Electronic Supplementary Material (ESI) for Food & Function.

Appendix A1

1. Low-density lipoprotein cholesterol

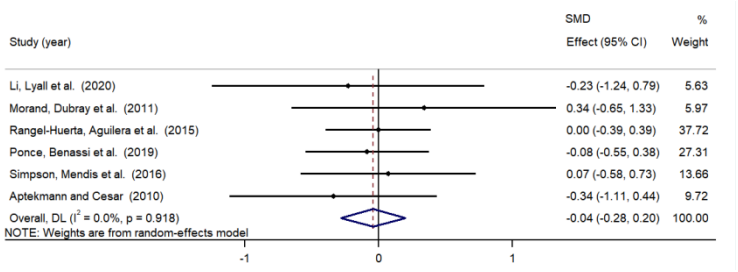

Fig. A1.1. Forest plot of low-density lipoprotein cholesterol without Ribeiro et al. study

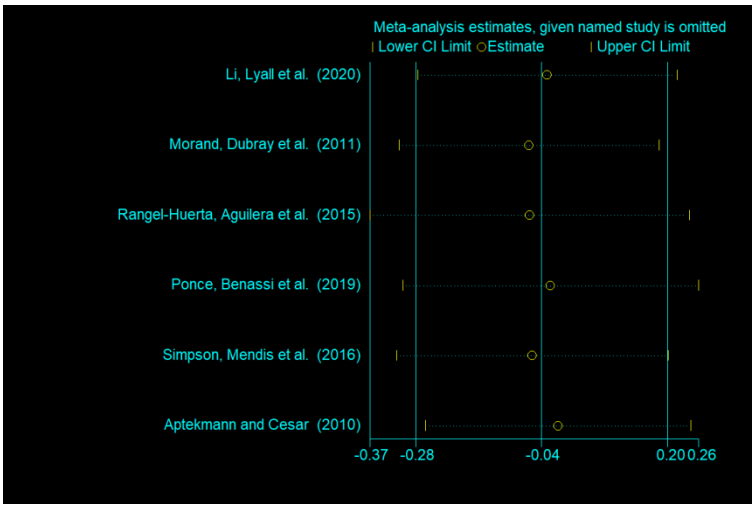

Fig. A1.2. Sensitivity analysis of low-density lipoprotein cholesterol without Ribeiro et al. study

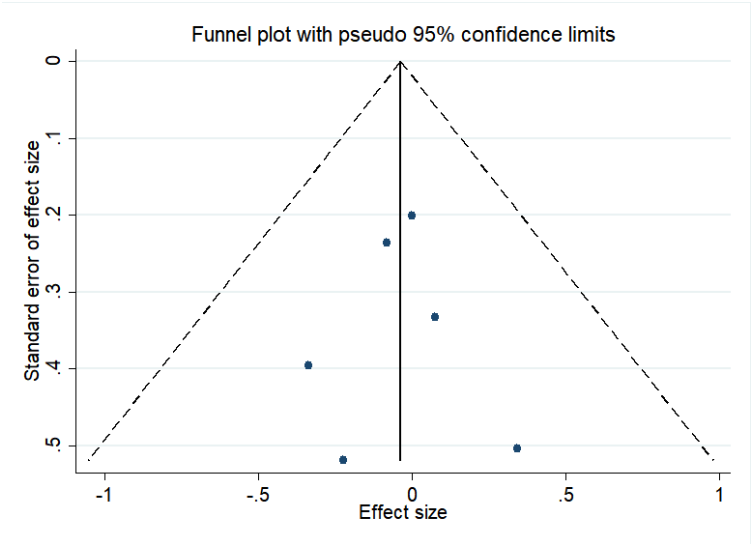

Fig. A1.3. Funnel plot of low-density lipoprotein cholesterol without Ribeiro et al. study

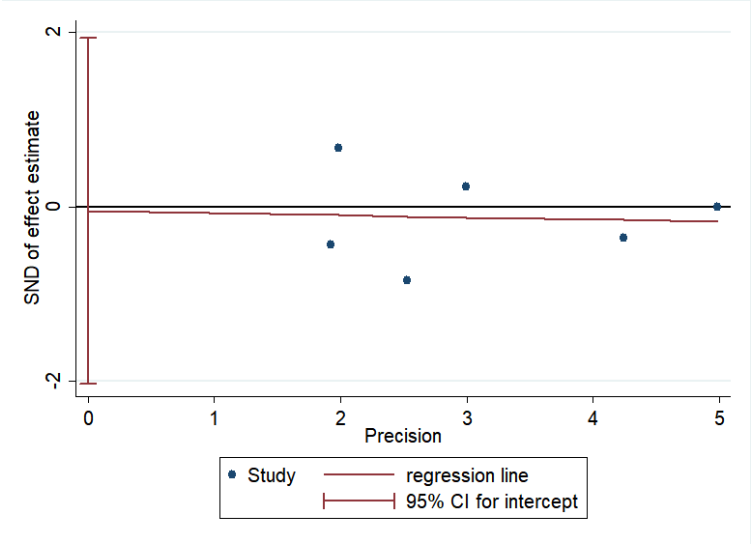

Fig. A1.4. Egger's regression plot of low-density lipoprotein cholesterol without Ribeiro et al. study

```
. metabias _ES _seES,egger graph

Note: data input format theta se_theta assumed

Egger's test for small-study effects:
Regress standard normal deviate of intervention
  effect estimate against its standard error

.
Number of studies =  6                                  Root MSE      =    .6023
```

Std_Eff	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
slope	-.0231633	.2155116	-0.11	0.920	-.6215195	.575193
bias	-.0509661	.7140129	-0.07	0.947	-2.033384	1.931452

```
Test of H0: no small-study effects          P = 0.947
```

Fig. A1.5. Egger's test of low-density lipoprotein cholesterol without Ribeiro et al. study

Appendix A2

2. Glucose

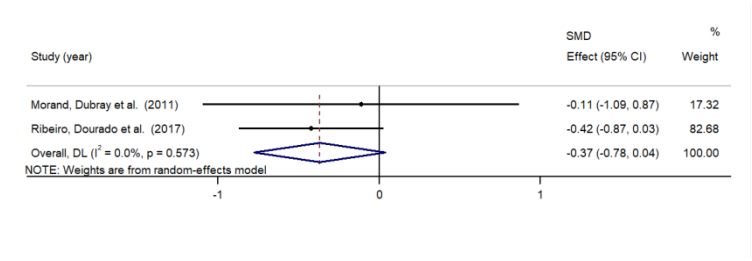

Fig. A2.1. Forest plot of glucose without Rangel-Huerta et al. study

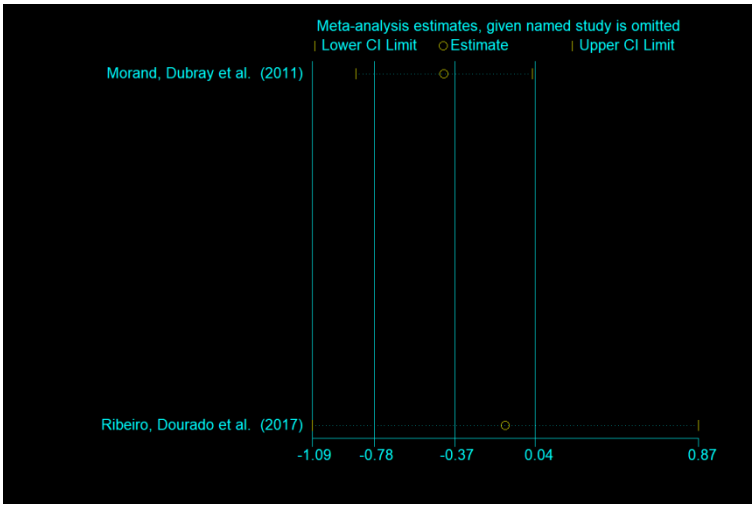

Fig. A2.2. Sensitivity analysis of glucose without Rangel-Huerta et al. study

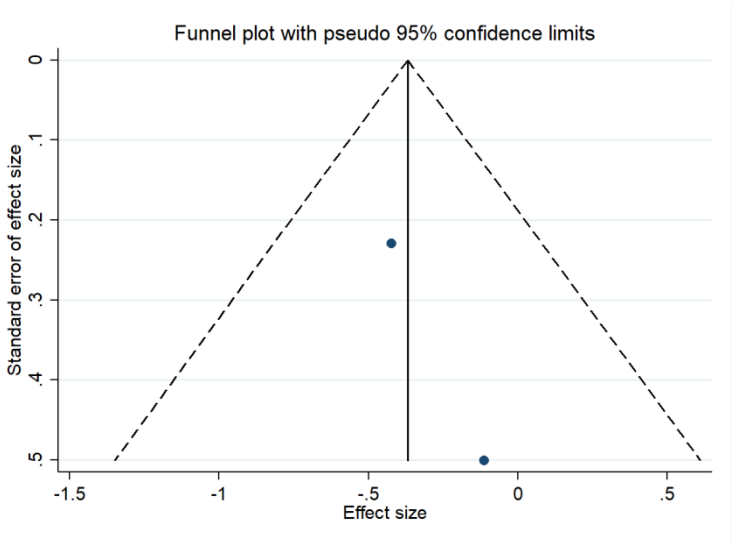

Fig. A2.3. Funnel plot of glucose without Rangel-Huerta et al. study

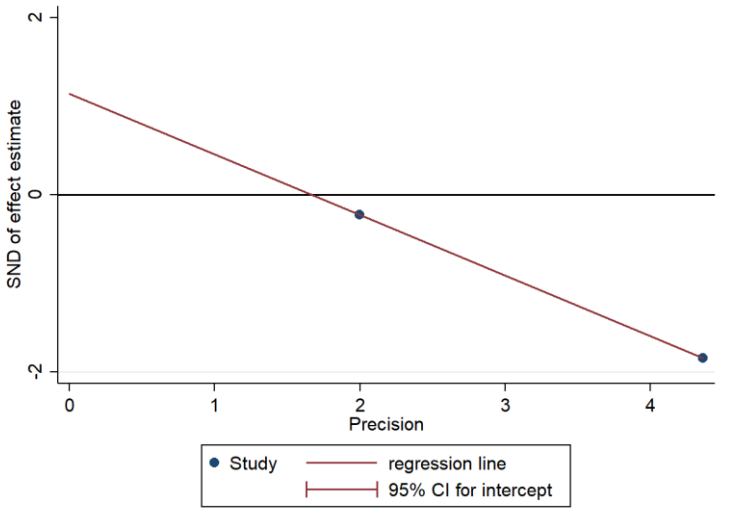

Fig. A2.4. Egger's regression plot of glucose without Rangel-Huerta et al. study

Appendix A3

3. Homeostatic model assessment of insulin resistance

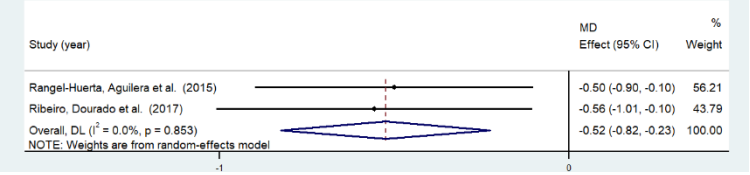

Fig. A3.1. Forest plot of homeostatic model assessment of insulin resistance without Ponce, Benassi et al. study

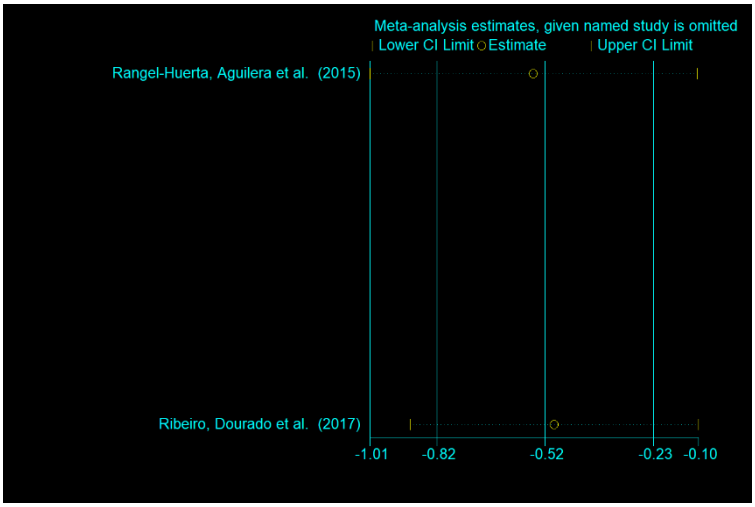

Fig. A3.2. Sensitivity analysis of homeostatic model assessment of insulin resistance without Ponce, Benassi et al. study

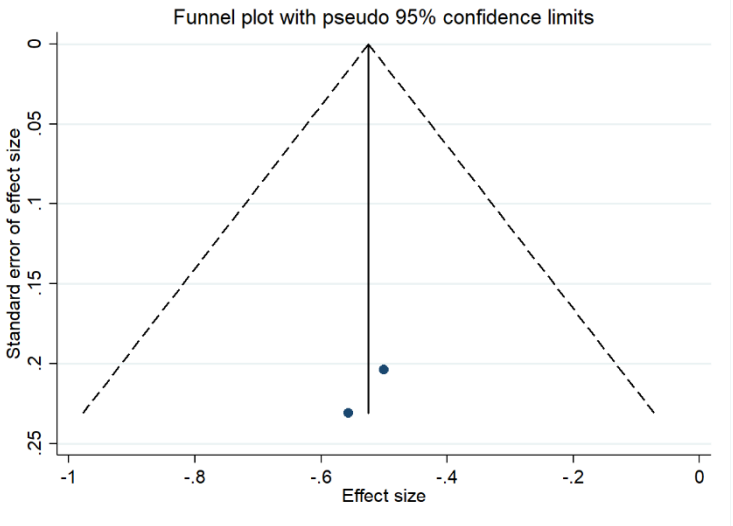

Fig. A3.3. Funnel plot of homeostatic model assessment of insulin resistance without Ponce, Benassi et al. study

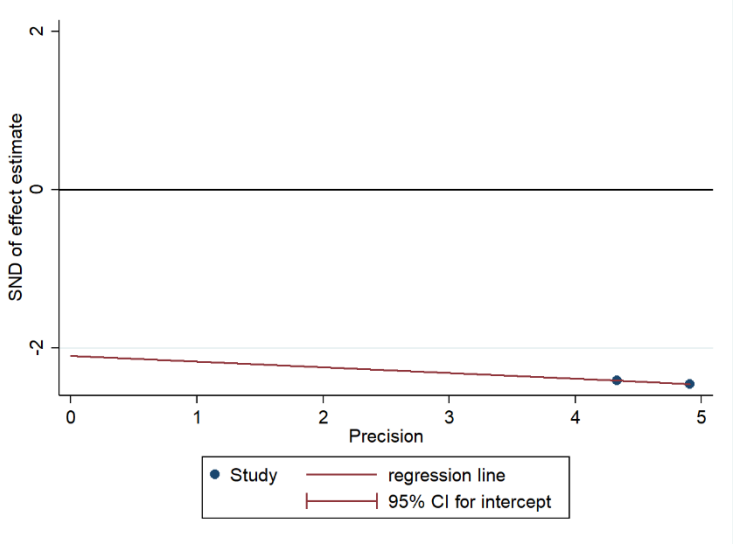

Fig. A3.4. Egger's regression plot of homeostatic model assessment of insulin resistance without Ponce, Benassi et al. study

Appendix A4

4. C-reactive protein

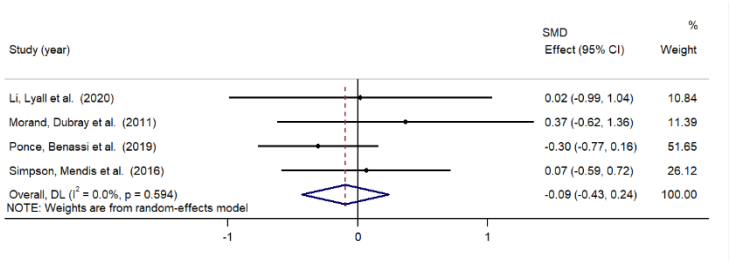

Fig. A4.1. Forest plot of C-reactive protein without Ribeiro et al. study

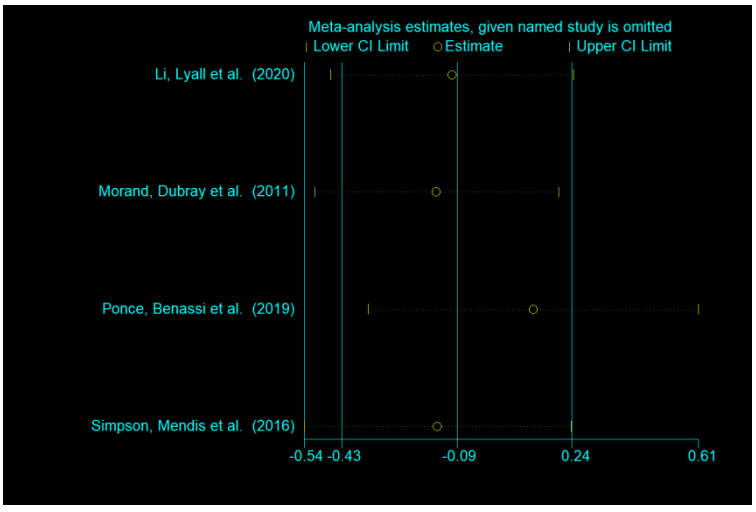

Fig. A4.2. Sensitivity analysis of C-reactive protein without Ribeiro et al. study

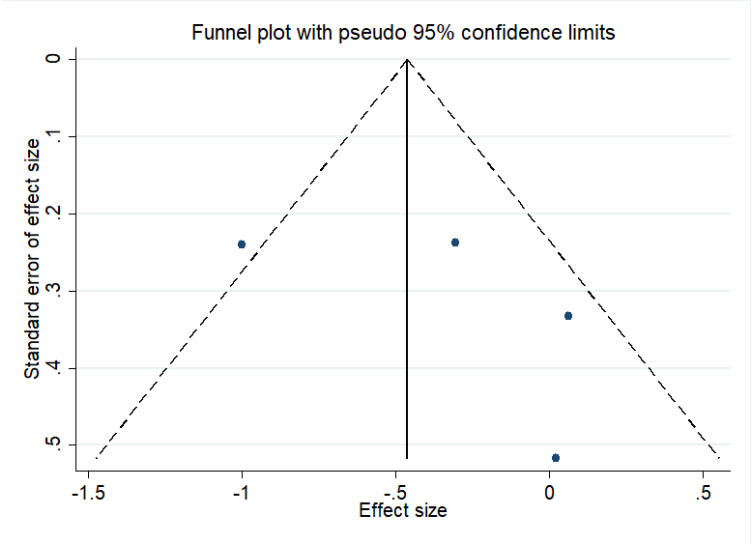

Fig. A4.3. Funnel plot of C-reactive protein without Ribeiro et al. study

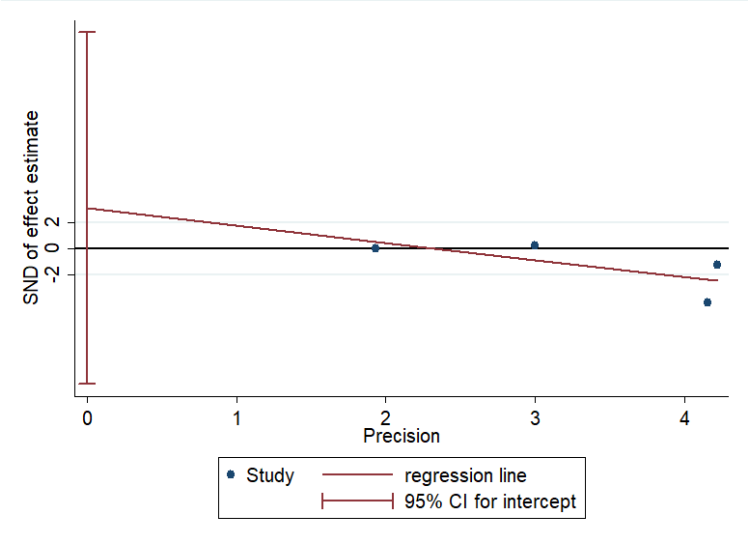

Fig. A4.4. Egger's regression plot of C-reactive protein without Ribeiro et al. study

```
. metabias _ES _seES,egger graph

Note: data input format theta se_theta assumed

Egger's test for small-study effects:
Regress standard normal deviate of intervention
  effect estimate against its standard error

.
Number of studies =  4                              Root MSE      =     1.72
```

Std_Eff	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
slope	-1.33357	.9148564	-1.46	0.282	-5.269879	2.602739
bias	3.137604	3.162583	0.99	0.426	-10.46989	16.7451

```
Test of H0: no small-study effects          P = 0.426
```

Fig. A4.5. Egger's test of C-reactive protein without Ribeiro et al. study

Appendix A5

5. Total cholesterol

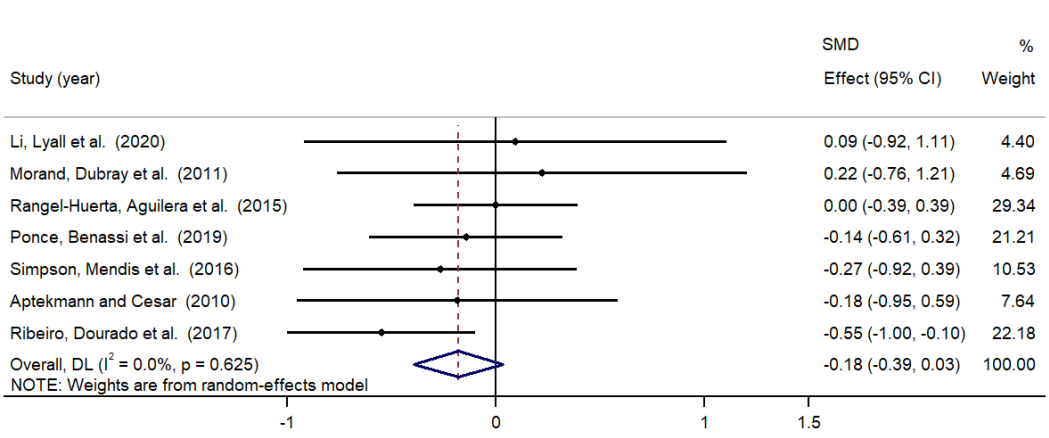

Fig. A5.1. Forest plot of total cholesterol

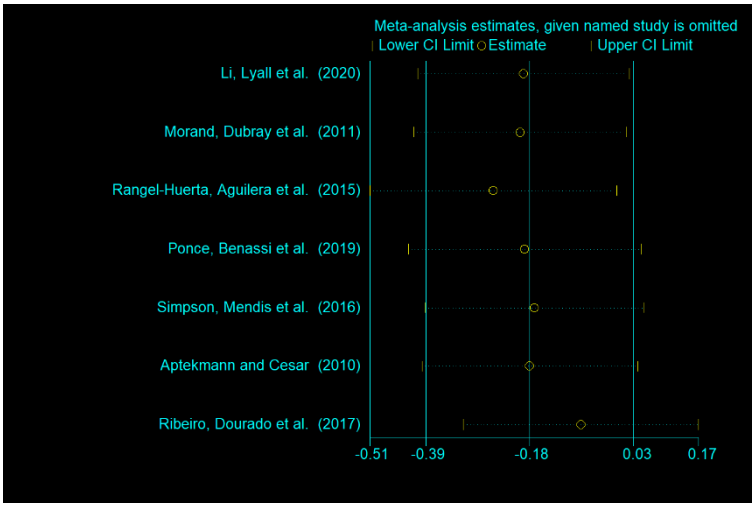

Fig. A5.2. Sensitivity analysis of total cholesterol

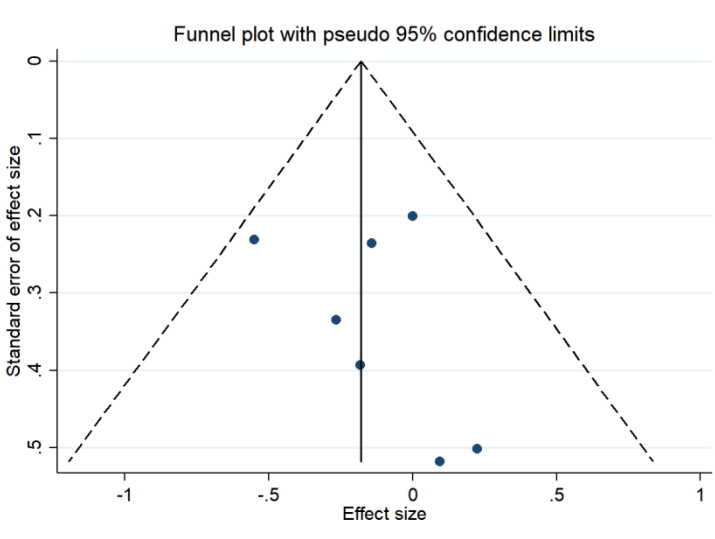

Fig. A5.3. Funnel plot of total cholesterol

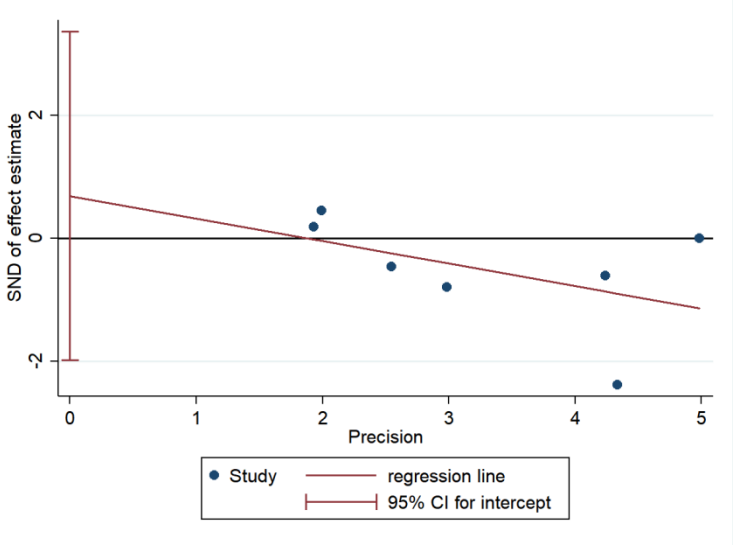

Fig. A5.4. Egger's regression plot of total cholesterol

```
. . metabias _ES _seES, egger graph

Note: data input format theta se_theta assumed

Egger's test for small-study effects:
Regress standard normal deviate of intervention
  effect estimate against its standard error

.
Number of studies =  7                          Root MSE      =   .8983
```

Std_Eff	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
slope	-.3658904	.2989026	-1.22	0.275	-1.134244	.4024632
bias	.6854621	1.039445	0.66	0.539	-1.986516	3.35744

```
Test of H0: no small-study effects          P = 0.539
```

Fig. A5.5. Egger's test of total cholesterol

6. Triglycerides

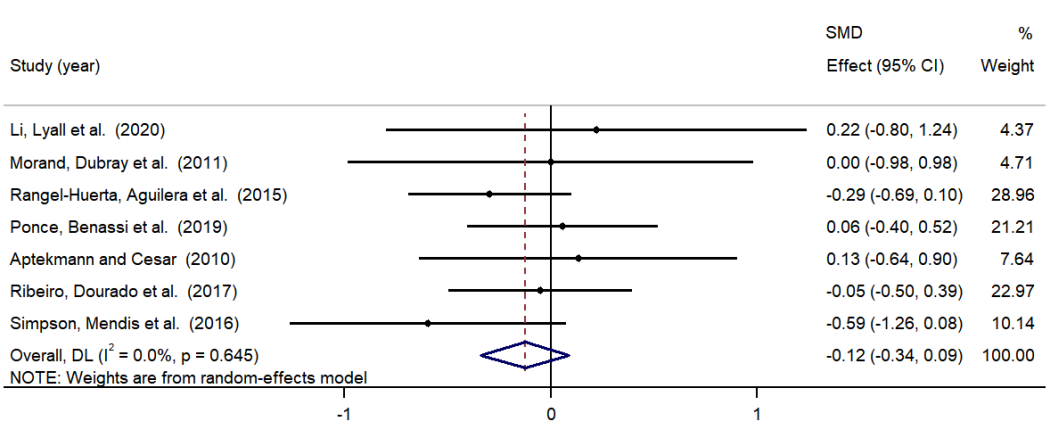

Fig. A6.1. Forest plot of triglycerides

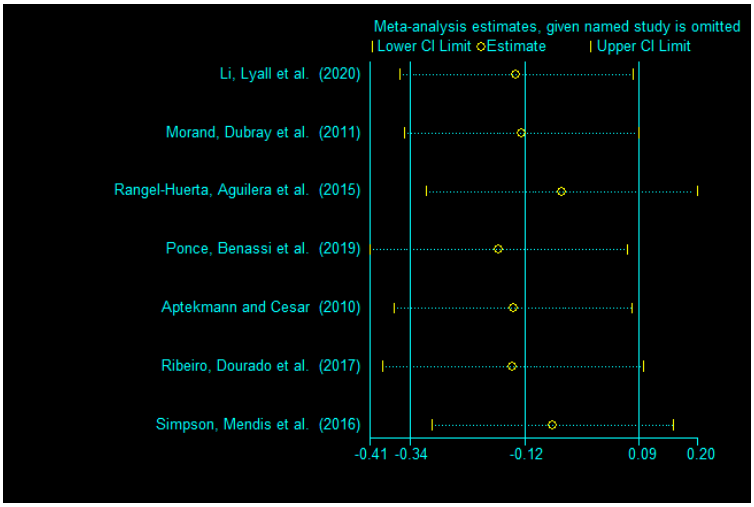

Fig. A6.2. Sensitivity analysis of triglycerides

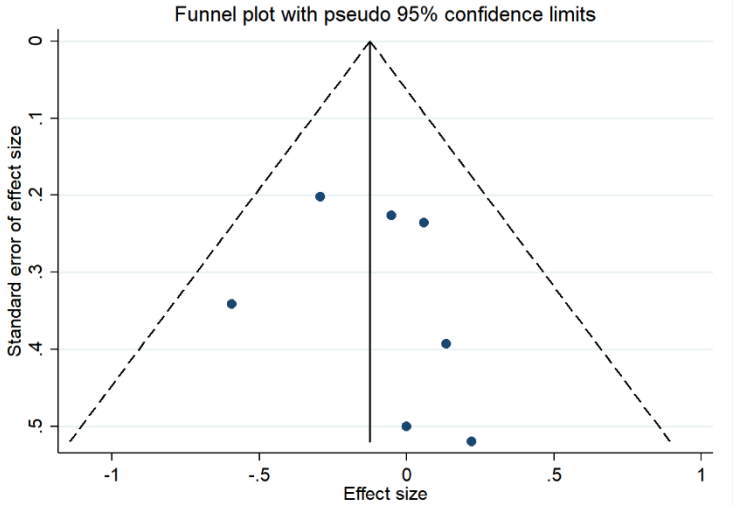

Fig. A6.3. Funnel plot of triglycerides

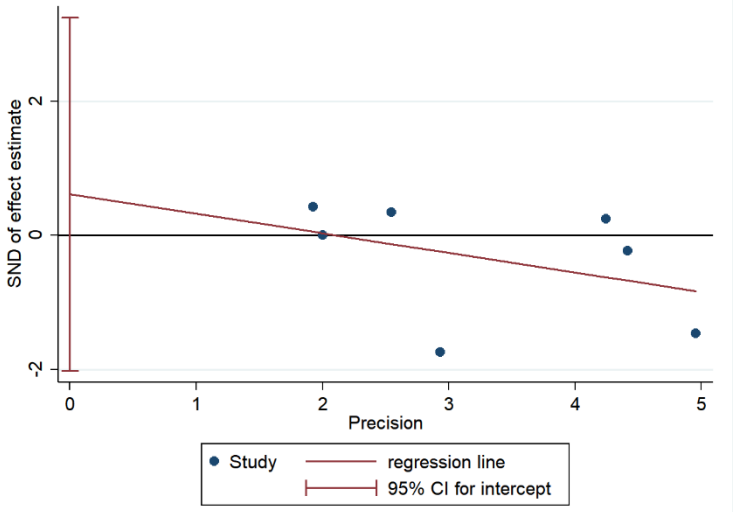

Fig. A6.4. Egger's regression plot of triglycerides

```
. metabias _ES _seES,egger graph

Note: data input format theta se_theta assumed

Egger's test for small-study effects:
Regress standard normal deviate of intervention
  effect estimate against its standard error

.
Number of studies =  7                          Root MSE      =    .8888
```

Std_Eff	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
slope	-.2914278	.2937082	-0.99	0.367	-1.046429	.4635731
bias	.6141798	1.022557	0.60	0.574	-2.014387	3.242747

```
Test of H0: no small-study effects          P = 0.574
```

Fig. A6.5. Egger's test of triglycerides

7. Low-density lipoprotein cholesterol

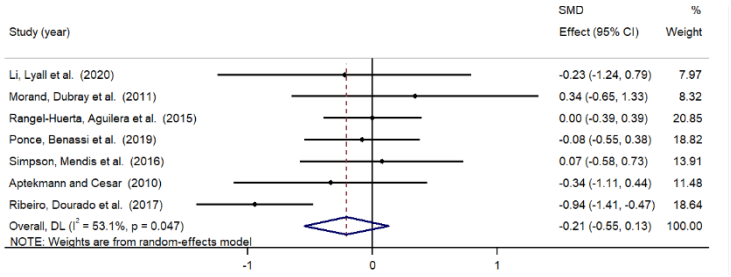

Fig. A7.1. Forest plot of low-density lipoprotein cholesterol

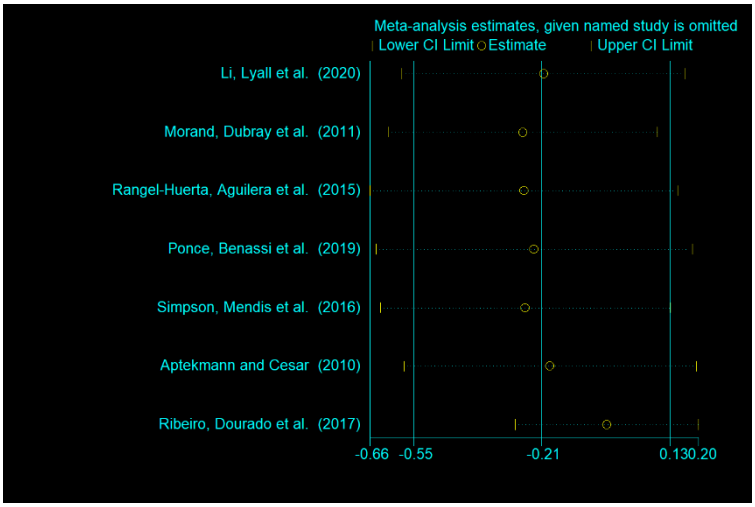

Fig. A7.2. Sensitivity analysis of low-density lipoprotein cholesterol

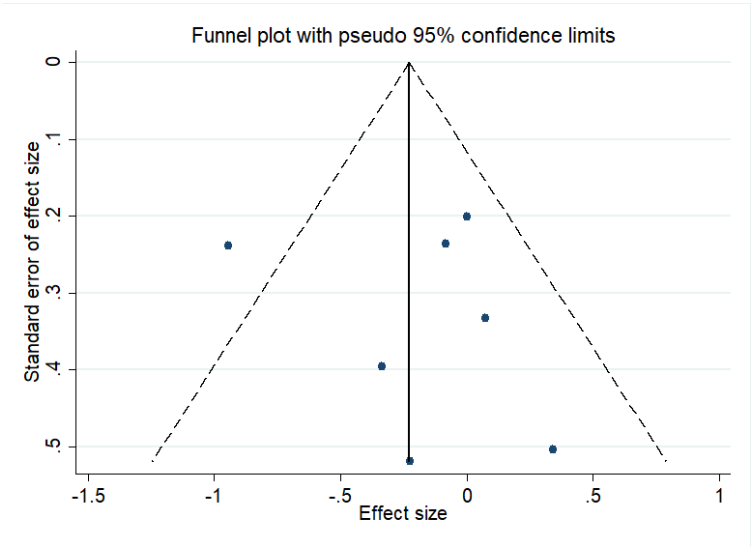

Fig. A7.3. Funnel plot of low-density lipoprotein cholesterol

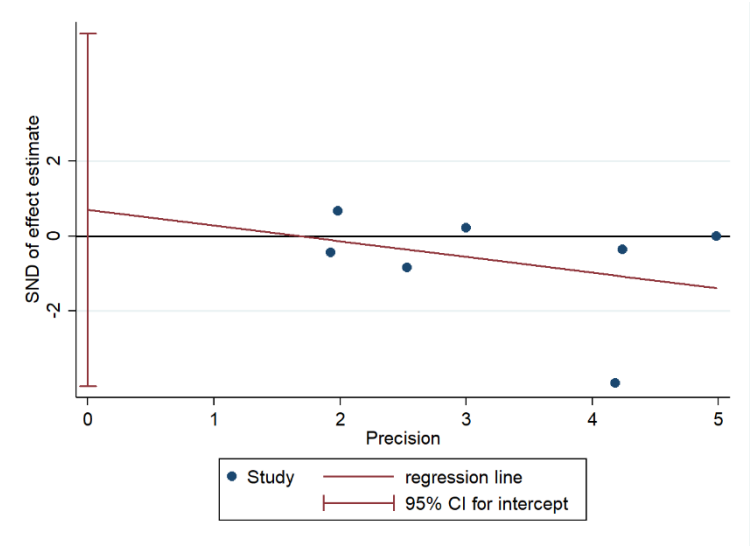

Fig. A7.4. Egger's regression plot of low-density lipoprotein cholesterol

```
. metabias _ES _seES,egger graph

Note: data input format theta se_theta assumed

Egger's test for small-study effects:
Regress standard normal deviate of intervention
  effect estimate against its standard error

.
Number of studies =  7                                  Root MSE      =    1.576

------------------------------------------------------------------------------
     Std_Eff |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       slope |  -.4201332     .53132    -0.79   0.465    -1.785935    .9456683
        bias |   .7022749   1.833565     0.38   0.717    -4.011054    5.415604
------------------------------------------------------------------------------

Test of H0: no small-study effects          P = 0.717
```

Fig. A7.5. Egger's test of low-density lipoprotein cholesterol

8. High-density lipoprotein cholesterol

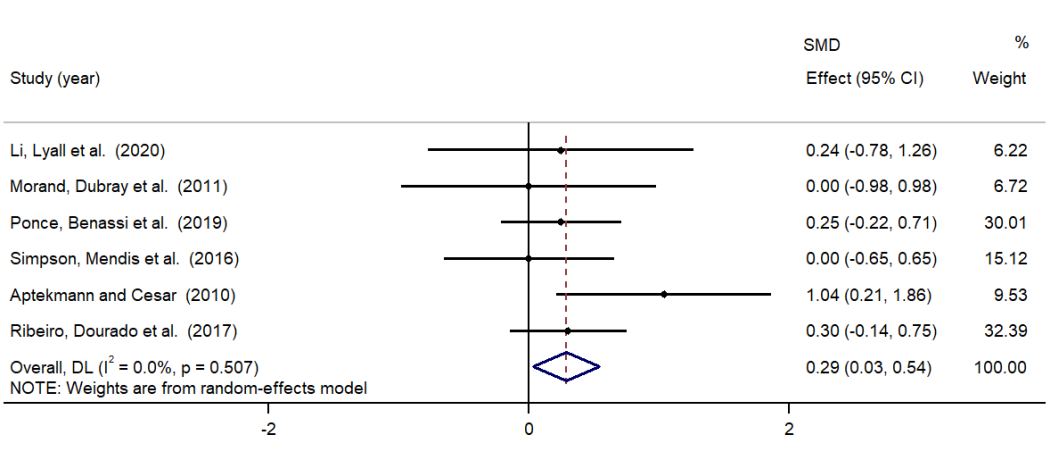

Fig. A8.1. Forest plot of high-density lipoprotein cholesterol

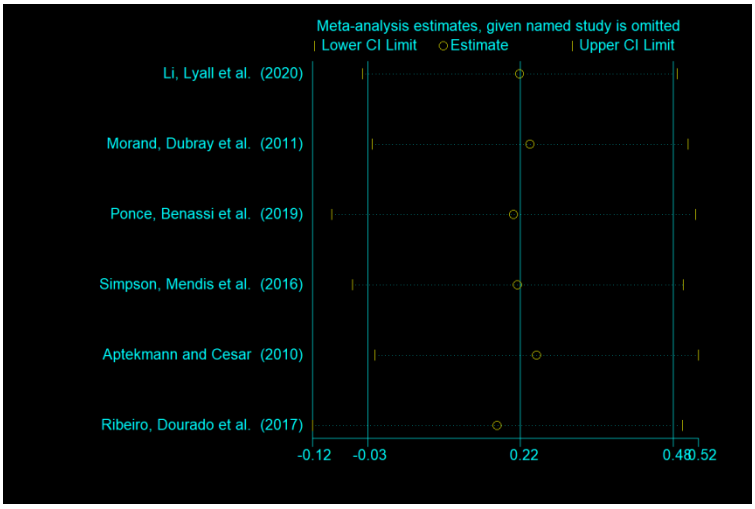

Fig. A8.2. Sensitivity analysis of high-density lipoprotein cholesterol

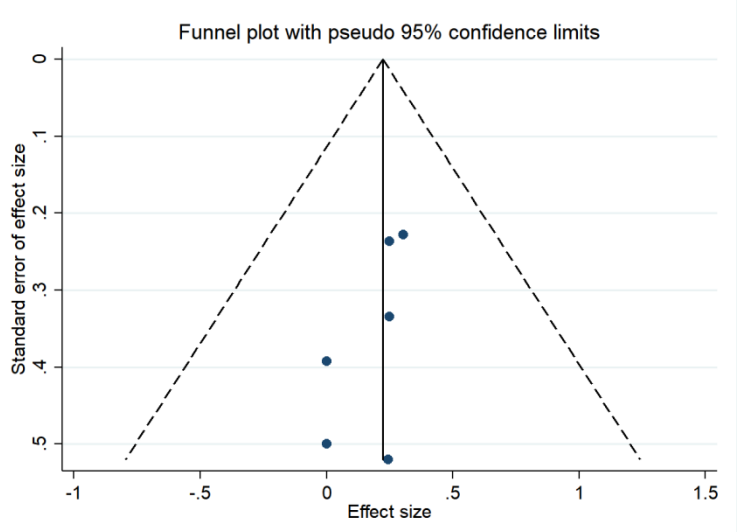

Fig. A8.3. Funnel plot of high-density lipoprotein cholesterol

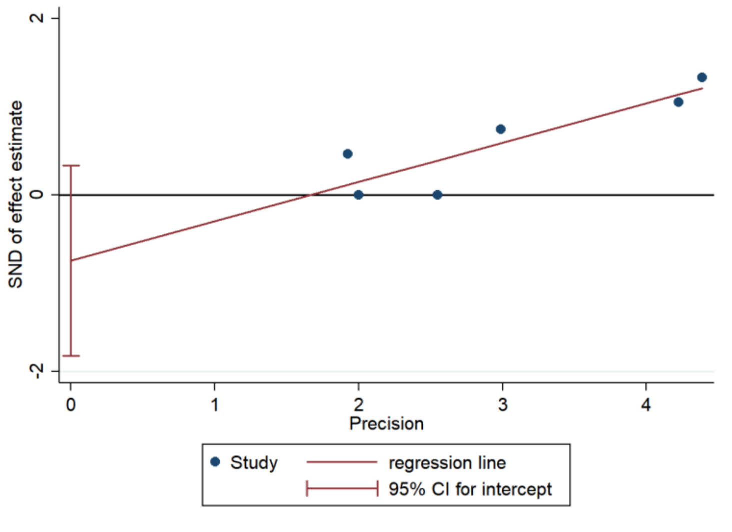

Fig. A8.4. Egger's regression plot of high-density lipoprotein cholesterol

```
. metabias _ES _seES,egger graphc

Note: data input format theta se_theta assumed

Egger's test for small-study effects:
Regress standard normal deviate of intervention
  effect estimate against its standard error

.
Number of studies =  6                              Root MSE      =    1.031
------------------------------------------------------------------------------
     Std_Eff |      Coef.   Std. Err.       t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       slope |   .1977551   .4217592     0.47   0.664     -.973236    1.368746
        bias |   .2965928   1.328206     0.22   0.834    -3.391098    3.984284
------------------------------------------------------------------------------

Test of H0: no small-study effects          P = 0.834
```

Fig. A8.5. Egger's test of high-density lipoprotein cholesterol

9. Systolic blood pressure

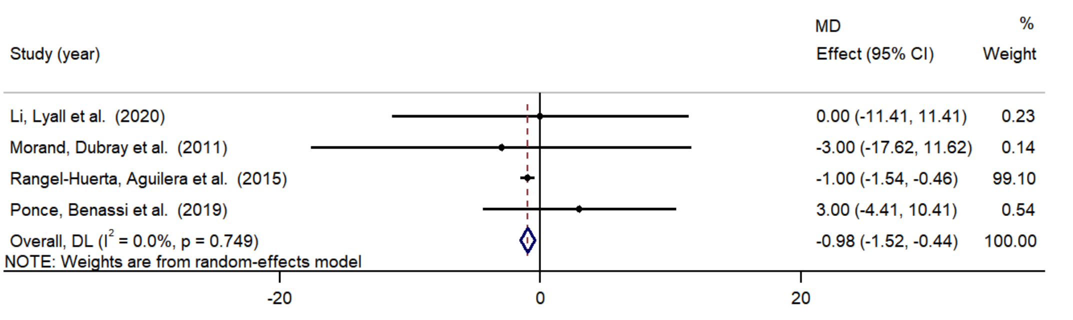

Fig. A9.1. Forest plot of systolic blood pressure

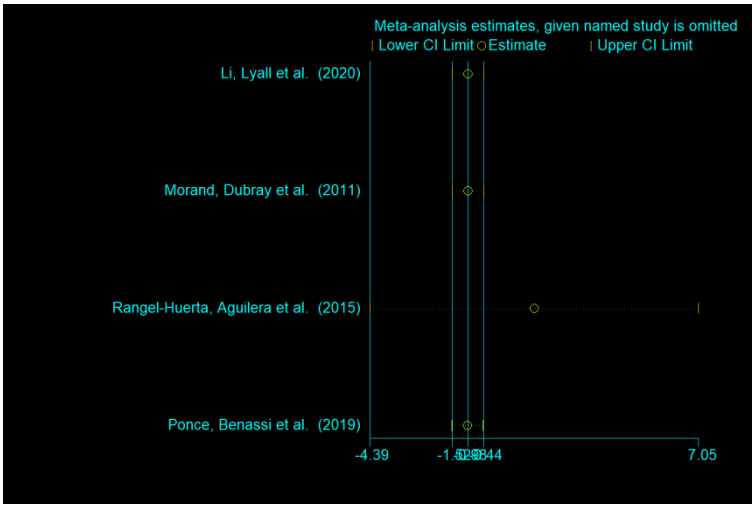

Fig. A9.2. Sensitivity analysis of systolic blood pressure

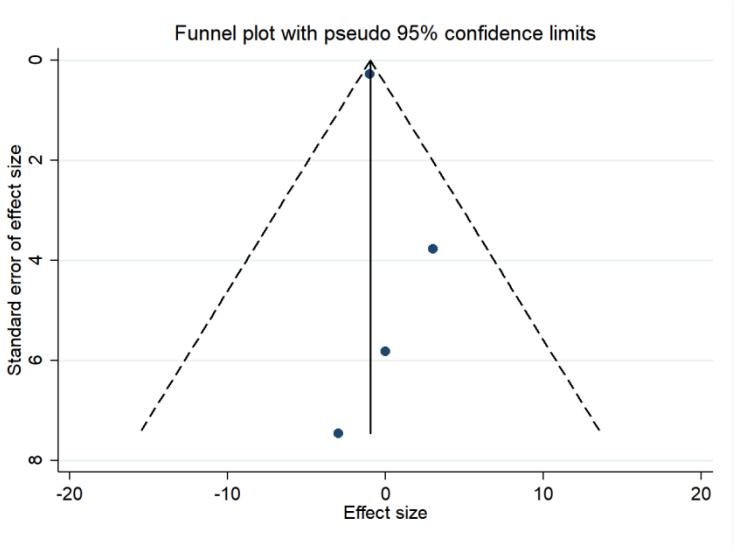

Fig. A9.3. Funnel plot of systolic blood pressure

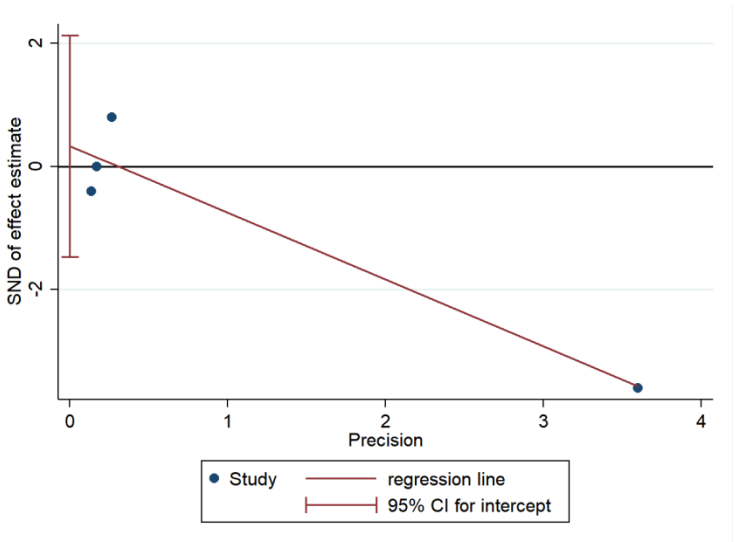

Fig. A9.4. Egger's regression plot of systolic blood pressure

```
. . metabias _ES _seES,egger graph

Note: data input format theta se_theta assumed

Egger's test for small-study effects:
Regress standard normal deviate of intervention
  effect estimate against its standard error

.
Number of studies =  4                                  Root MSE      =    .6818
```

Std_Eff	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
slope	-1.083633	.2309647	-4.69	0.043	-2.077394	-.0898724
bias	.3276749	.4172575	0.79	0.515	-1.467639	2.122989

```
Test of H0: no small-study effects          P = 0.515
```

Fig. A9.5. Egger's test of systolic blood pressure

10. Diastolic blood pressure

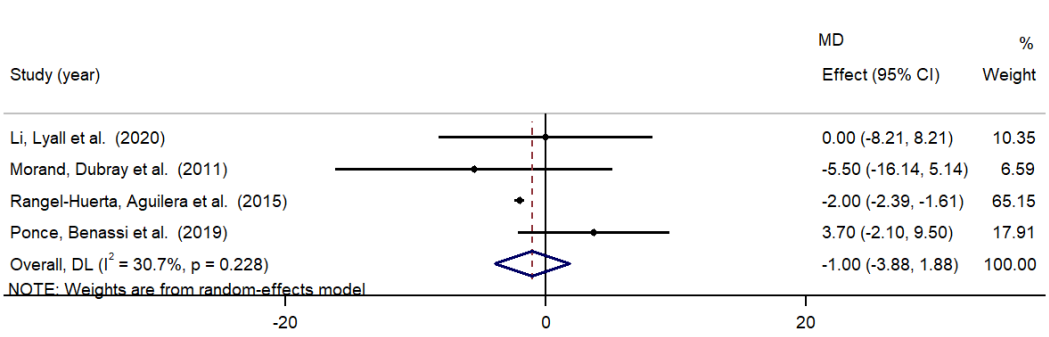

Fig. A10.1. Forest plot of diastolic blood pressure

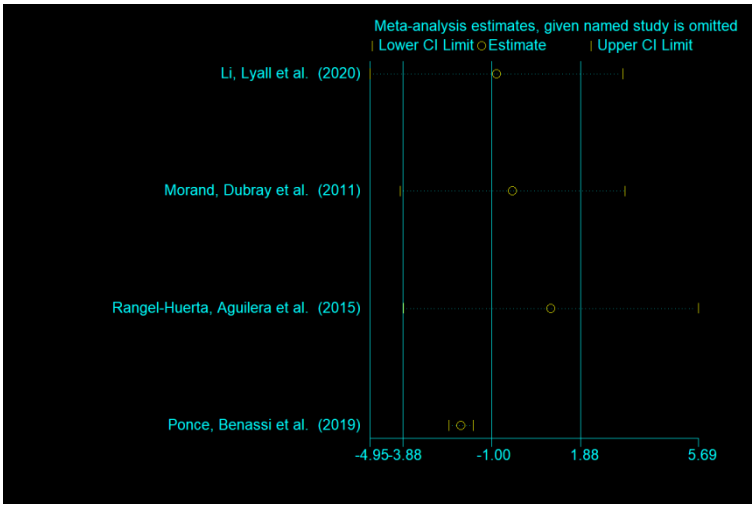

Fig. A10.2. Sensitivity analysis of diastolic blood pressure

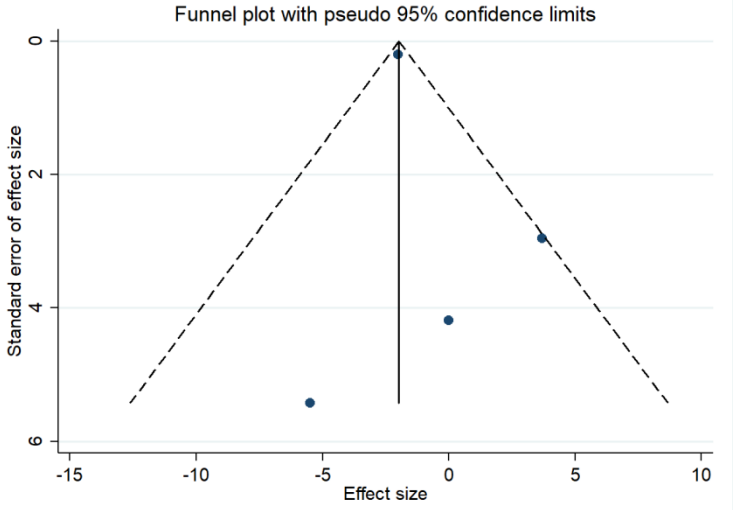

Fig. A10.3. Funnel plot of diastolic blood pressure

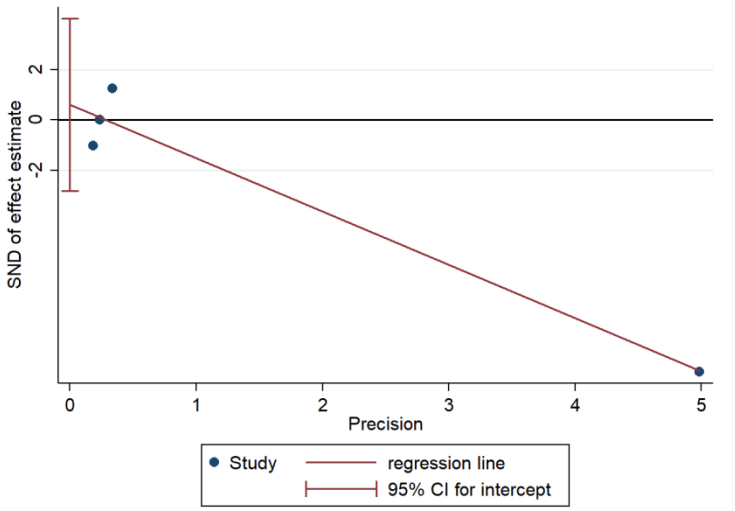

Fig. A10.4. Egger's regression plot of diastolic blood pressure

```
. metabias _ES _seES,egger graph

Note: data input format theta se_theta assumed

Egger's test for small-study effects:
Regress standard normal deviate of intervention
  effect estimate against its standard error

.
Number of studies =  4                                  Root MSE      =  1.297
```

Std_Eff	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
slope	-2.111866	.3165695	-6.67	0.022	-3.473955	-.7497778
bias	.6000213	.7921347	0.76	0.528	-2.808259	4.008302

```
Test of H0: no small-study effects          P = 0.528
```

Fig. A10.5. Egger's test of diastolic blood pressure

11. Glucose

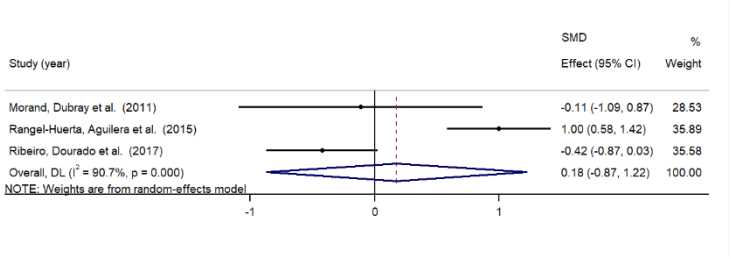

Fig. A11.1. Forest plot of glucose

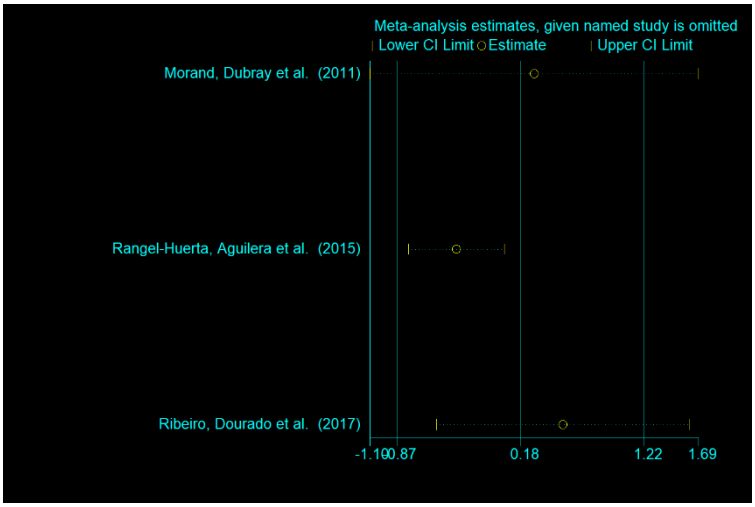

Fig. A11.2. Sensitivity analysis of glucose

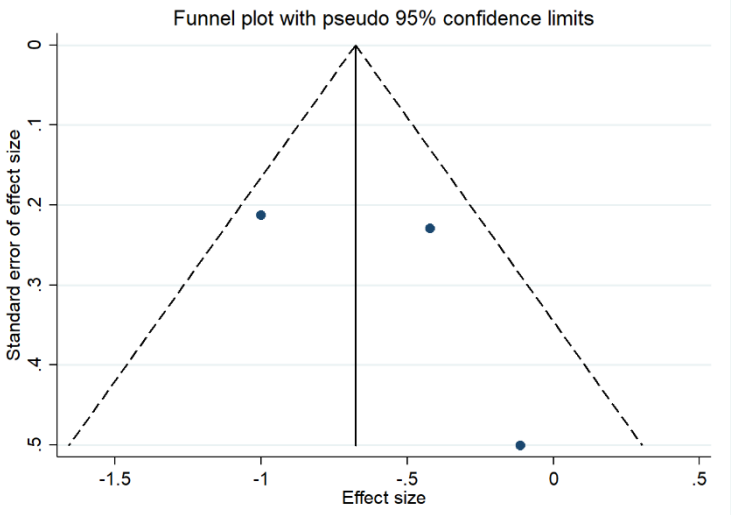

Fig. A11.3. Funnel plot of glucose

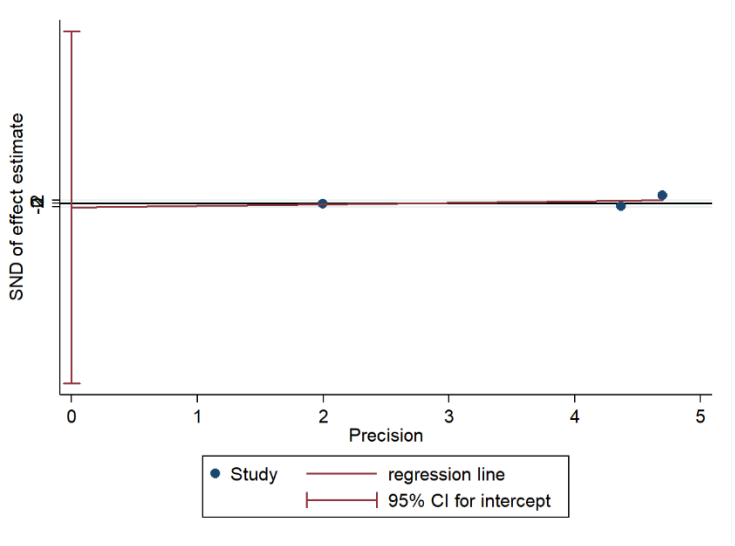

Fig. A11.4. Egger's regression plot of glucose

```
. metabias _ES _seES,egger graph

Note: data input format theta se_theta assumed

Egger's test for small-study effects:
Regress standard normal deviate of intervention
  effect estimate against its standard error

.
Number of studies =  3                                  Root MSE      =  4.444
```

Std_Eff	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
slope	.8914581	2.135592	0.42	0.748	-26.24381	28.02673
bias	-2.410101	8.280575	-0.29	0.820	-107.6248	102.8046

```
Test of H0: no small-study effects          P =  0.820
```

Fig. A11.5. Egger's test of glucose

12. Insulin

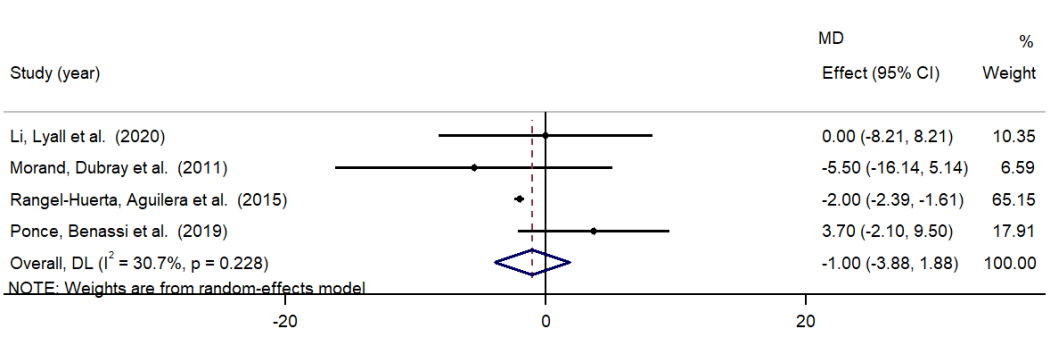

Fig. A12.1. Forest plot of insulin

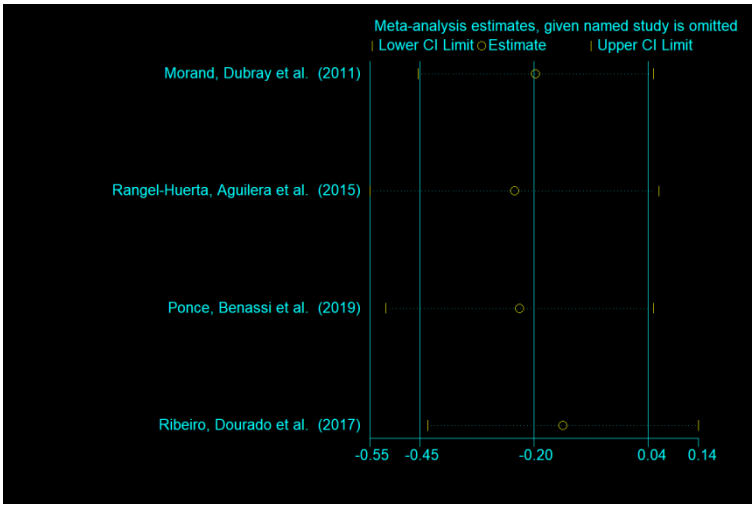

Fig. A12.2. Sensitivity analysis of insulin

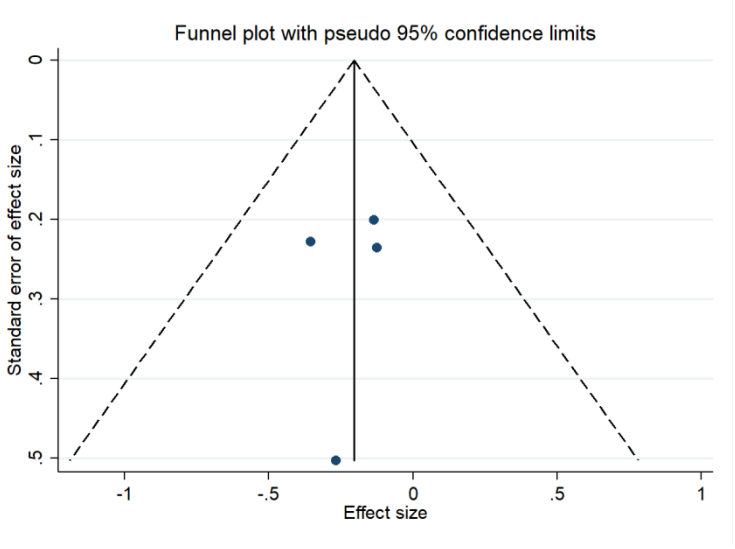

Fig. A12.3. Funnel plot of insulin

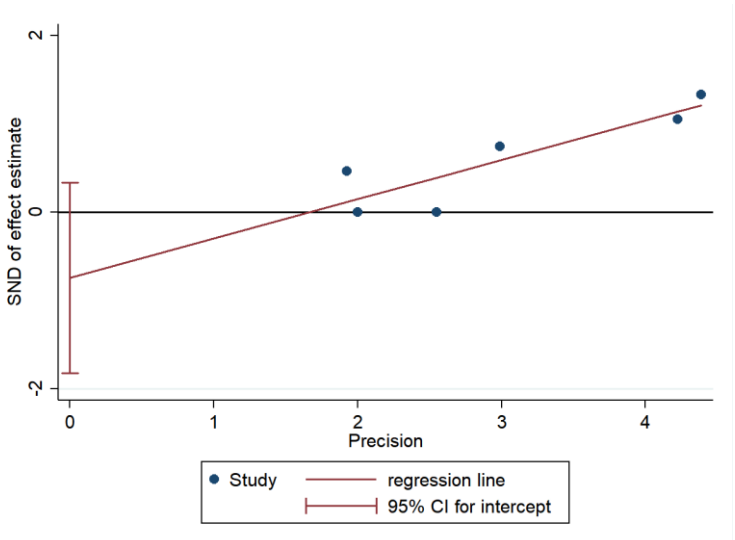

Fig. A12.4. Egger's regression plot of insulin

```
. metabias _ES _seES,egger graph

Note: data input format theta se_theta assumed

Egger's test for small-study effects:
Regress standard normal deviate of intervention
  effect estimate against its standard error

.
Number of studies =  4                                  Root MSE      =    .5641
```

Std_Eff	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
slope	-.1268301	.2484415	-0.51	0.660	-1.195788	.9421275
bias	-.3274585	1.008392	-0.32	0.776	-4.666221	4.011304

```
Test of H0: no small-study effects          P = 0.776
```

Fig. A12.5. Egger's test of insulin

13. Homeostatic model assessment of insulin resistance

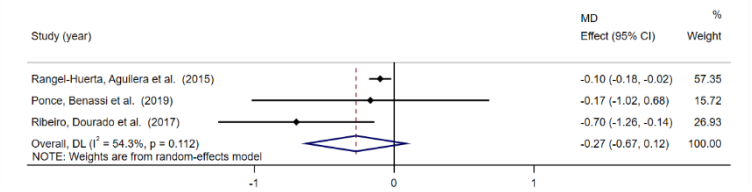

Fig. A13.1. Forest plot of homeostatic model assessment of insulin resistance

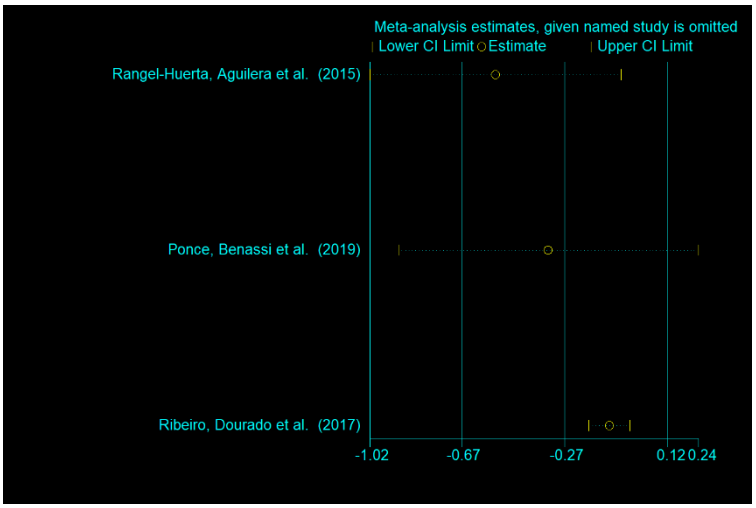

Fig. A13.2. Sensitivity analysis of homeostatic model assessment of insulin resistance

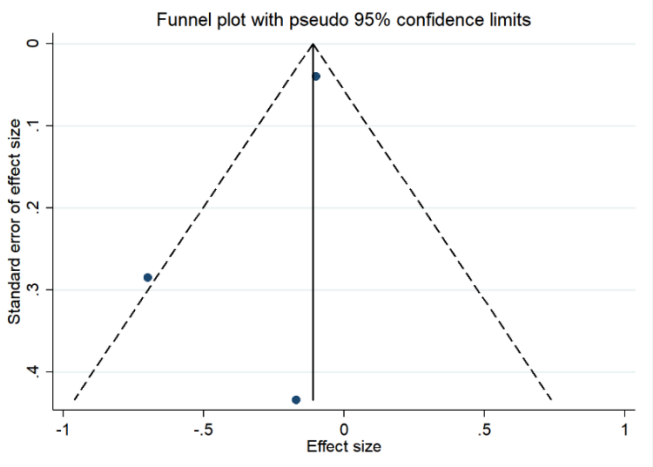

Fig. A13.3. Funnel plot of homeostatic model assessment of insulin resistance

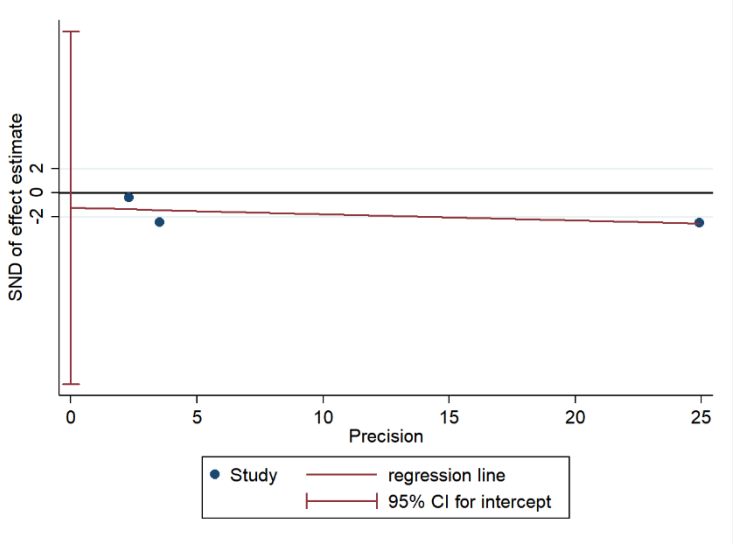

Fig. A13.4. Egger's regression plot of homeostatic model assessment of insulin resistance

```
Egger's test for small-study effects:
Regress standard normal deviate of intervention
  effect estimate against its standard error

.
Number of studies =  3                                  Root MSE      =    1.419
```

Std_Eff	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
slope	-.0521869	.0788518	-0.66	0.628	-1.054094	.9497207
bias	-1.246387	1.150504	-1.08	0.475	-15.86492	13.37215

```
Test of H0: no small-study effects          P = 0.475
```

Fig. A13.5. Egger's test of homeostatic model assessment of insulin resistance

14. C-reactive protein

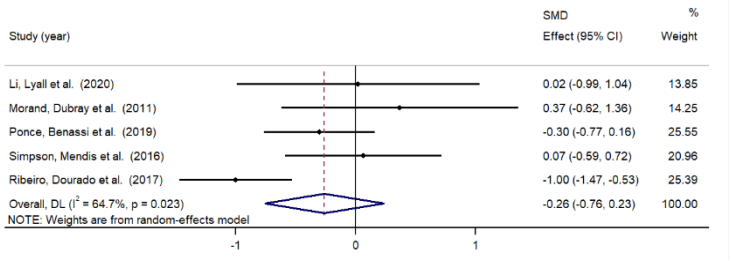

Fig. A14.1. Forest plot of C-reactive protein

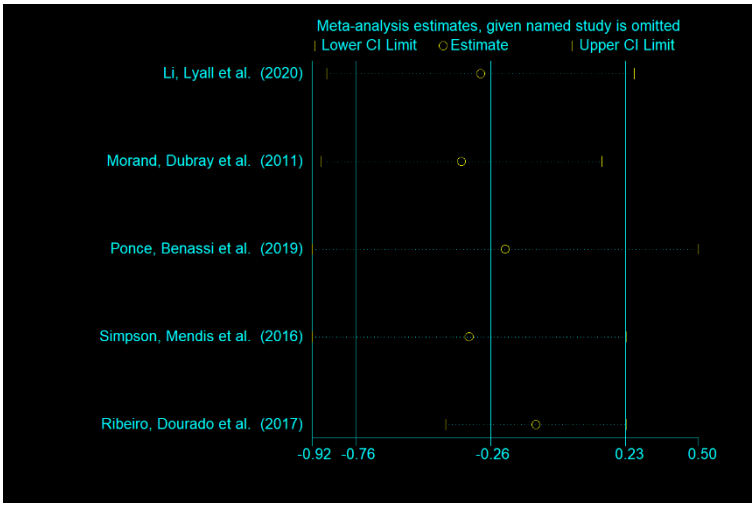

Fig. A14.2. Sensitivity analysis of C-reactive protein

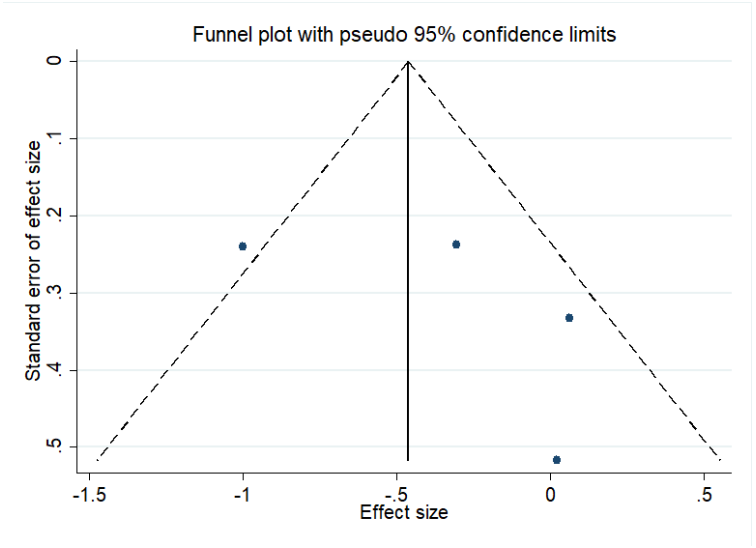

Fig. A14.3. Funnel plot of C-reactive protein

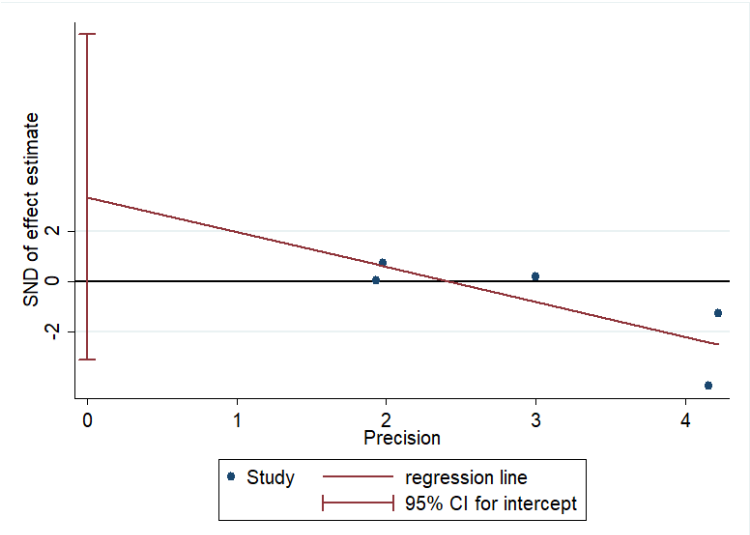

Fig. A14.4. Egger's regression plot of C-reactive protein

.
Number of studies = **5** Root MSE = **1.408**

Std_Eff	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
slope	**-1.384521**	**.6307965**	**-2.19**	**0.116**	**-3.391997**	**.6229548**
bias	**3.340567**	**2.028863**	**1.65**	**0.198**	**-3.116179**	**9.797313**

Test of H0: no small-study effects P = **0.198**

Fig. A14.5. Egger's test of C-reactive protein