

APPENDIX Q-2.

Graphical Presentations of Continuous Clinical Parameters versus Current Dioxin

This appendix contains bivariate scatterplots describing the relationship between selected clinical parameters and lipid-adjusted current dioxin. The clinical parameter transformation used in the statistical analysis has been used in the scatterplots, and consequently the axis marks are equally spaced on the transformed scale. The axis marks for current lipid-adjusted dioxin are equally spaced for twofold increases, because a logarithmic (base 2) transformation was used. For the scatterplots, the reference line indicates the general relationship, unadjusted for any covariates, between the (transform of the) clinical parameter and \log_2 (current lipid-adjusted dioxin + 1). Participants excluded from the analyses are not displayed on these scatterplots, and consequently the graphical displays parallel the unadjusted Model 4 analyses of these selected clinical parameters.

A listing of the clinical parameter presented in each graphical display, along with a reference to a table in Chapters 9 through 20 and the transformation used on the clinical parameter, is given below.

Appendix Q-2 Figure	Chapter 9 through 20 Reference Table	Clinical Parameter (units)	Transformation
Q-2-1	9-6	Body Fat (percent)	Natural logarithm
Q-2-2	9-10	Sedimentation Rate (mm/hr)	Natural logarithm
Q-2-3	10-40	Prostate-Specific Antigen (ng/ml) (Measurements at or Above Sensitivity Limit)	Natural logarithm
Q-2-4	11-28	Vibrotactile Threshold Measurement of Right Great Toe (microns)	Natural logarithm
Q-2-5	11-29	Vibrotactile Threshold Measurement of Left Great Toe (microns)	Natural logarithm
Q-2-6	13-25	Cholesterol (mg/dl)	Natural logarithm
Q-2-7	13-27	HDL Cholesterol (mg/dl)	Natural logarithm
Q-2-8	13-31	Triglycerides (mg/dl)	Natural logarithm
Q-2-9	16-5	White Blood Cell (WBC) Count (thousand/mm ³)	Natural logarithm
Q-2-10	16-11	Platelet Count (thousand/mm ³)	Square root
Q-2-11	18-19	Thyroid Stimulating Hormone (TSH) (μ IU/ml)	Natural logarithm
Q-2-12	18-21	Thyroxine (T ₄) (μ g/dl)	--
Q-2-13	18-24	Fasting Glucose (mg/dl) (All Participants)	Natural logarithm

Appendix Q-2 Figure	Chapter 9 through 20 Reference Table	Clinical Parameter (units)	Transformation
Q-2-14	18-30	2-Hour Postprandial Glucose (mg/dl) (Nondiabetics)	Natural logarithm
Q-2-15	18-38	Serum Insulin (mIU/ml) (Diabetics)	Natural logarithm
Q-2-16	18-40	Serum Insulin (mIU/ml) (Nondiabetics)	Natural logarithm
Q-2-17	18-59	Total Testosterone (ng/dl)	Square root
Q-2-18	19-6	CD4 Cells (cells/mm ³)	Natural logarithm
Q-2-19	19-8	CD8 Cells (cells/mm ³)	Natural logarithm
Q-2-20	19-13	CD4-CD8 Ratio	Natural logarithm
Q-2-21	19-19	IgA (mg/dl)	Natural logarithm
Q-2-22	19-20	IgG (mg/dl)	Natural logarithm
Q-2-23	19-21	IgM (mg/dl)	Natural logarithm
Q-2-24	20-8	Forced Vital Capacity (FVC) (percent of predicted)	--
Q-2-25	20-9	Forced Expiratory Volume in 1 Second (FEV ₁) (percent of predicted)	--
Q-2-26	20-10	Ratio of Observed FEV ₁ to Observed FVC	Natural logarithm (1 - clinical parameter)

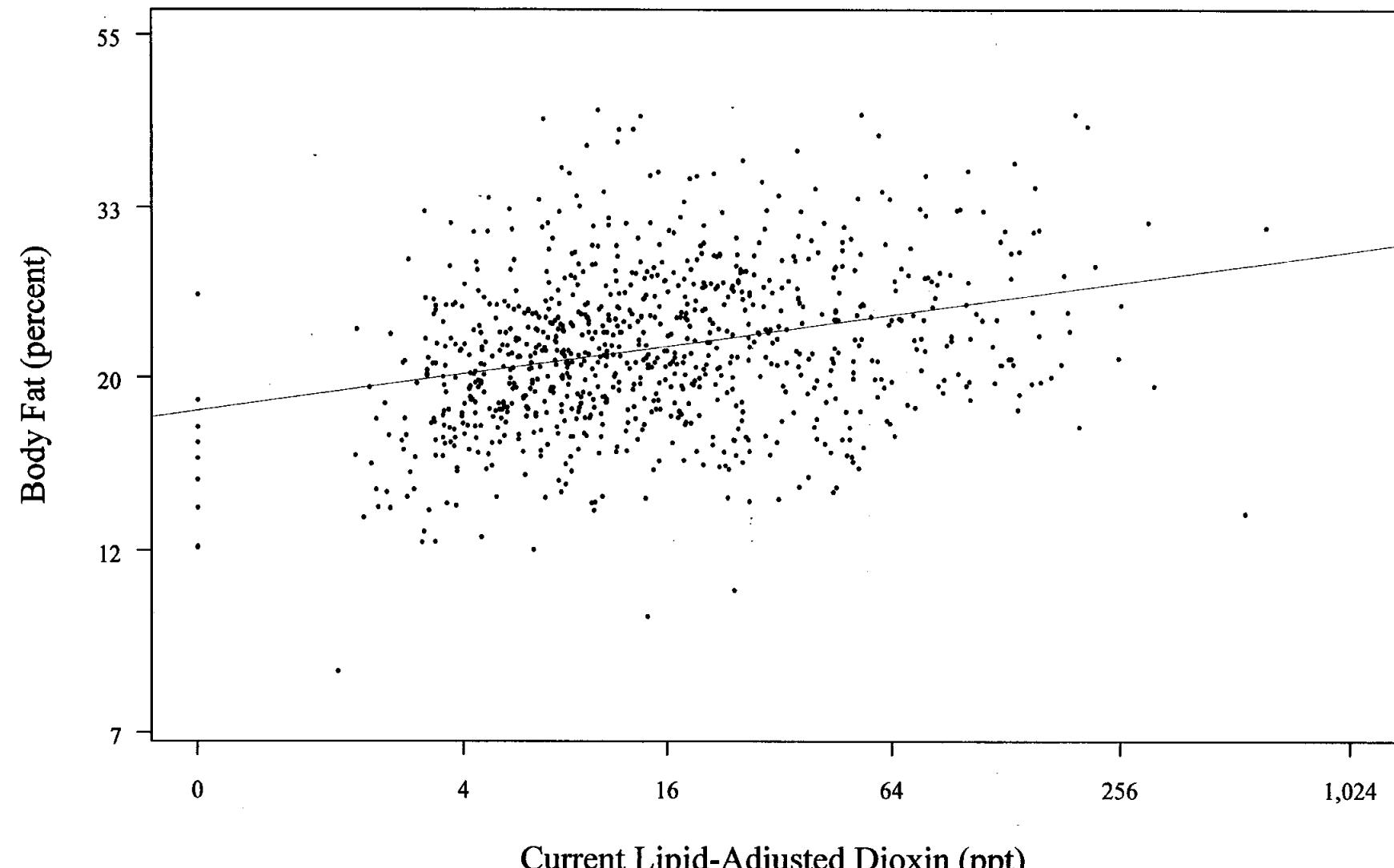


Figure Q-2-1.
Body Fat versus Current Lipid-Adjusted Dioxin (Table 9-6)

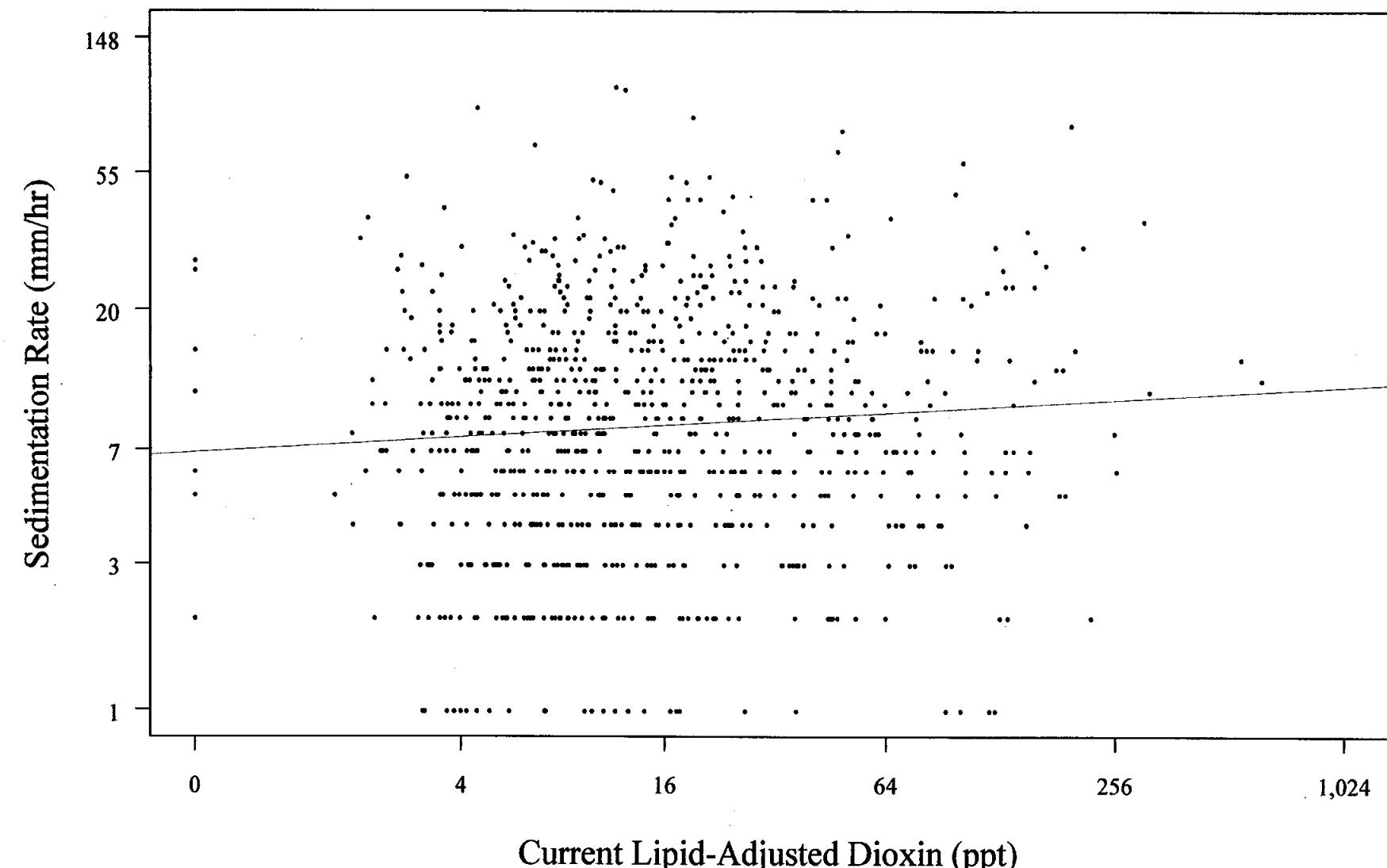


Figure Q-2-2.
Sedimentation Rate versus Current Lipid-Adjusted Dioxin (Table 9-10)

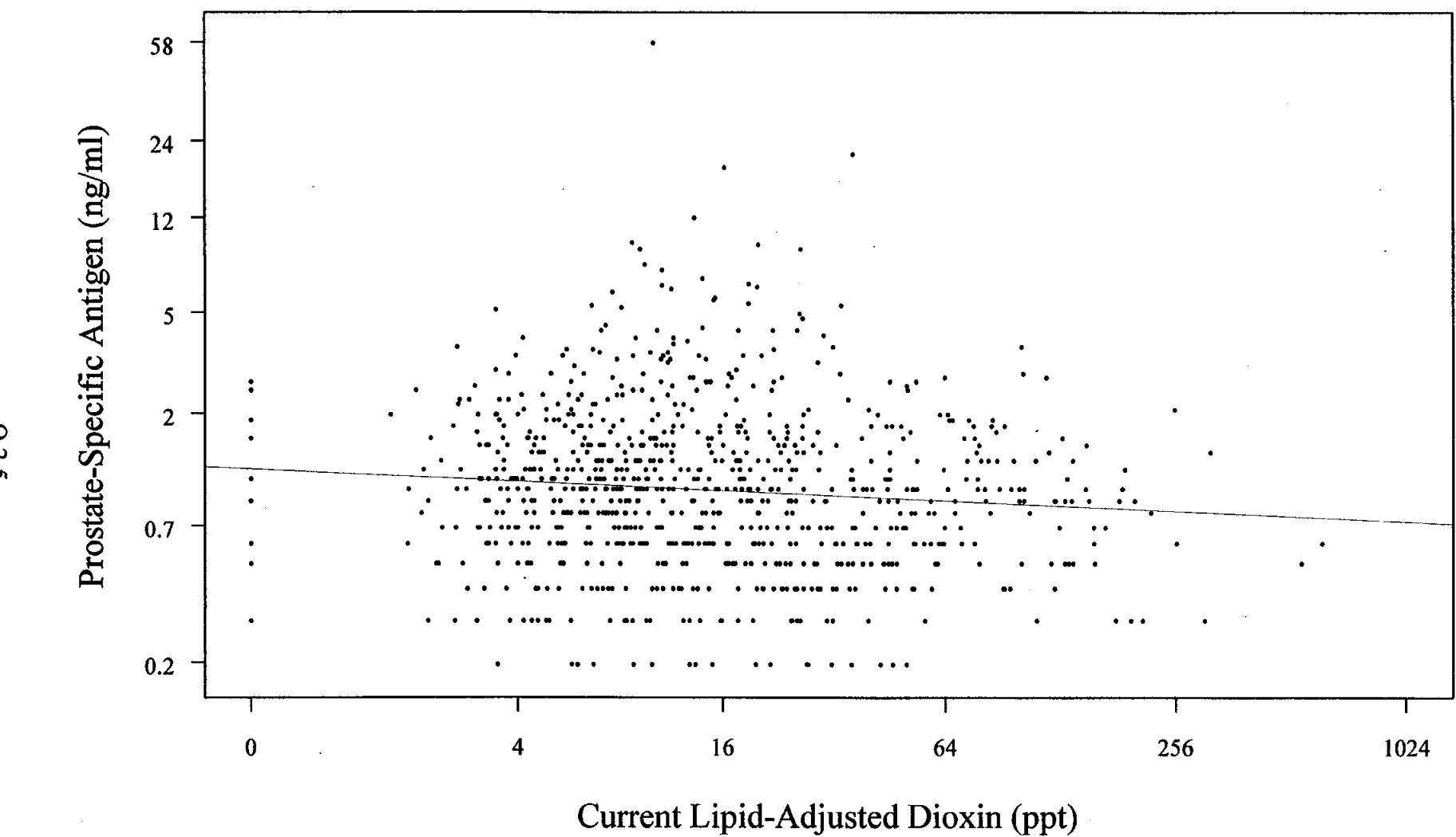


Figure Q-2-3.
Prostate-Specific Antigen versus Current Lipid-Adjusted Dioxin (Table 10-40)
Measurements at or Above Sensitivity Limit (0.2 ng/ml)

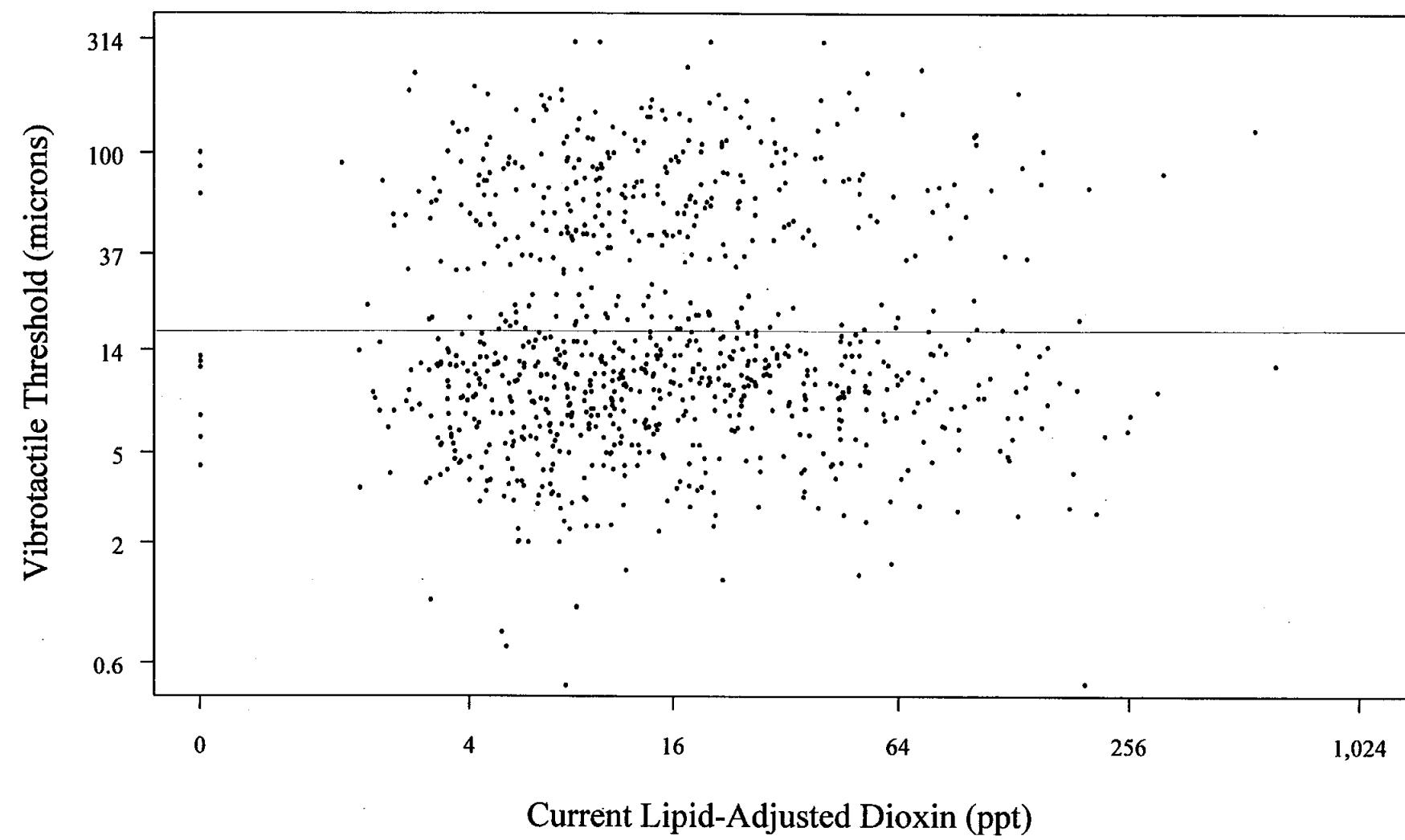


Figure Q-2-4.
Vibrotactile Threshold Measurement of Right Great Toe
versus Current Lipid-Adjusted Dioxin (Table 11-28)

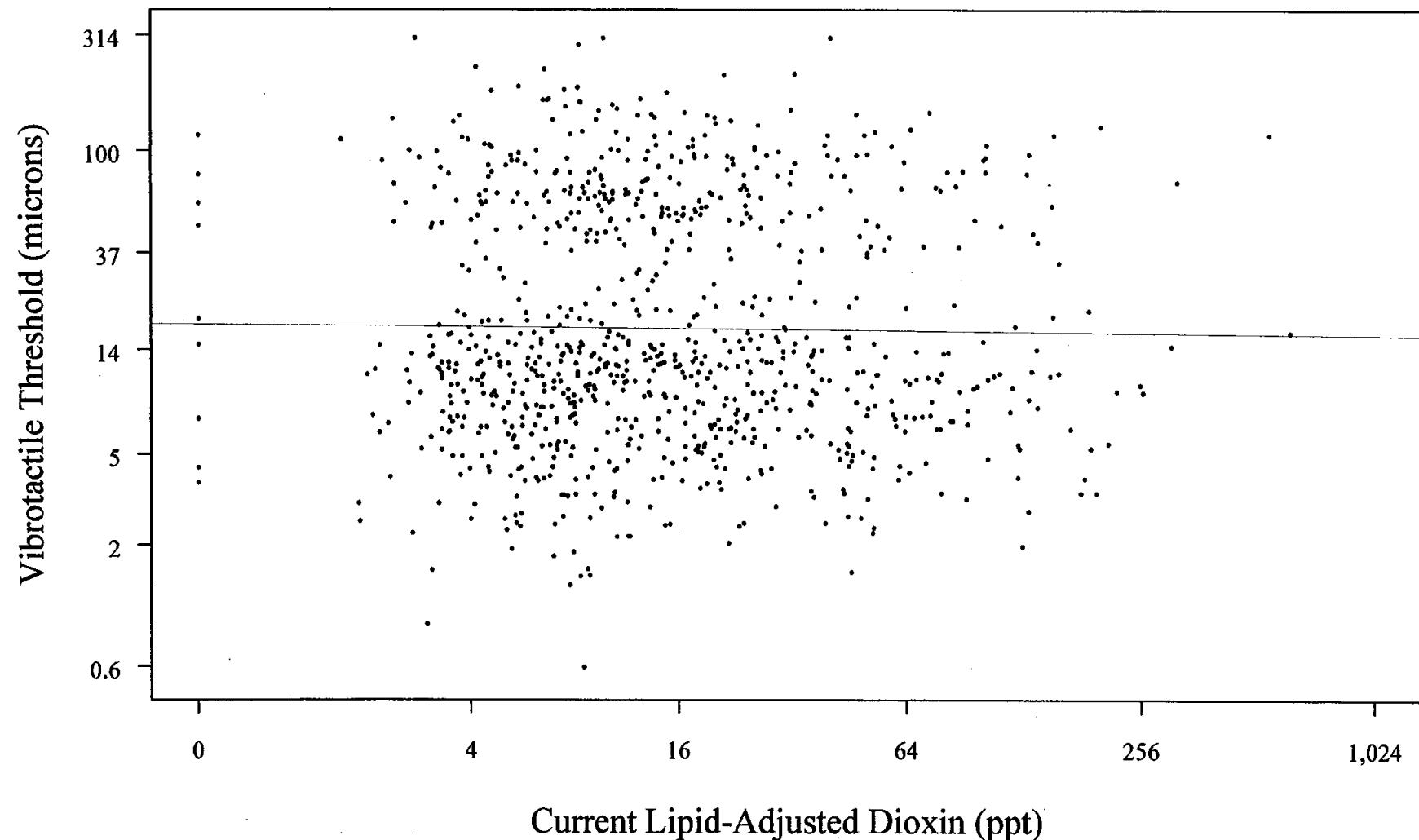


Figure Q-2-5.
Vibrotactile Threshold Measurement of Left Great Toe
versus Current Lipid-Adjusted Dioxin (Table 11-29)

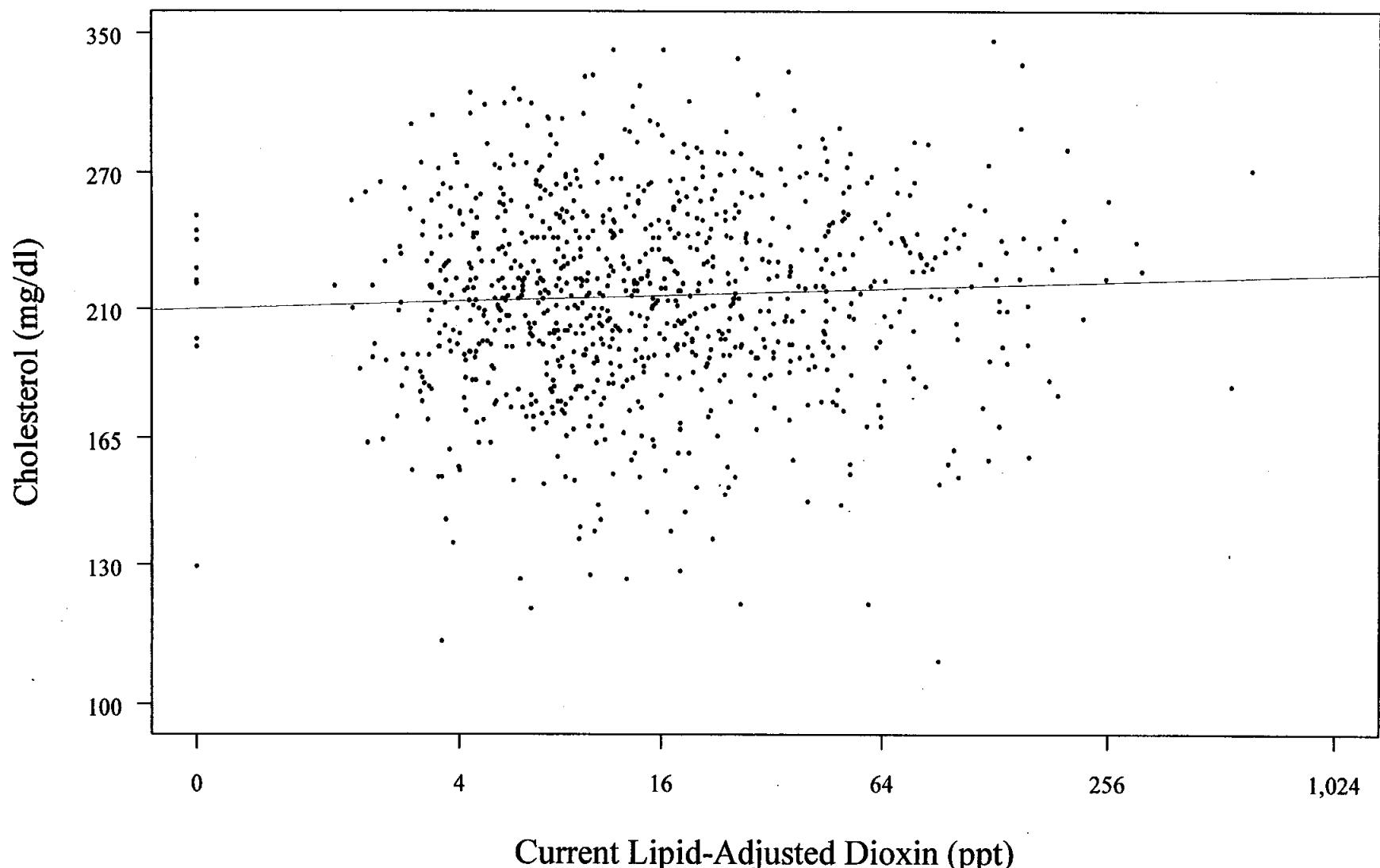


Figure Q-2-6.
Cholesterol versus Current Lipid-Adjusted Dioxin (Table 13-25)

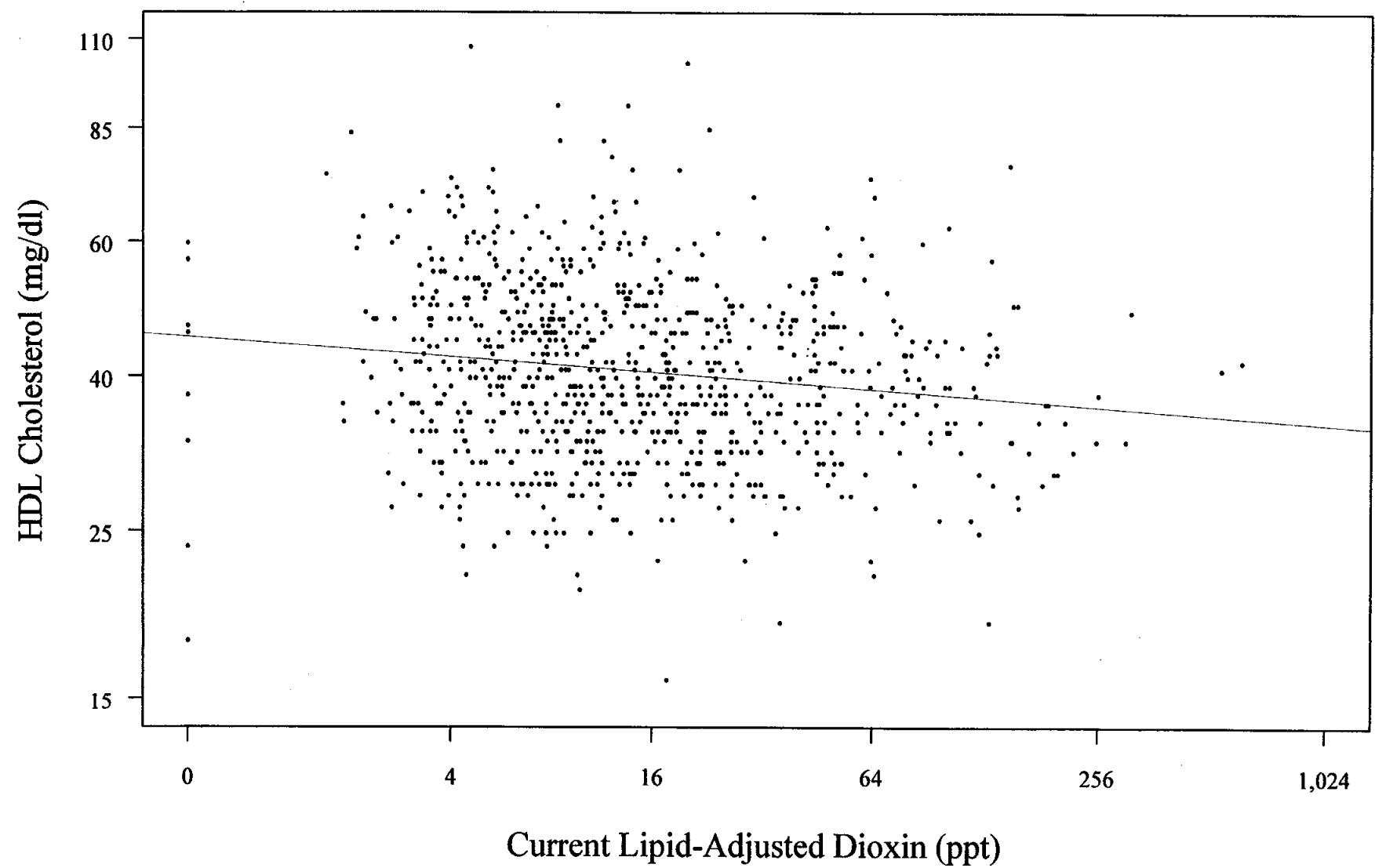


Figure Q-2-7.
HDL Cholesterol versus Current Lipid-Adjusted Dioxin (Table 13-27)

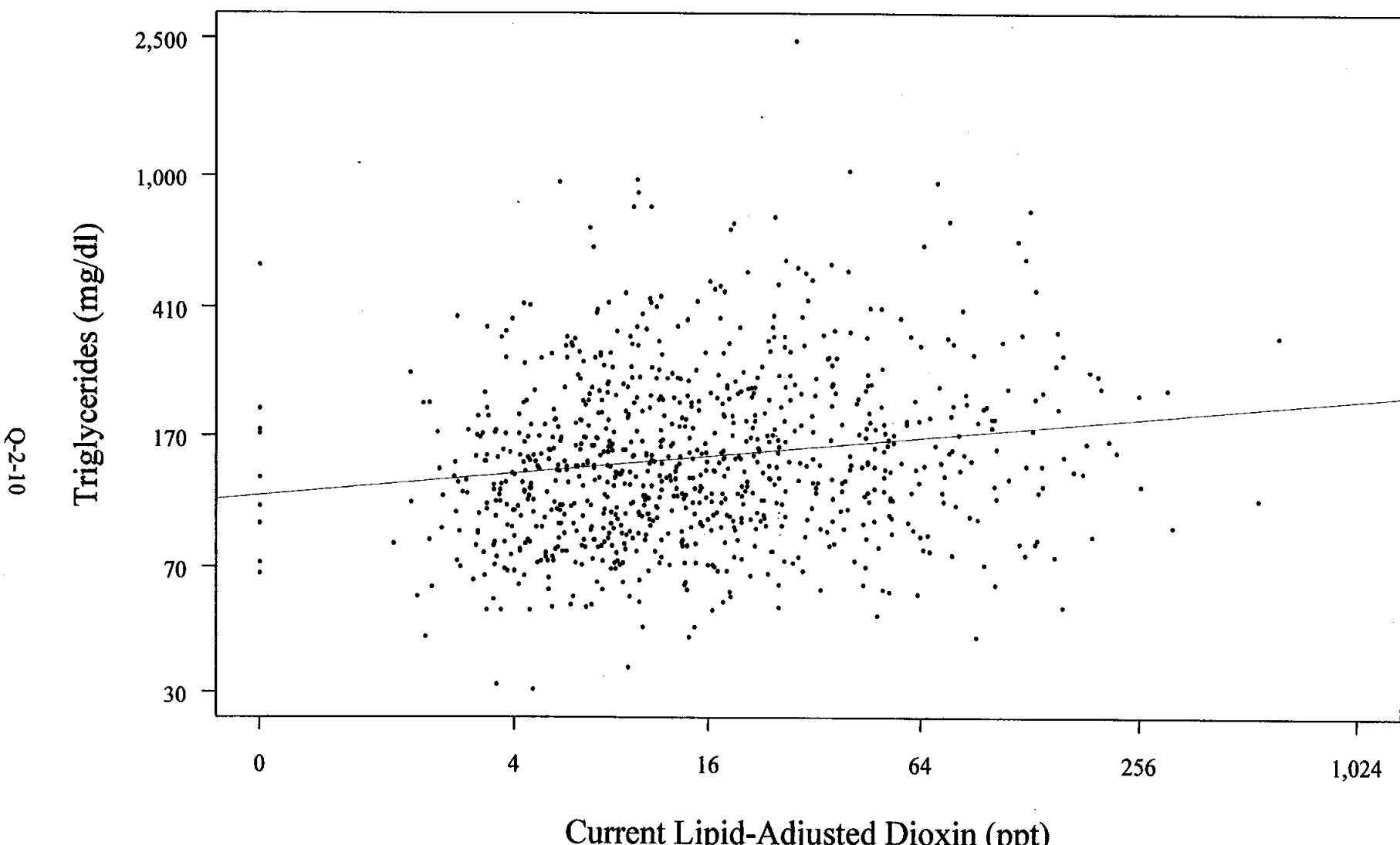


Figure Q-2-8.
Triglycerides versus Current Lipid-Adjusted Dioxin (Table 13-31)

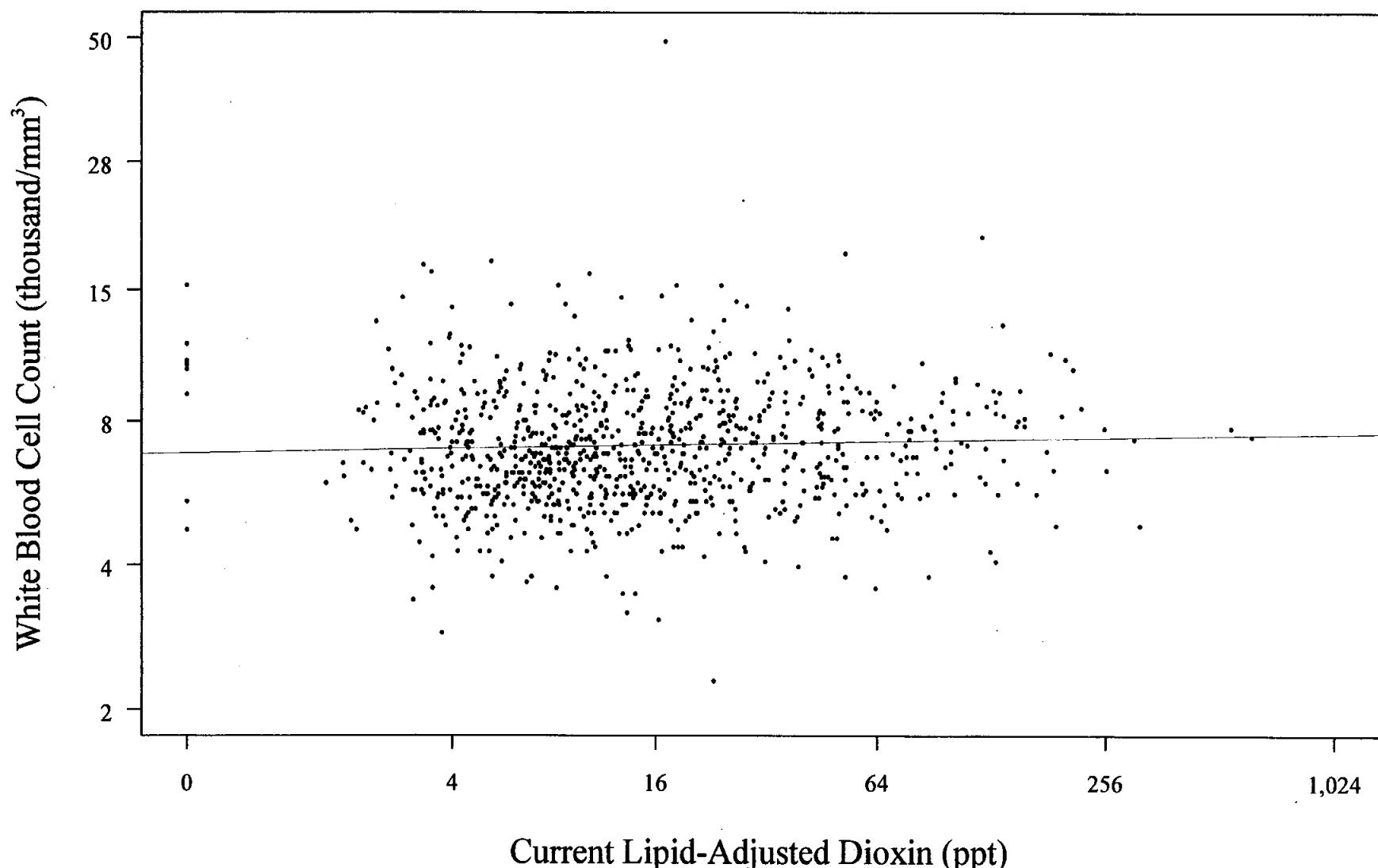


Figure Q-2-9.

White Blood Cell Count versus Current Lipid-Adjusted Dioxin (Table 16-5)

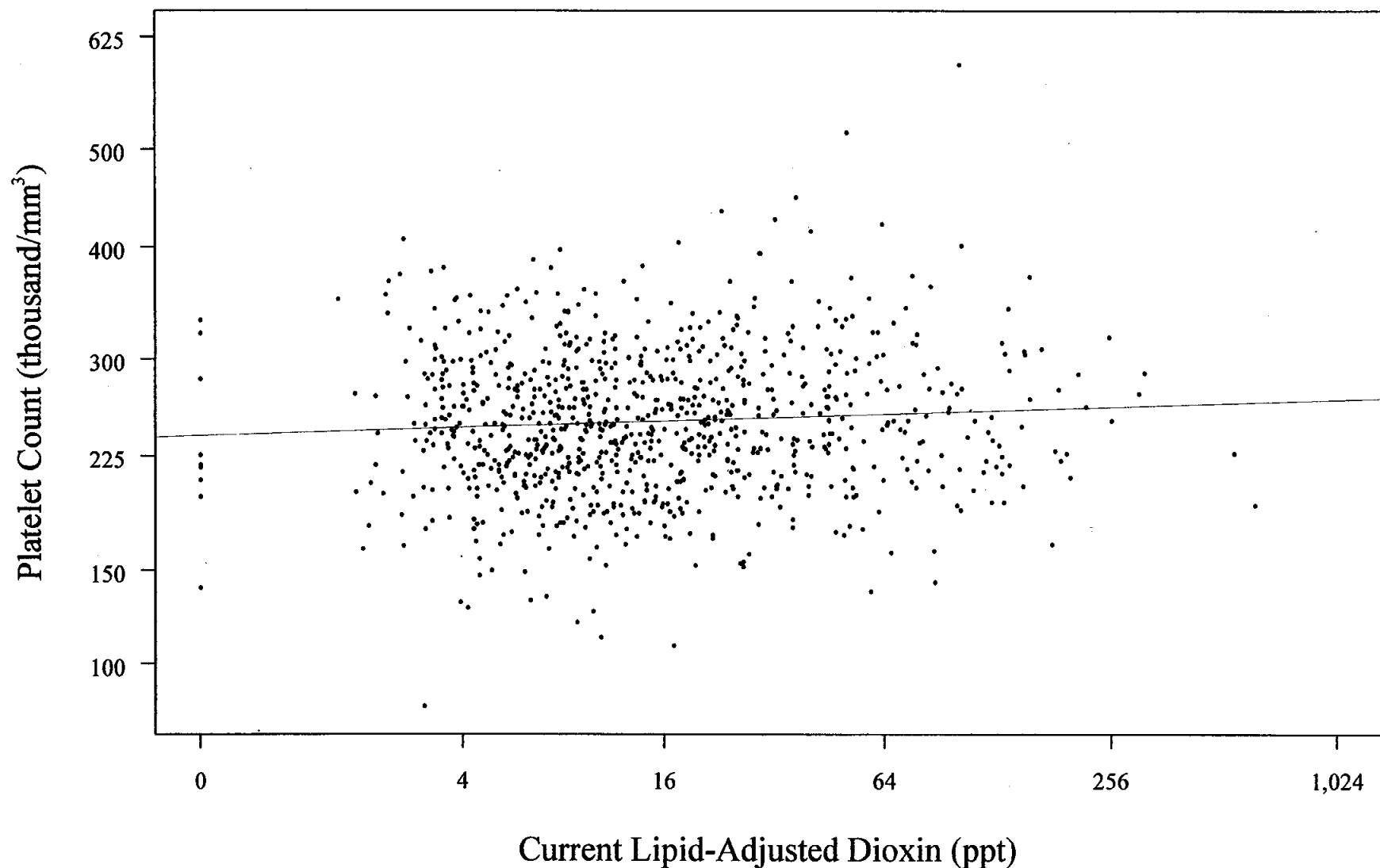


Figure Q-2-10.
Platelet Count versus Current Lipid-Adjusted Dioxin (Table 16-11)

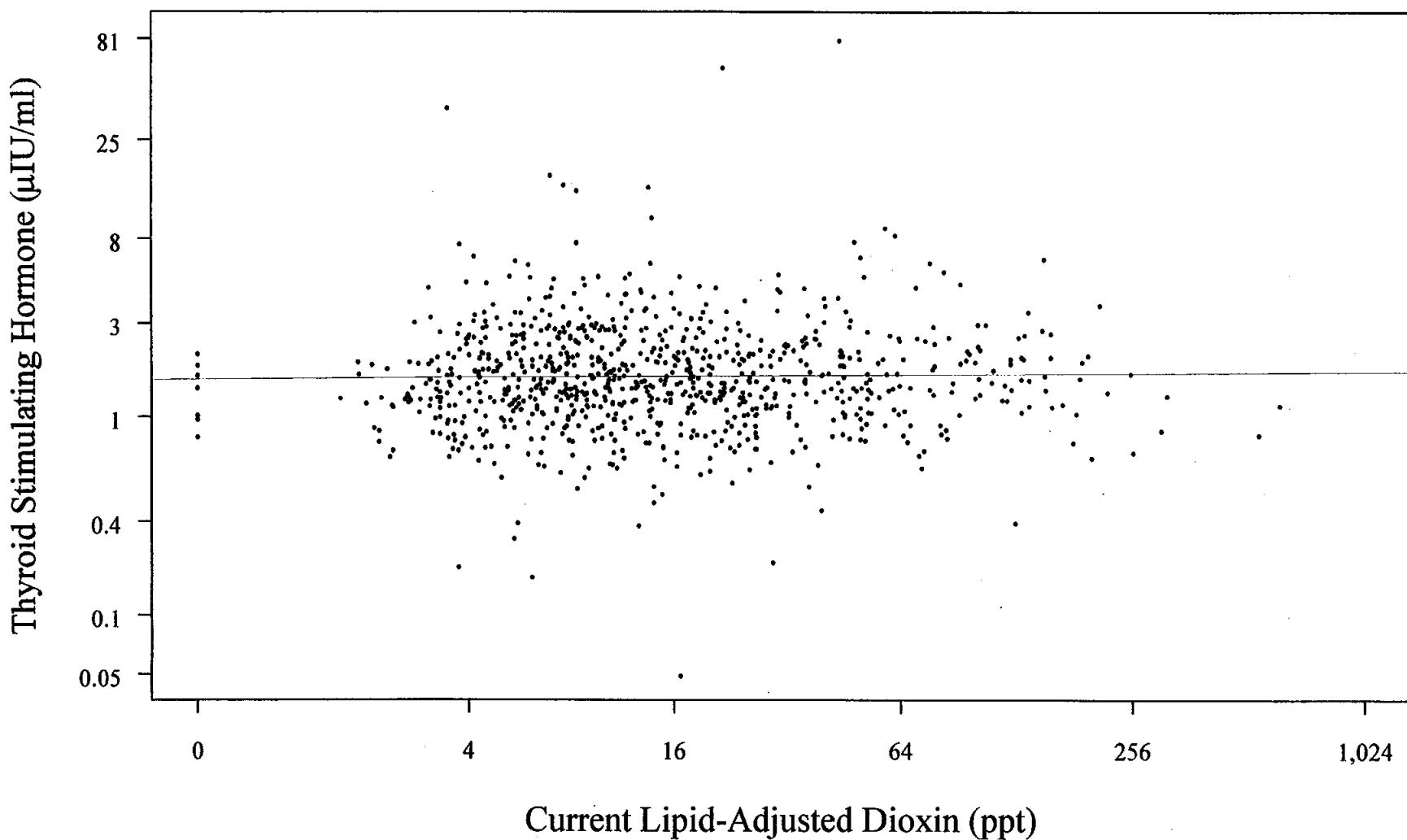


Figure Q-2-11.
Thyroid Stimulating Hormone (TSH) versus
Current Lipid-Adjusted Dioxin (Table 18-19)

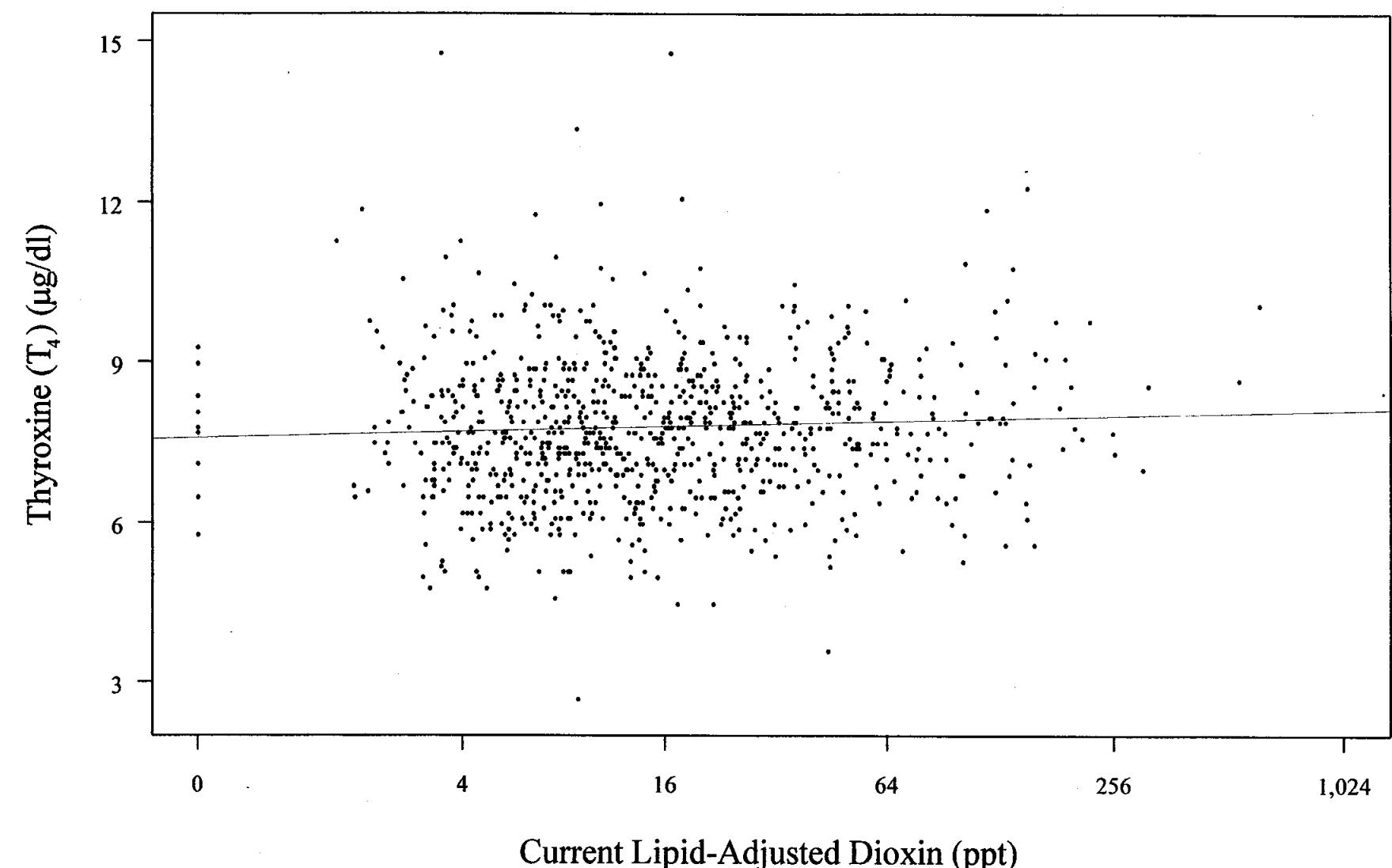


Figure Q-2-12.
Thyroxine (T_4) versus Current Lipid-Adjusted Dioxin (Table 18-21)

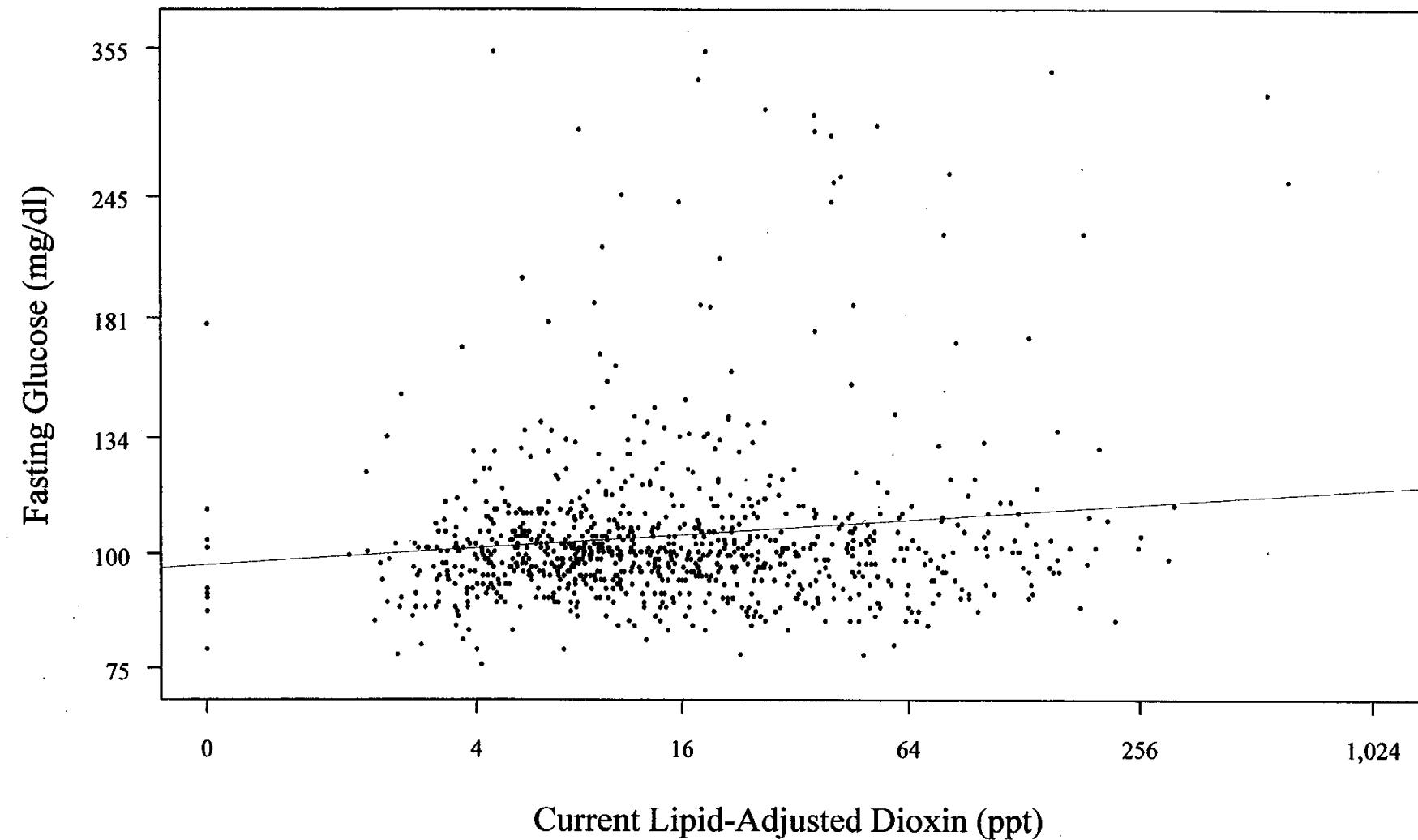


Figure Q-2-13.
Fasting Glucose versus Current Lipid-Adjusted Dioxin (Table 18-24)
(All Participants)

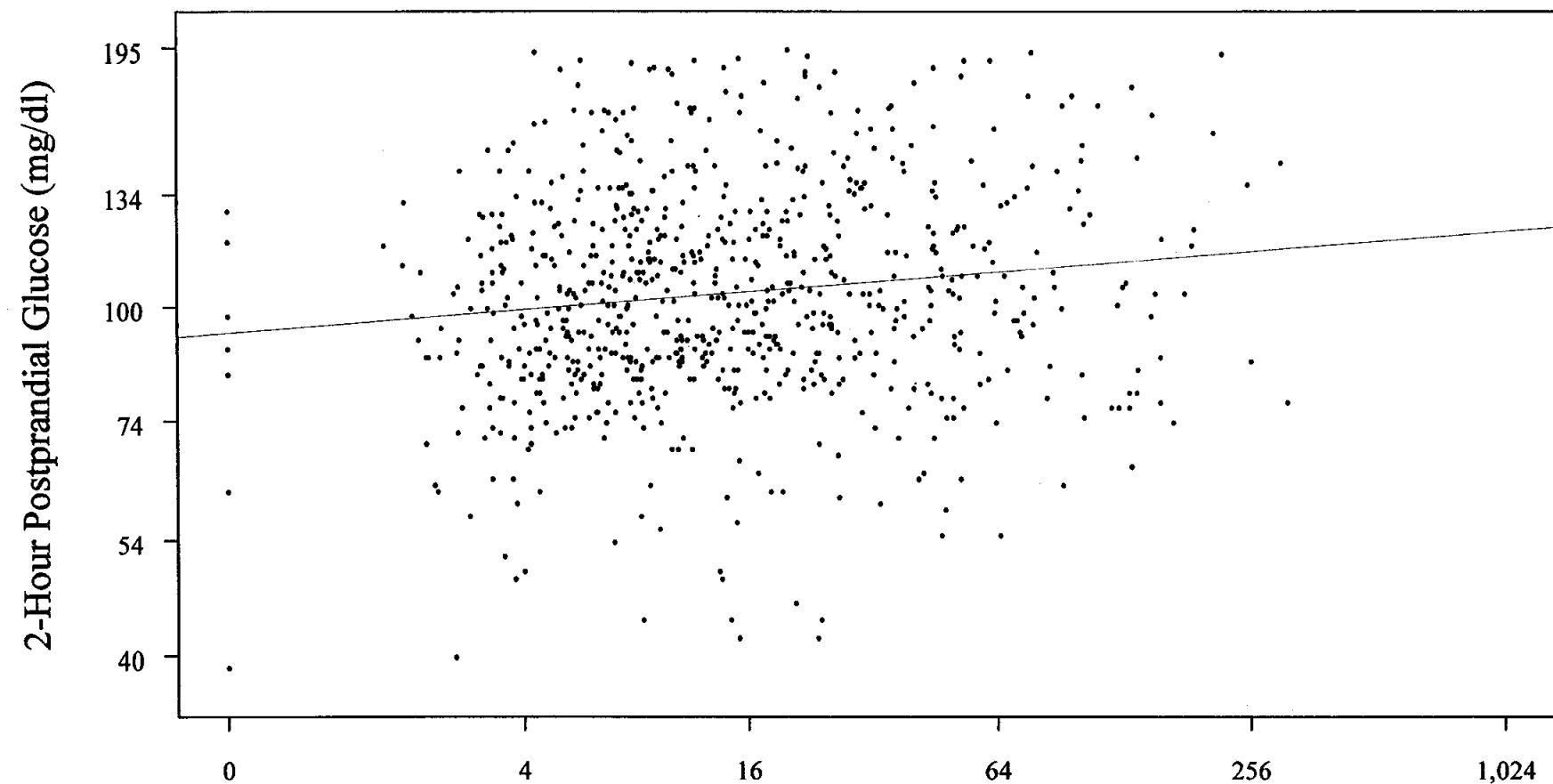


Figure Q-2-14.
2-Hour Postprandial Glucose versus
Current Lipid-Adjusted Dioxin (Table 18-30)
(Nondiabetics)

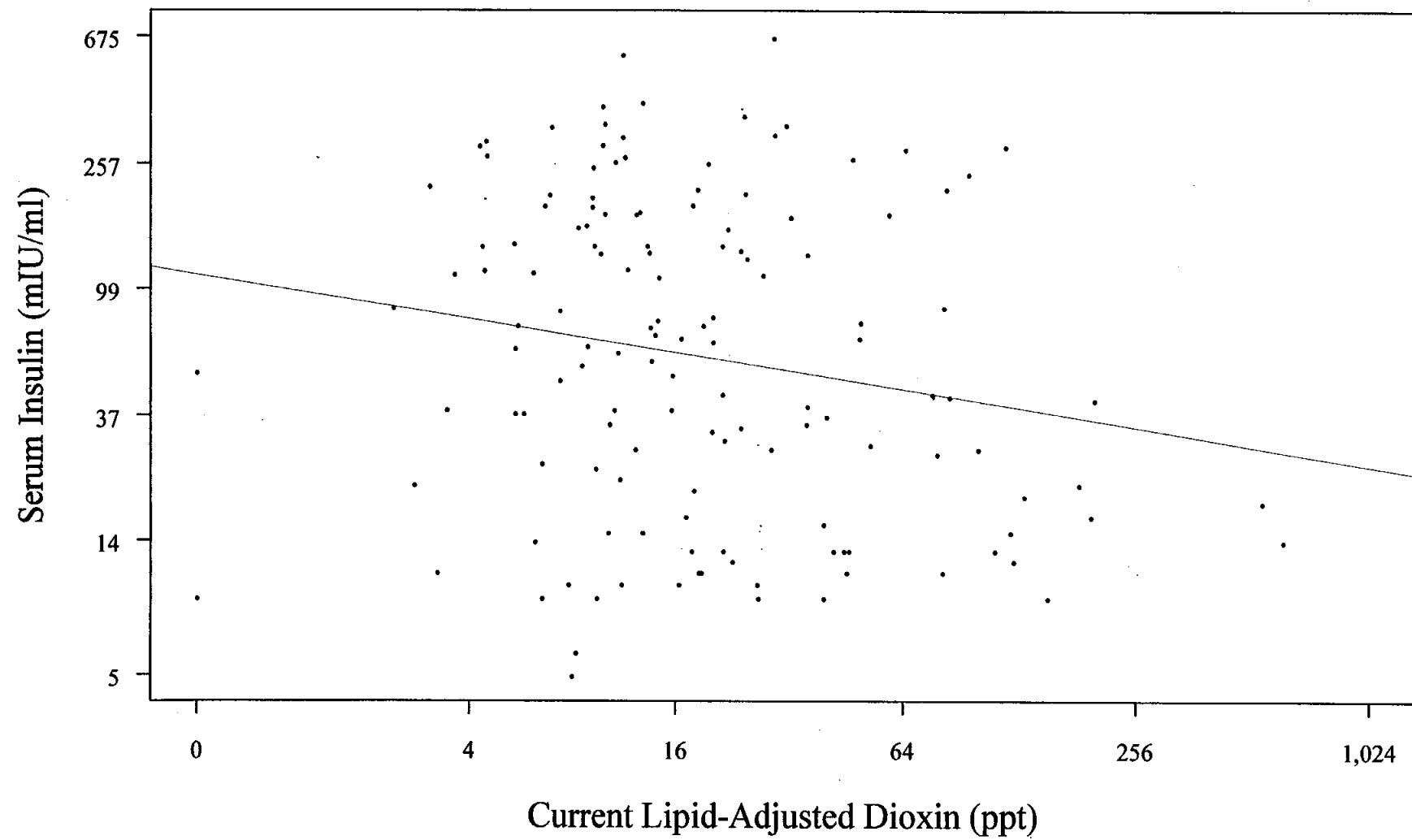


Figure Q-2-15.
 Serum Insulin versus Current Lipid-Adjusted Dioxin (Table 18-38)
 (Diabetics)

Q-2-18

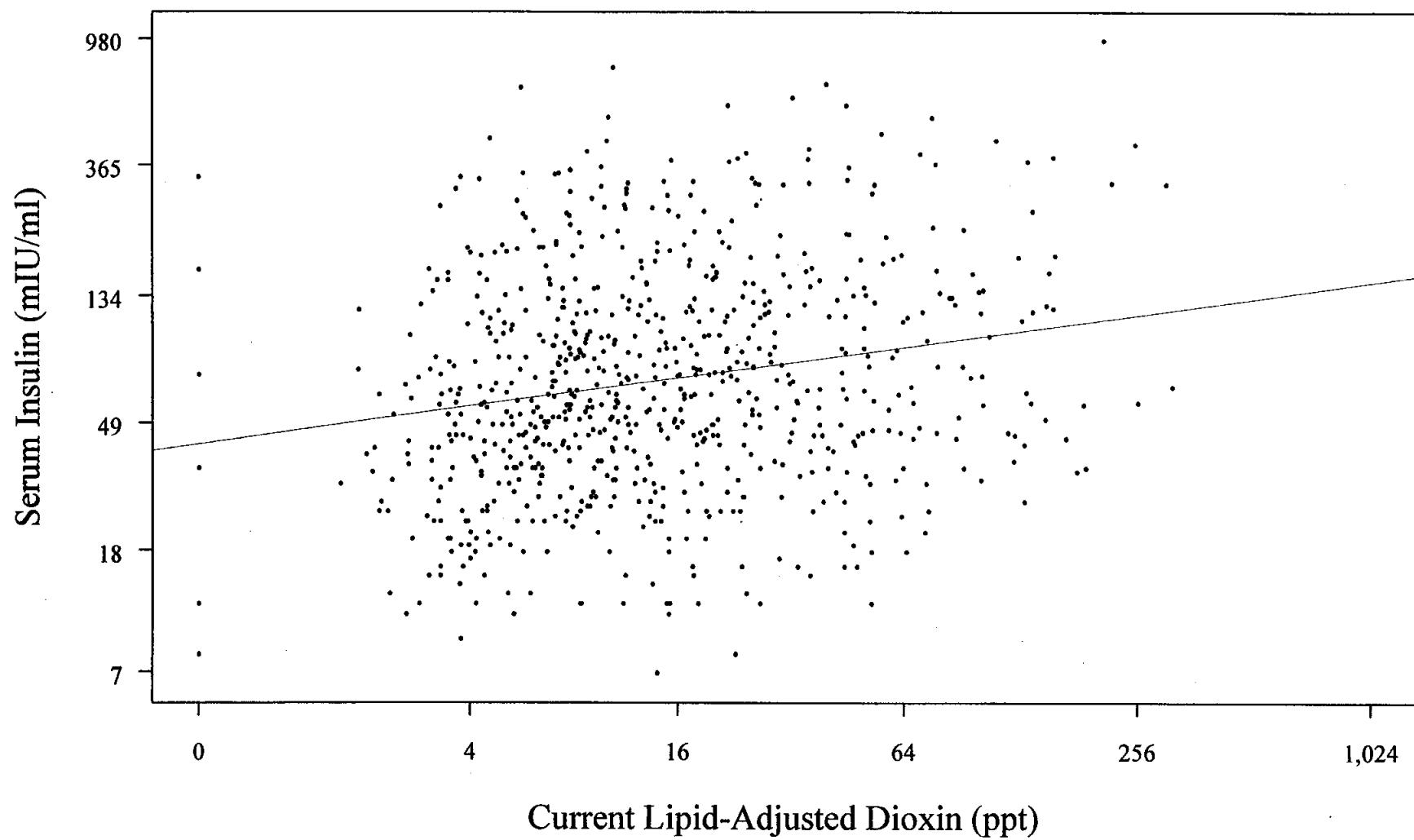


Figure Q-2-16.
Serum Insulin versus Current Lipid-Adjusted Dioxin (Table 18-40)
(Nondiabetics)

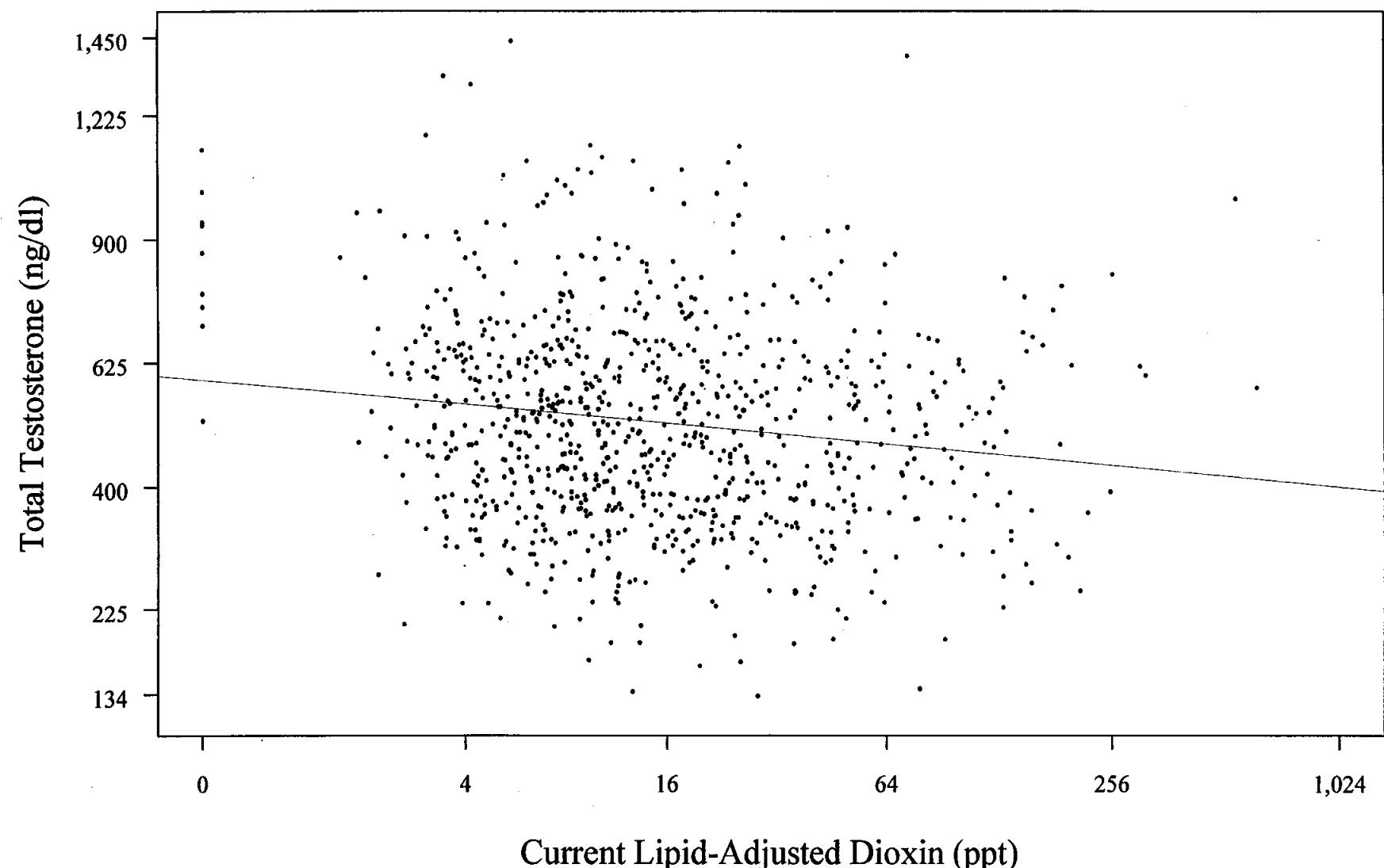


Figure Q-2-17.
Total Testosterone versus Current Lipid-Adjusted Dioxin (Table 18-59)

Q-2-20

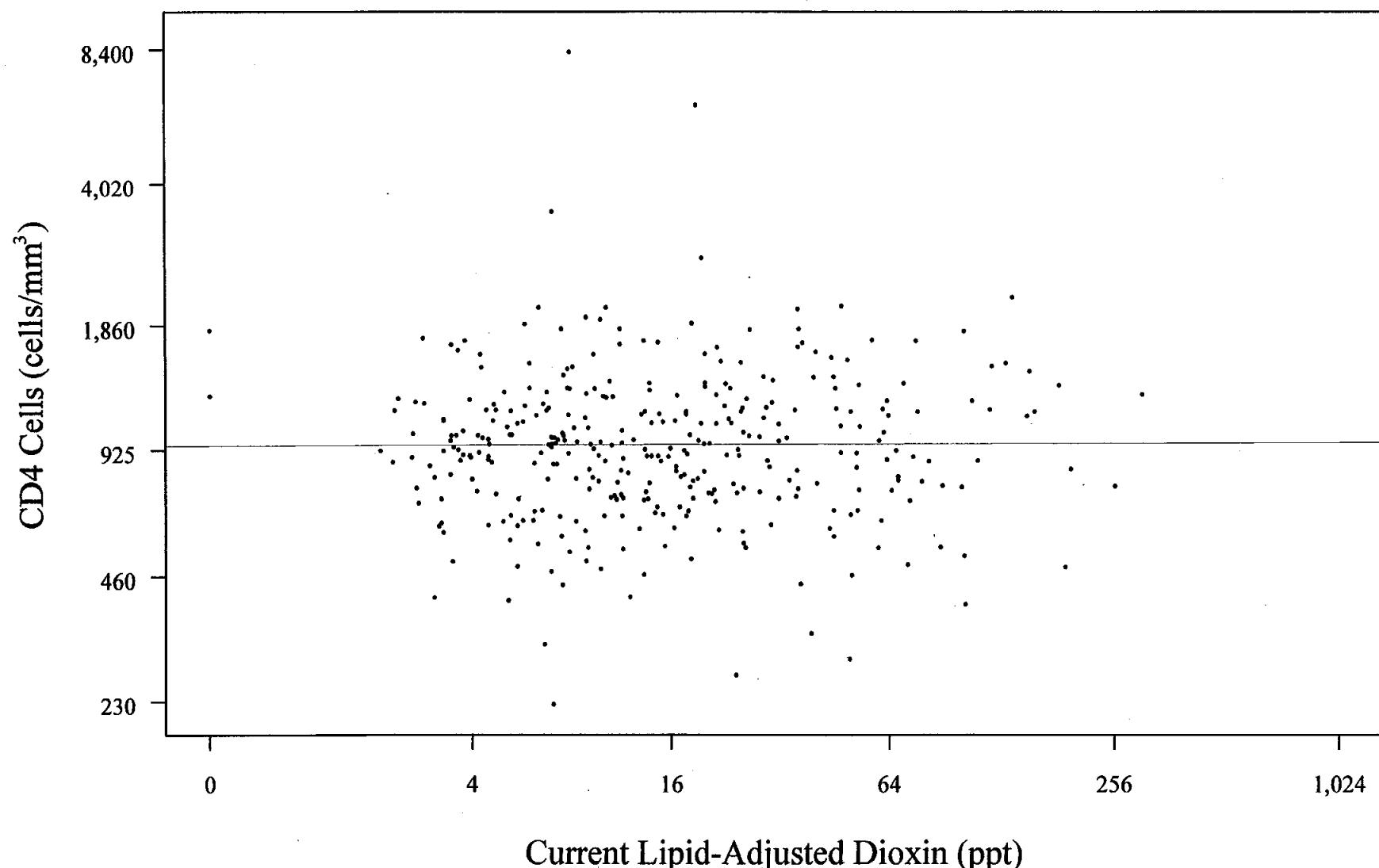


Figure Q-2-18.
CD4 Cells versus Current Lipid-Adjusted Dioxin (Table 19-6)

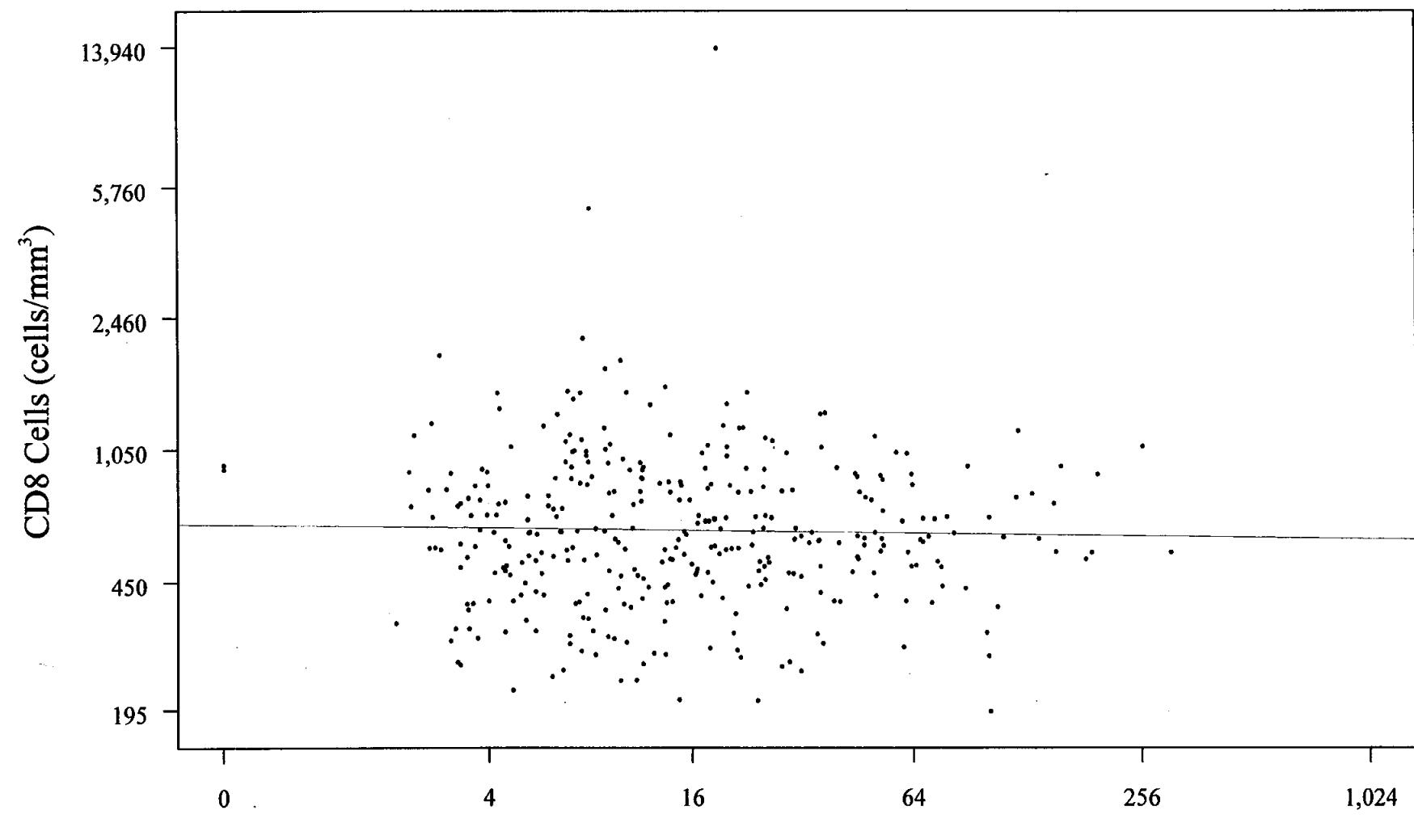


Figure Q-2-19.
CD8 Cells versus Current Lipid-Adjusted Dioxin (Table 19-8)

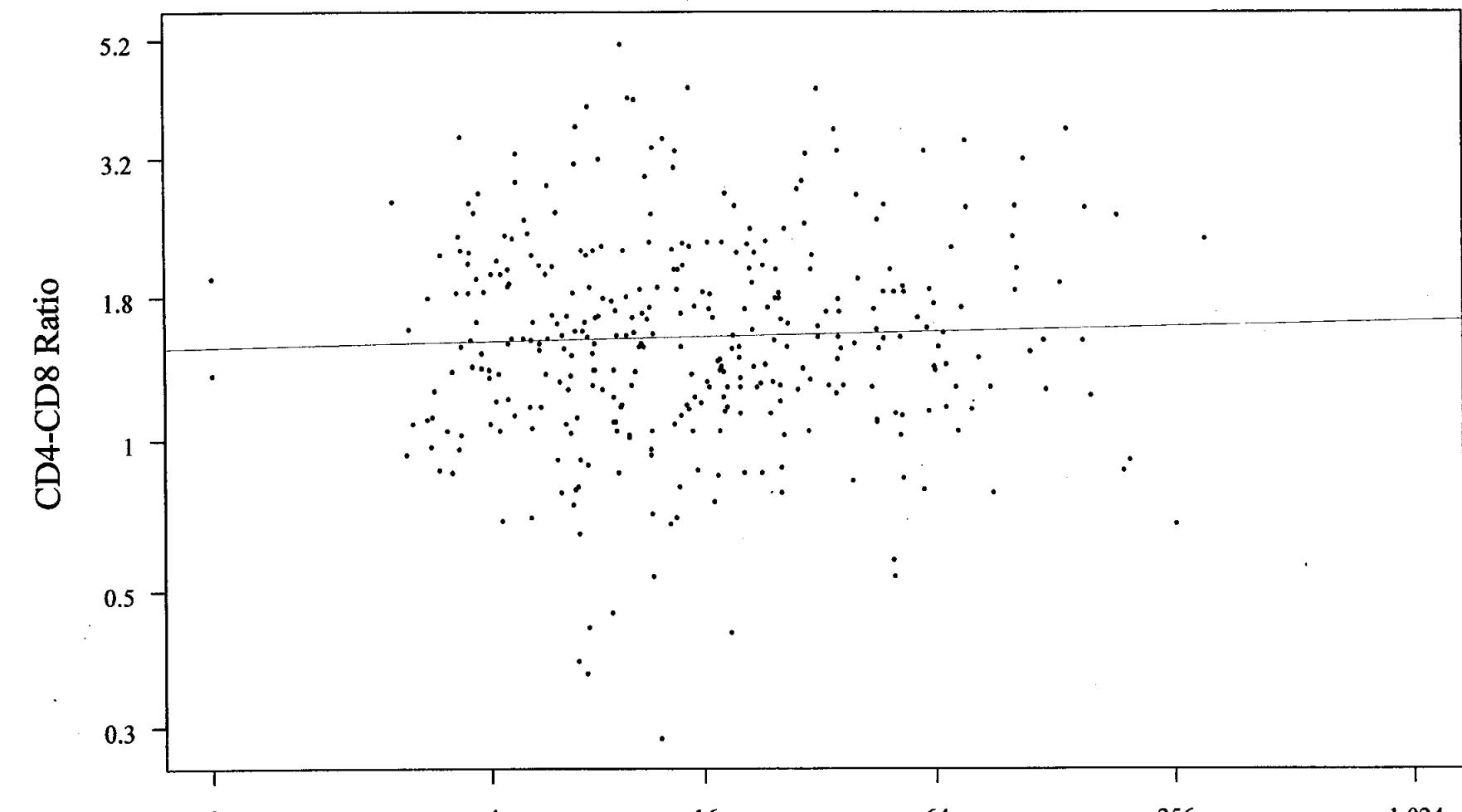


Figure Q-2-20.
CD4-CD8 Ratio versus Current Lipid-Adjusted Dioxin (Table 19-13)

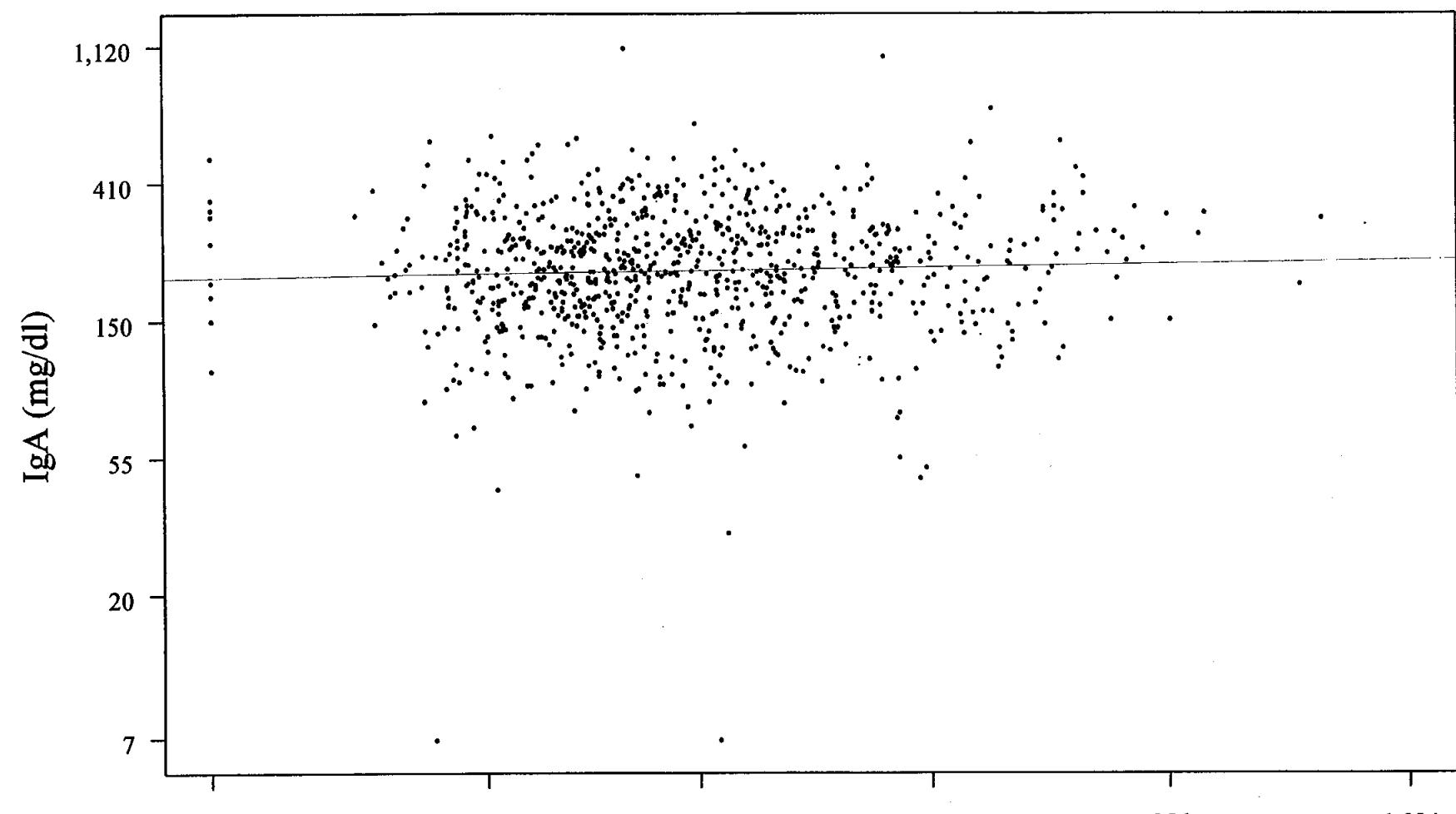


Figure Q-2-21.
IgA versus Current Lipid-Adjusted Dioxin (Table 19-19)

Q-2-24

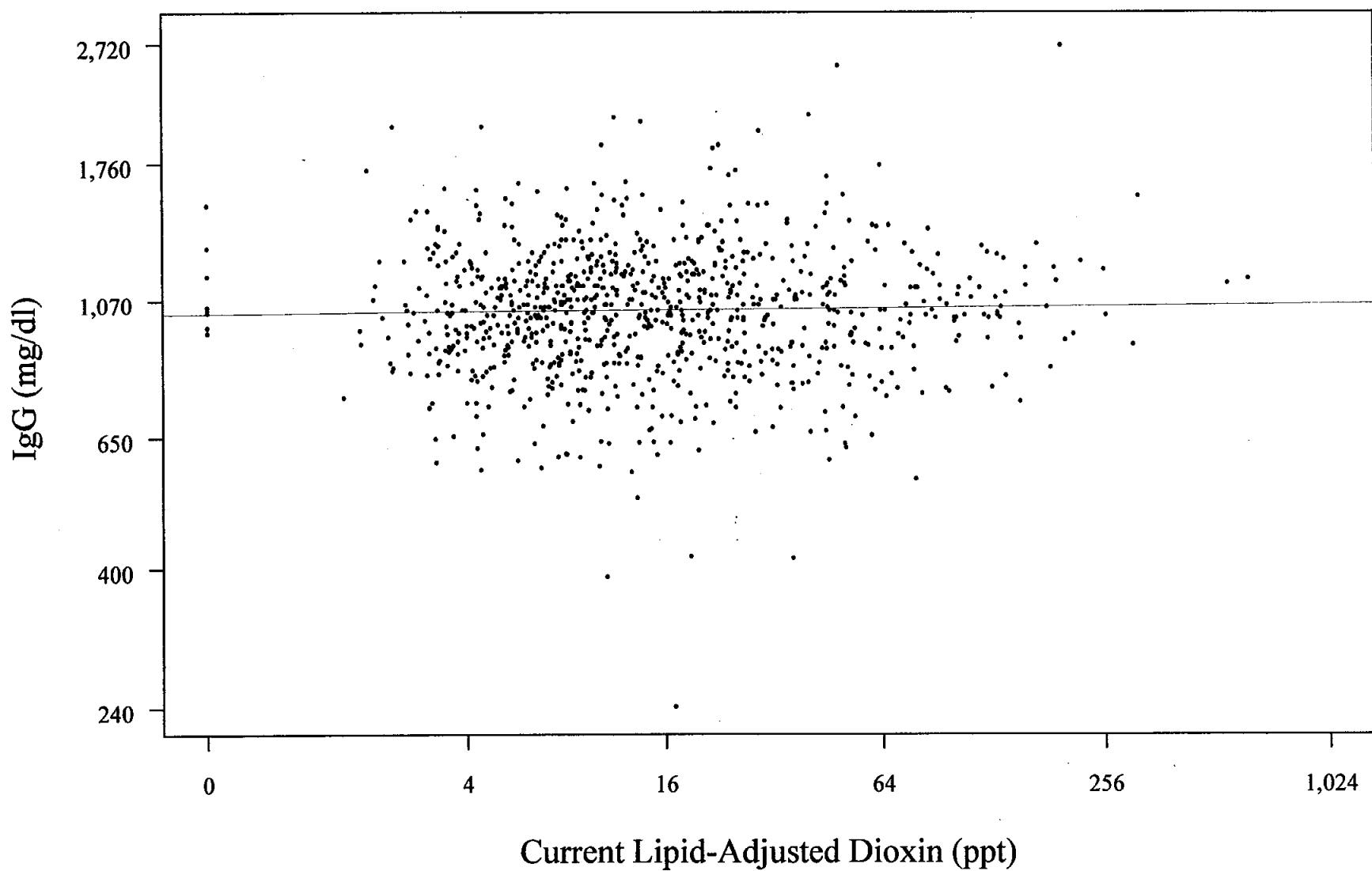


Figure Q-2-22.
IgG versus Current Lipid-Adjusted Dioxin (Table 19-20)

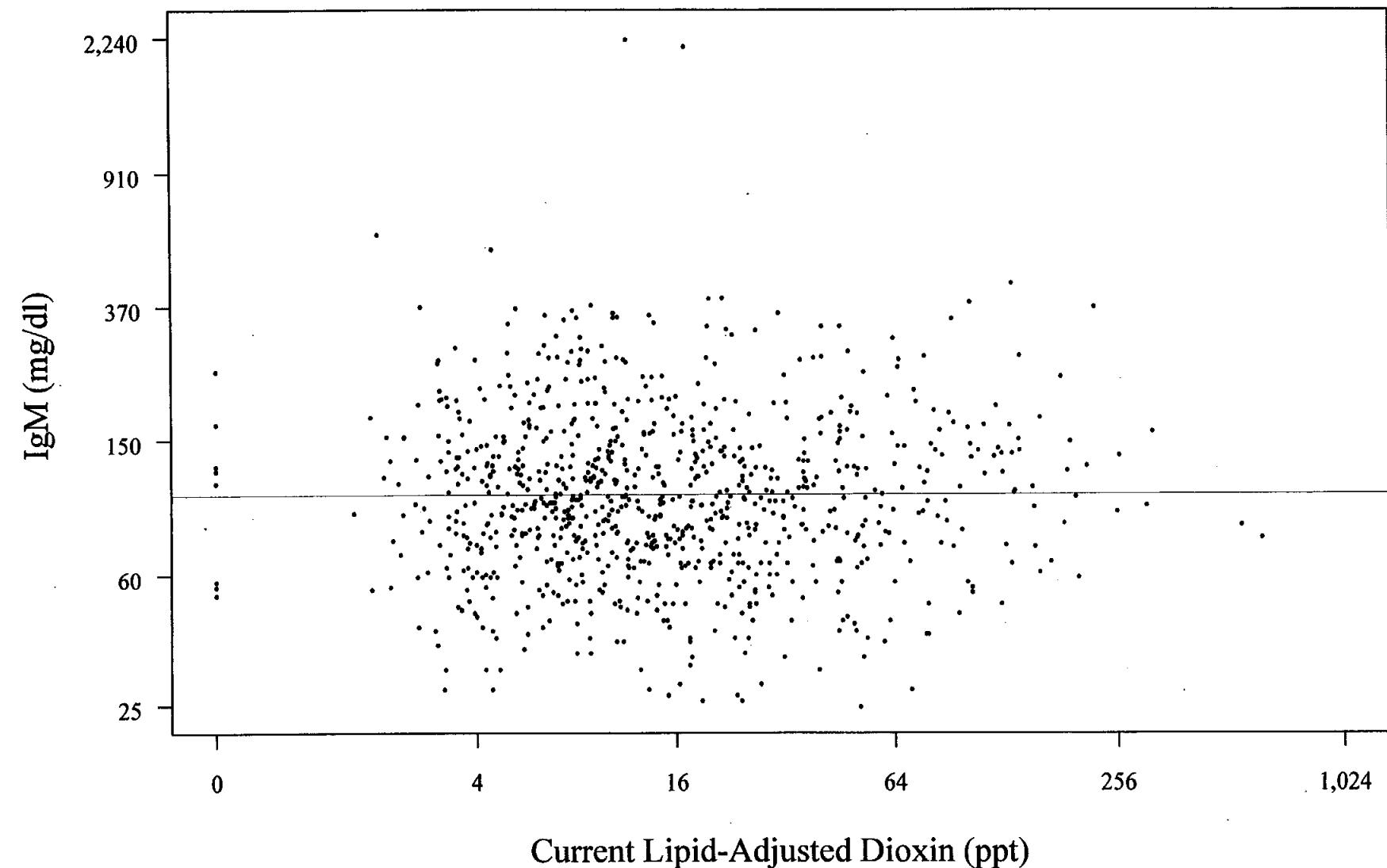


Figure Q-2-23.
IgM versus Current Lipid-Adjusted Dioxin (Table 19-21)

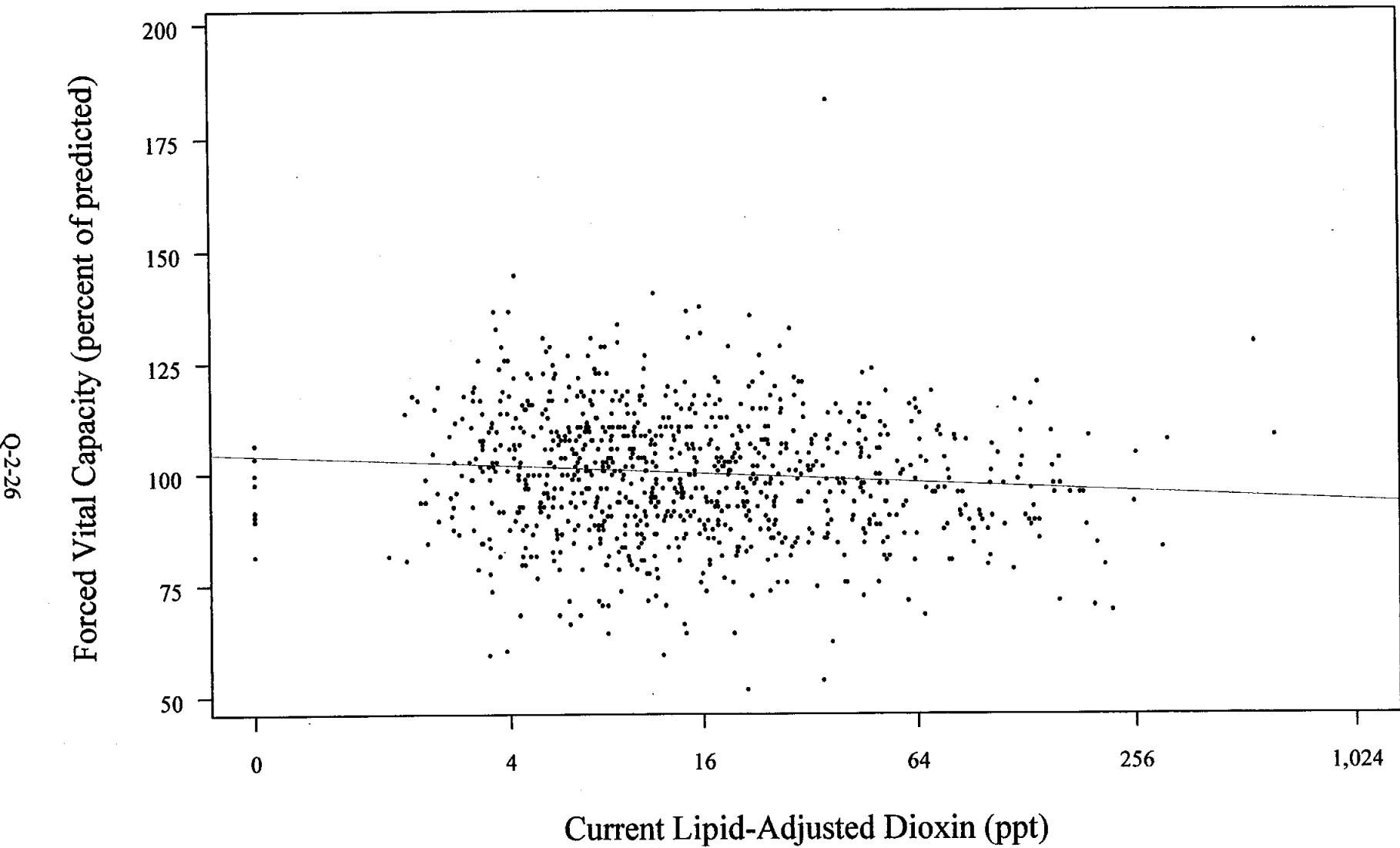


Figure Q-2-24.
Forced Vital Capacity versus Current Lipid-Adjusted Dioxin (Table 20-8)

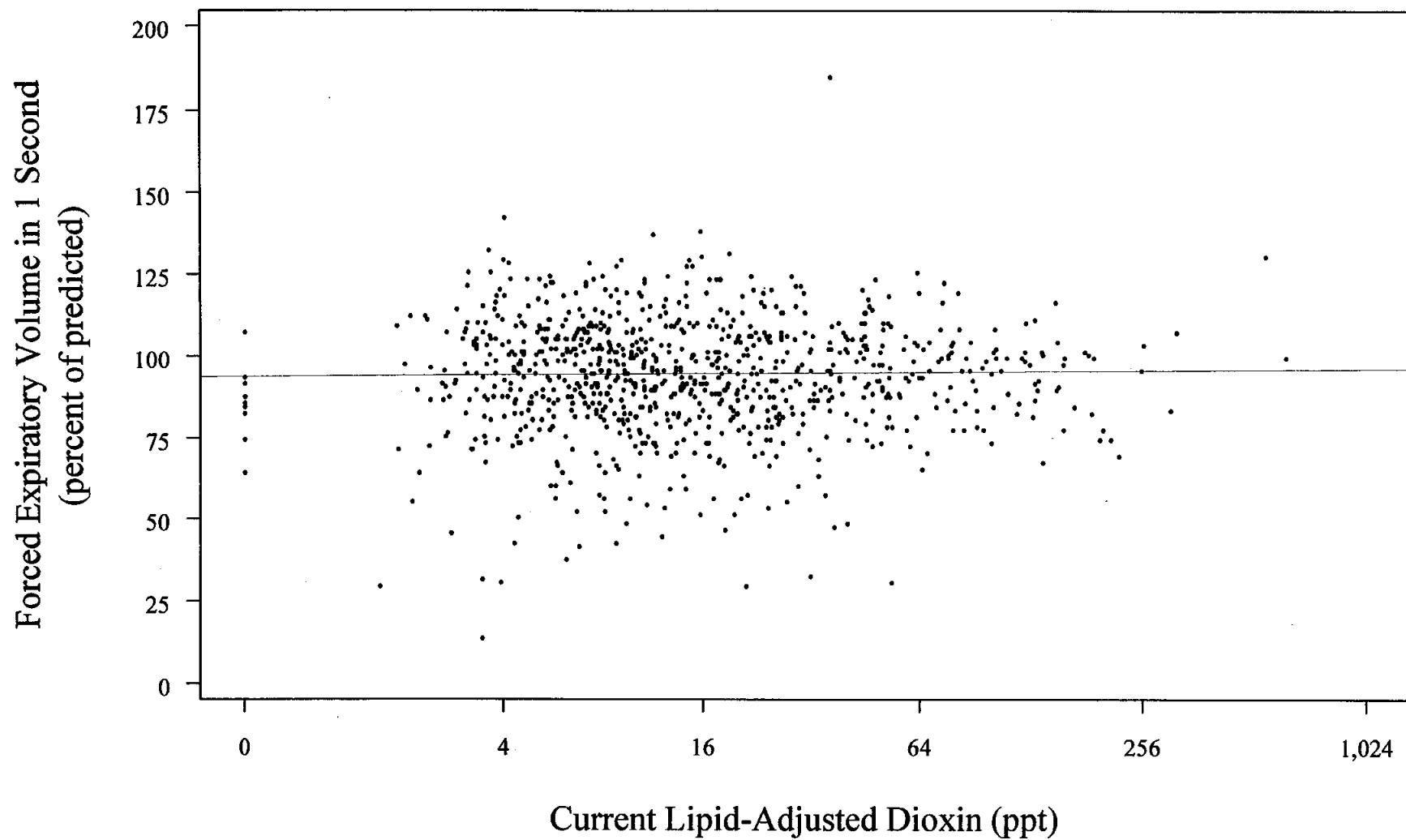


Figure Q-2-25.
Forced Expiratory Volume in 1 Second versus
Current Lipid-Adjusted Dioxin (Table 20-9)

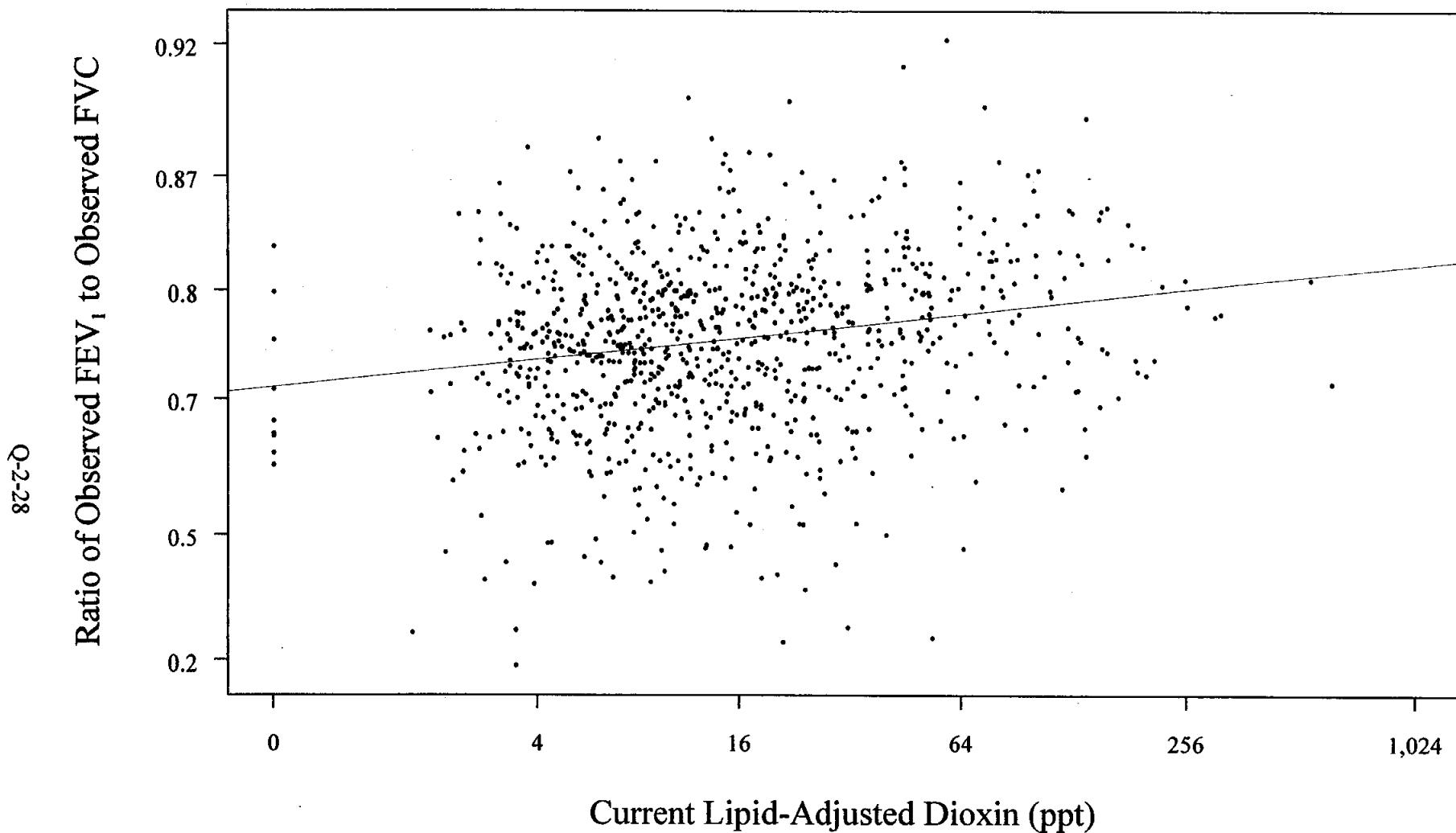


Figure Q-2-26.
Ratio of Observed FEV₁ to Observed FVC
versus Current Lipid-Adjusted Dioxin (Table 20-10)