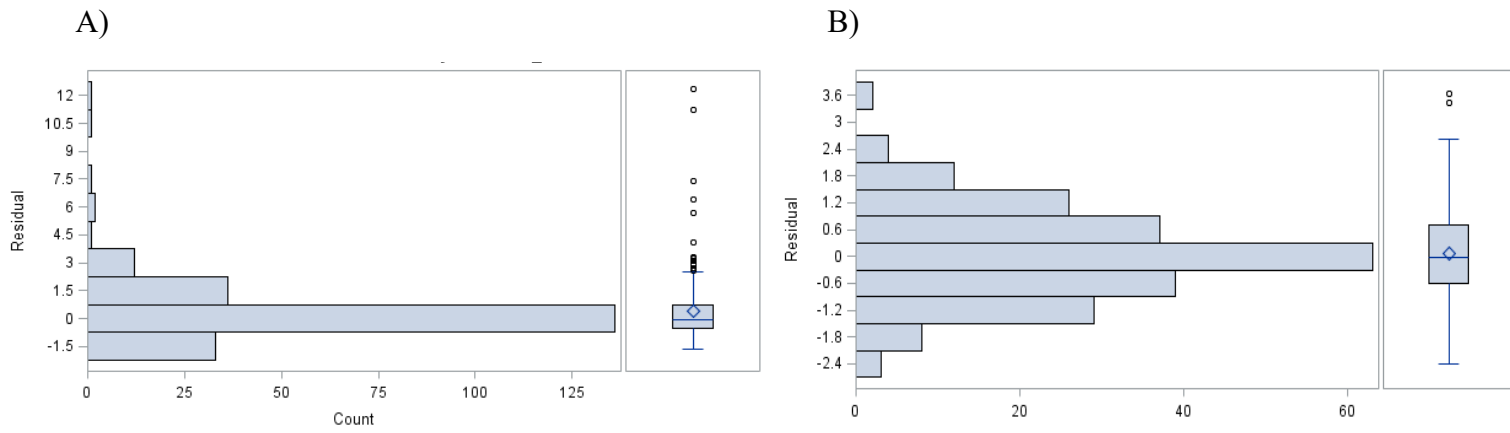
B)



Supplemental Figure 3. The distribution of residuals for fasting glucose before (A) and after (B) log transformation.

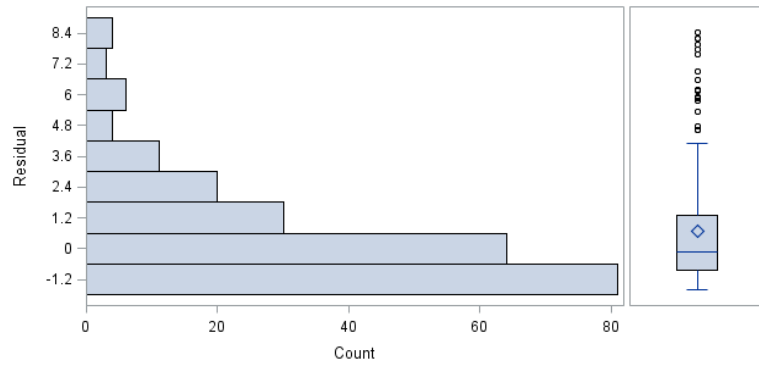


Supplemental Figure 4. The distribution of residuals for HOMA-IR (insulin resistance) before (A) and after (B) log transformation.

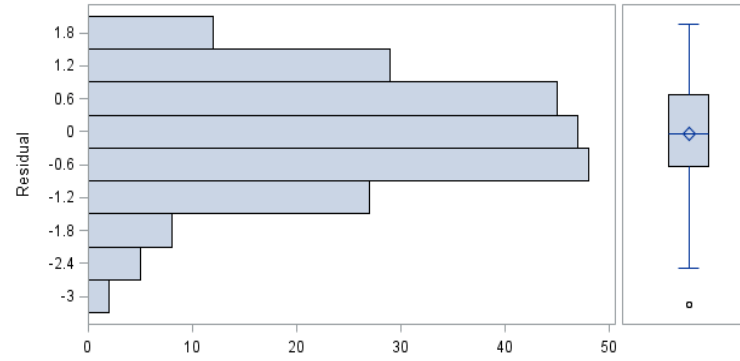


Supplemental Figure 5. The distribution of residuals for II-6 (interleukin 6) before (A) and after (B) log transformation.

A)



B)



Supplemental Figure 6. The distribution of residuals for CRP (C-reactive protein) before (A) and after (B) log transformation.