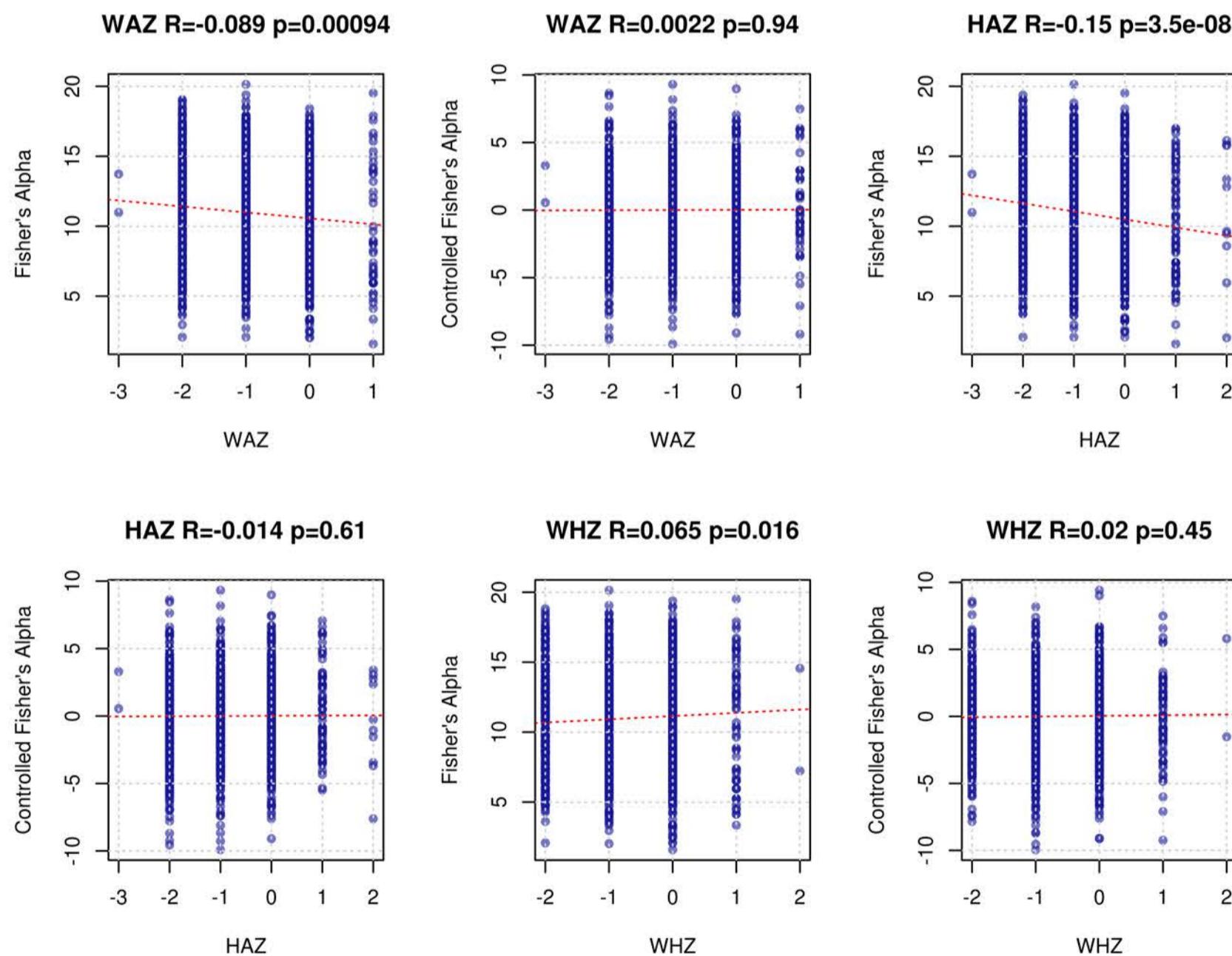
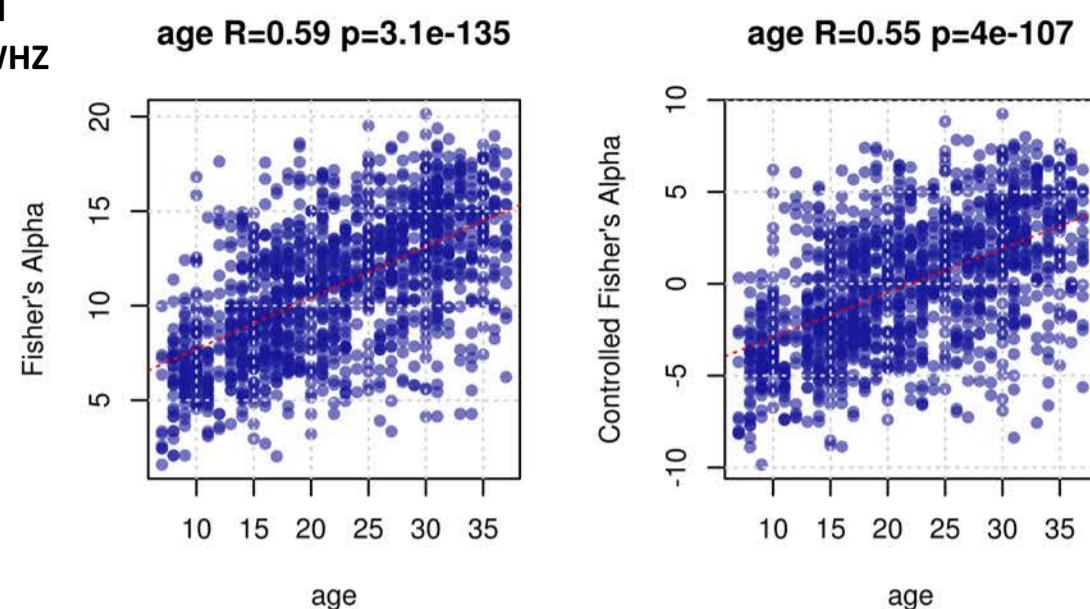


**Supplementary Figure 5.** Multivariate linear regression analysis for alpha diversity indexes with age, WAZ, HAZ, and WHZ

**5.a Multivariate linear regression model**

Fisher's Alpha ~ age + WAZ + HAZ + WHZ

	Coefficient	P	Signi
age	0.27165521	2.26e-120	**
WAZ	0.04246510	7.89e-01	
HAZ	0.03151150	7.83e-01	
WHZ	0.09633963	4.50e-01	



**Supplementary Figure 5. Continued**

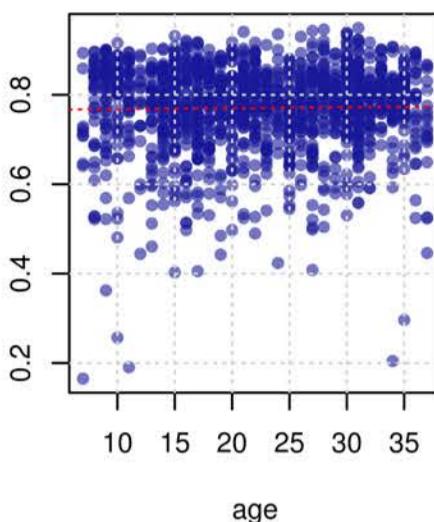
**5.b Multivariate linear regression model**

Simpson's ~ age + WAZ + HAZ + WHZ

	Coefficient	P	Signi
age	0.0003491916	0.312	
WAZ	0.0012718561	0.808	
HAZ	0.0029149711	0.439	
WHZ	0.0002541838	0.952	

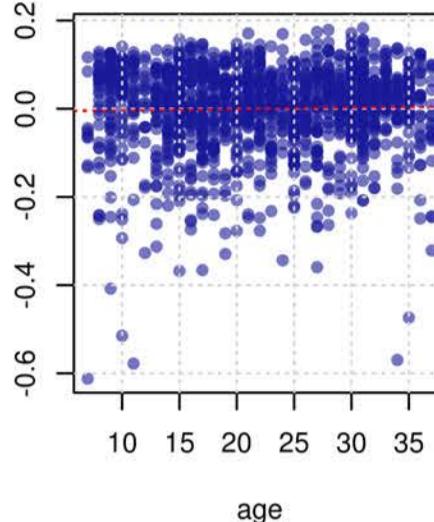
age R=-0.017 p=0.52

Simpson's Index

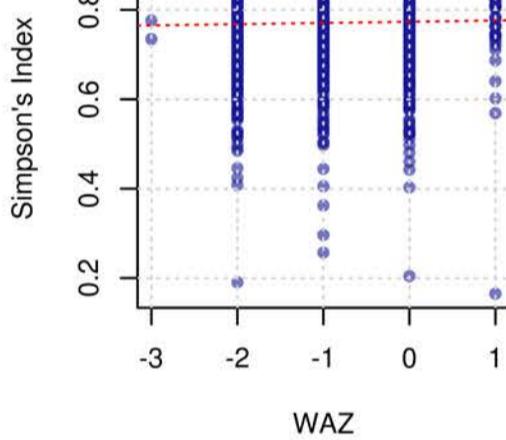


age R=-0.0076 p=0.78

Controlled Simpson's Index

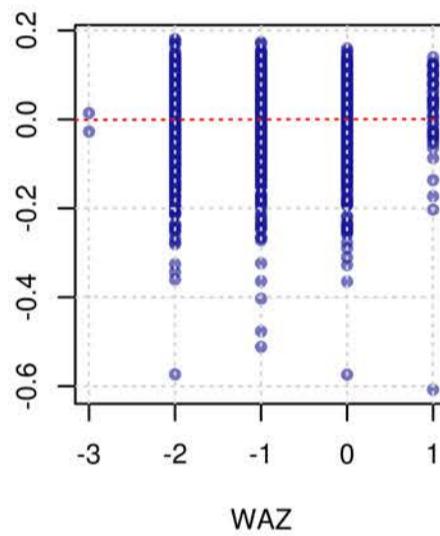


WAZ R=0.039 p=0.15

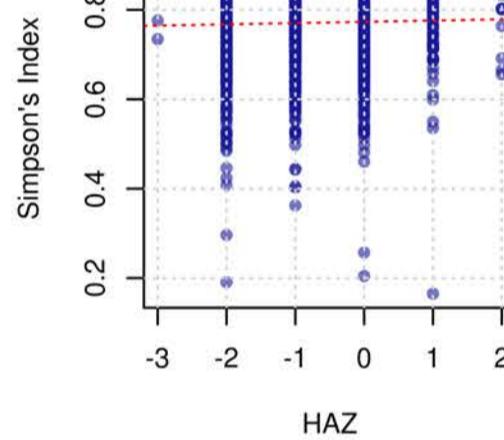


WAZ R=0.017 p=0.54

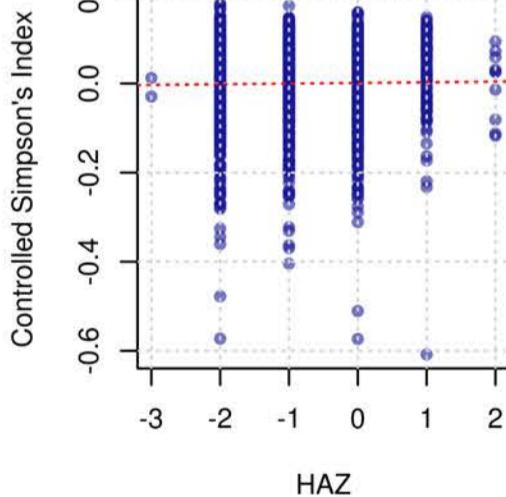
Controlled Simpson's Index



HAZ R=0.027 p=0.32

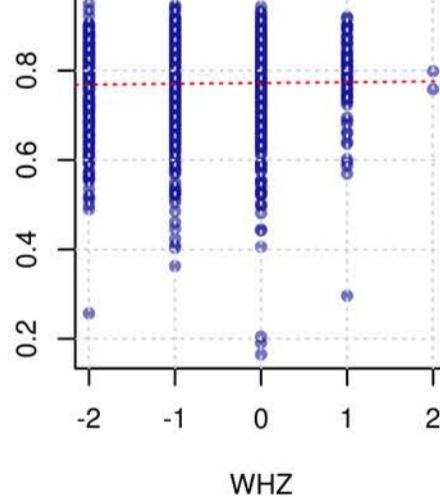


HAZ R=0.014 p=0.6

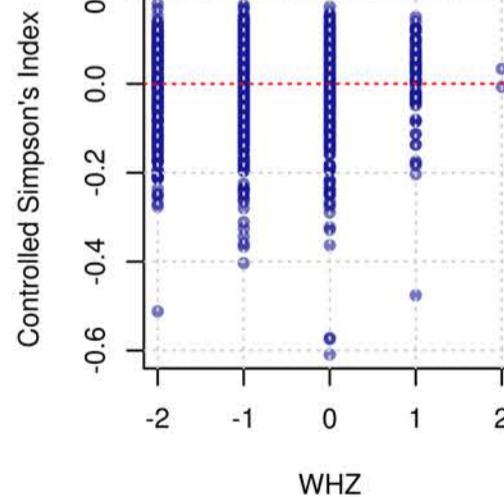


WHZ R=0.021 p=0.43

Simpson's Index



WHZ R=0.0044 p=0.87



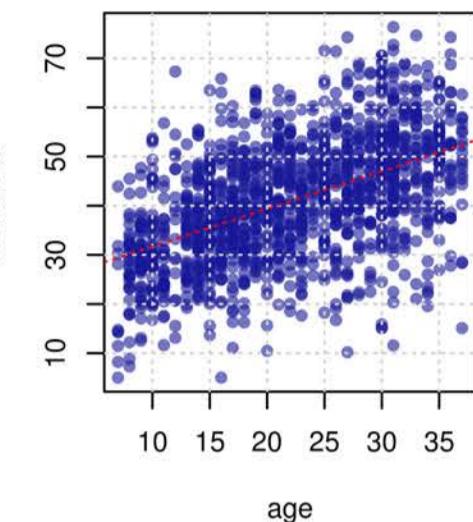
Supplementary Figure 5. Continued

5.c Multivariate linear regression model

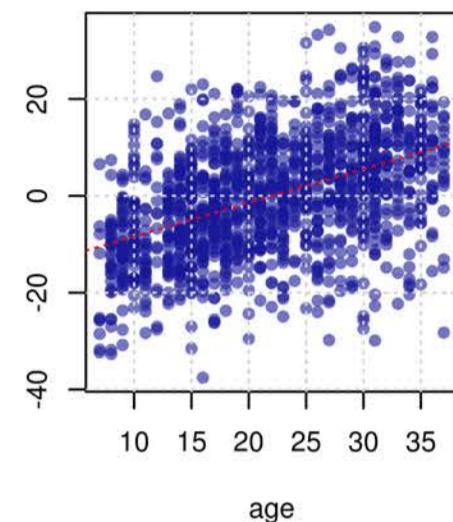
Richness ~ age + WAZ + HAZ + WHZ

	Coefficient	P	Sign
age	0.77973357	1.65e-82	**
WAZ	-0.02865546	9.60e-01	
HAZ	0.36471565	3.77e-01	
WHZ	0.22595115	6.22e-01	

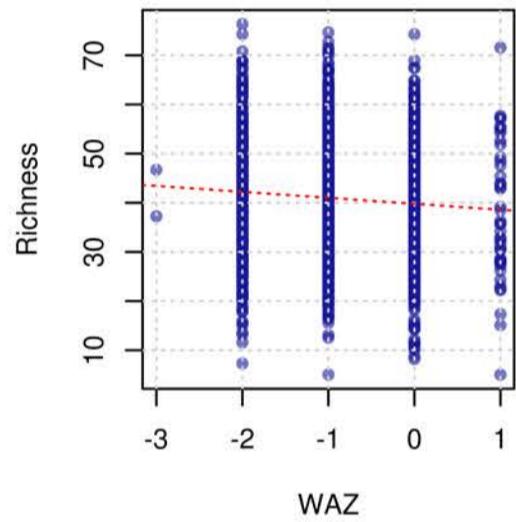
age R=0.51 p=6.8e-94



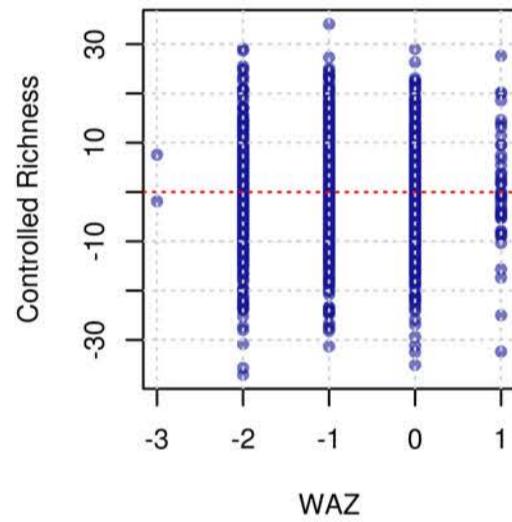
age R=0.47 p=2e-75



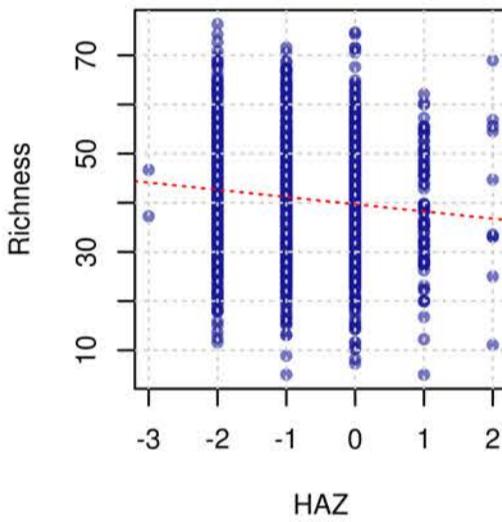
WAZ R=-0.075 p=0.0053



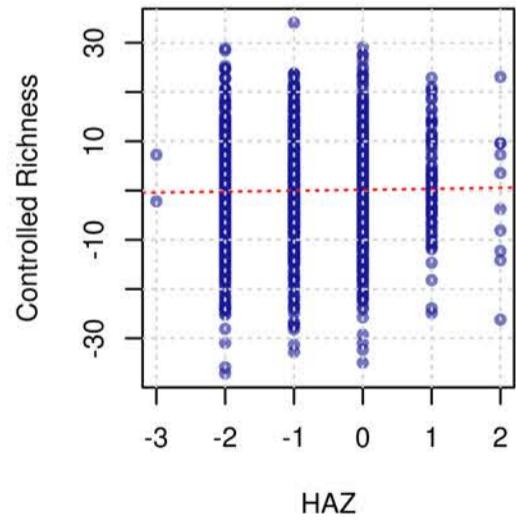
WAZ R=0.00074 p=0.98



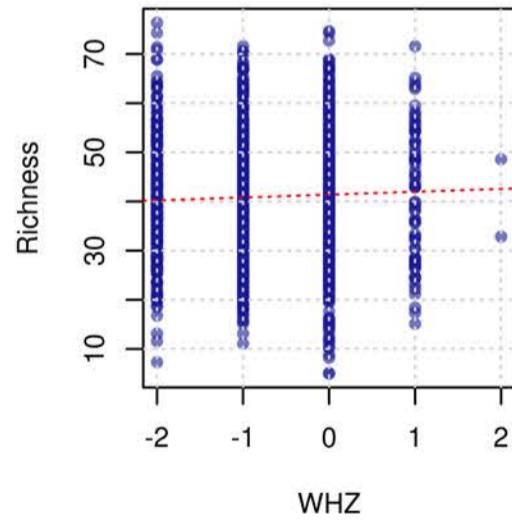
HAZ R=-0.11 p=3e-05



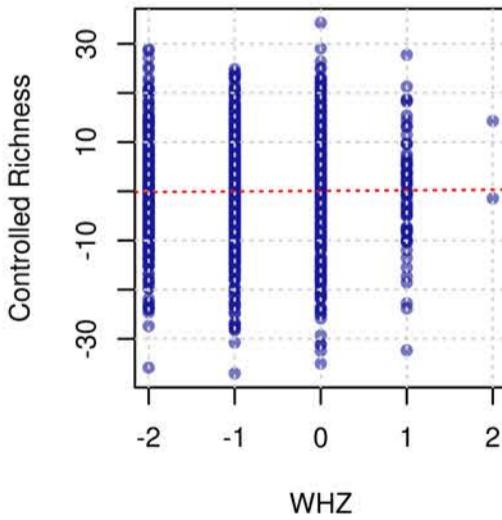
HAZ R=0.0084 p=0.76



WHZ R=0.052 p=0.052



WHZ R=0.016 p=0.56



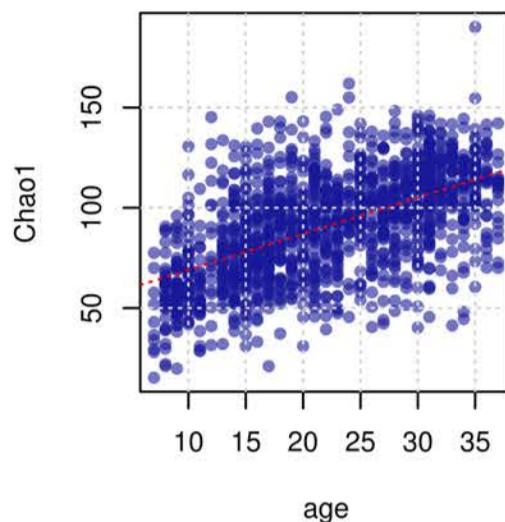
Supplementary Figure 5. Continued

5.d Multivariate linear regression model

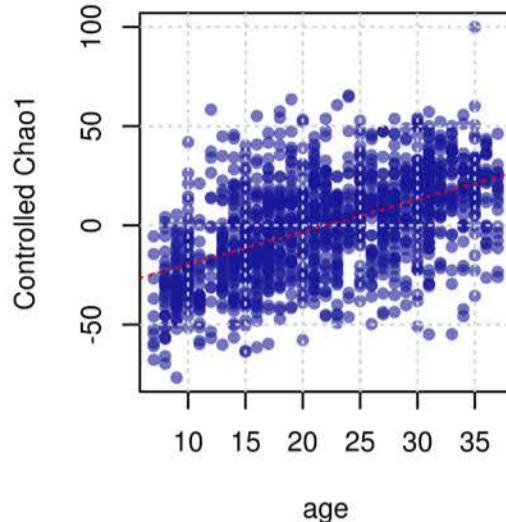
$\text{Chao1} \sim \text{age} + \text{WAZ} + \text{HAZ} + \text{WHZ}$

	Coefficient	P	Signi
age	1.8260444	1.88e-104	**
WAZ	0.3934922	7.36e-01	
HAZ	0.7256428	3.88e-01	
WHZ	0.5024521	5.90e-01	

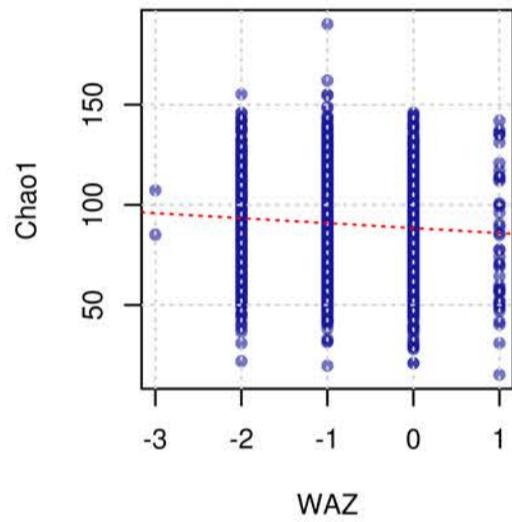
age  $R=0.56$   $p=8.2e-118$



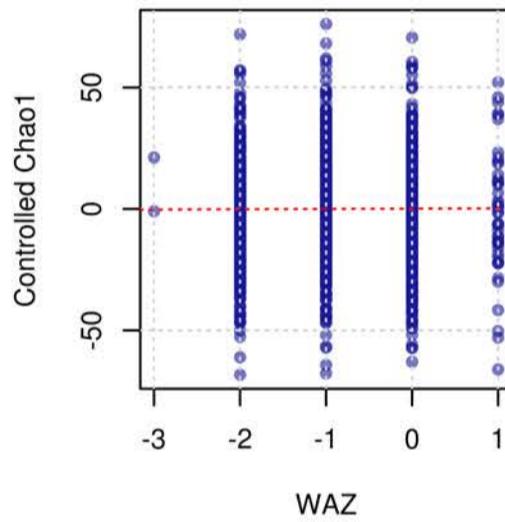
age  $R=0.52$   $p=1.1e-94$



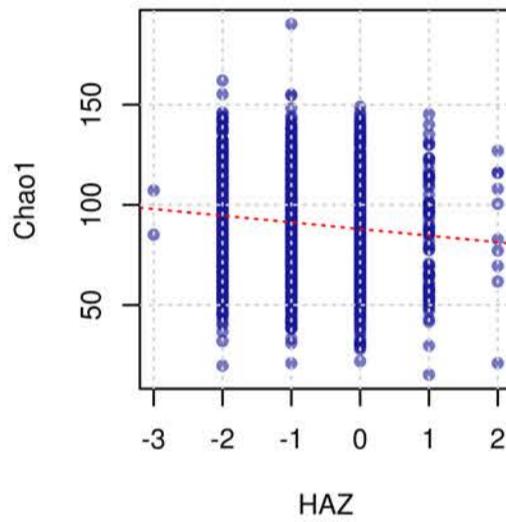
WAZ  $R=-0.07$   $p=0.0098$



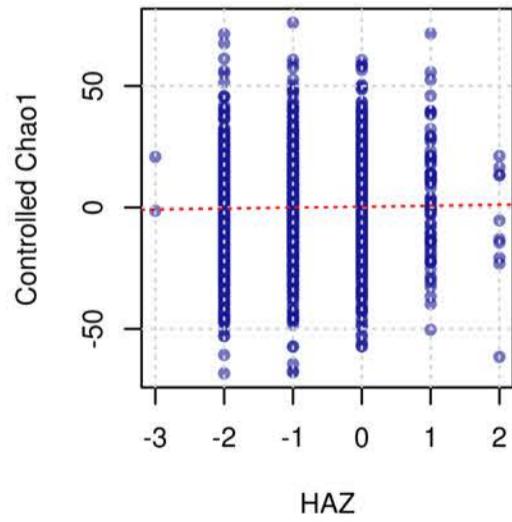
WAZ  $R=0.011$   $p=0.67$



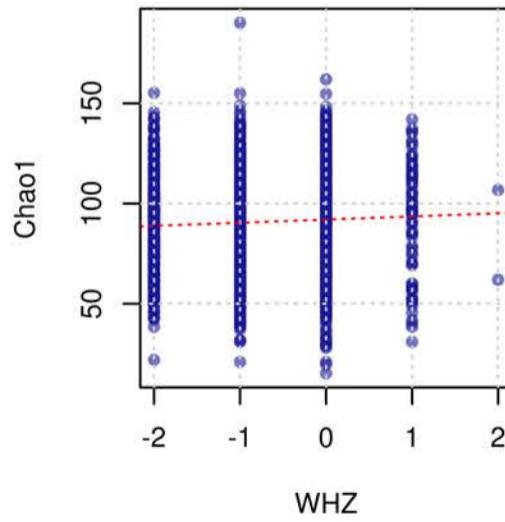
HAZ  $R=-0.12$   $p=1.2e-05$



HAZ  $R=0.0097$   $p=0.72$



WHZ  $R=0.066$   $p=0.014$



WHZ  $R=0.02$   $p=0.47$

