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Supplementary figures

Metabolic Syndrome Components Correlation with Colorectal Neoplasms: A Systematic Review and a Meta-analysis (Supplementary figures)

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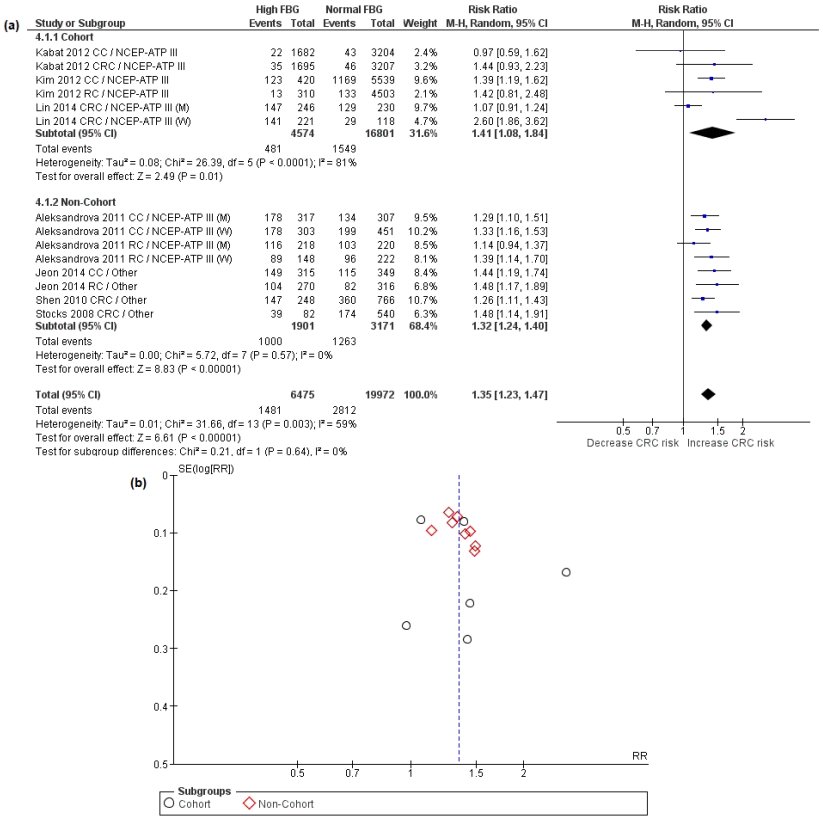
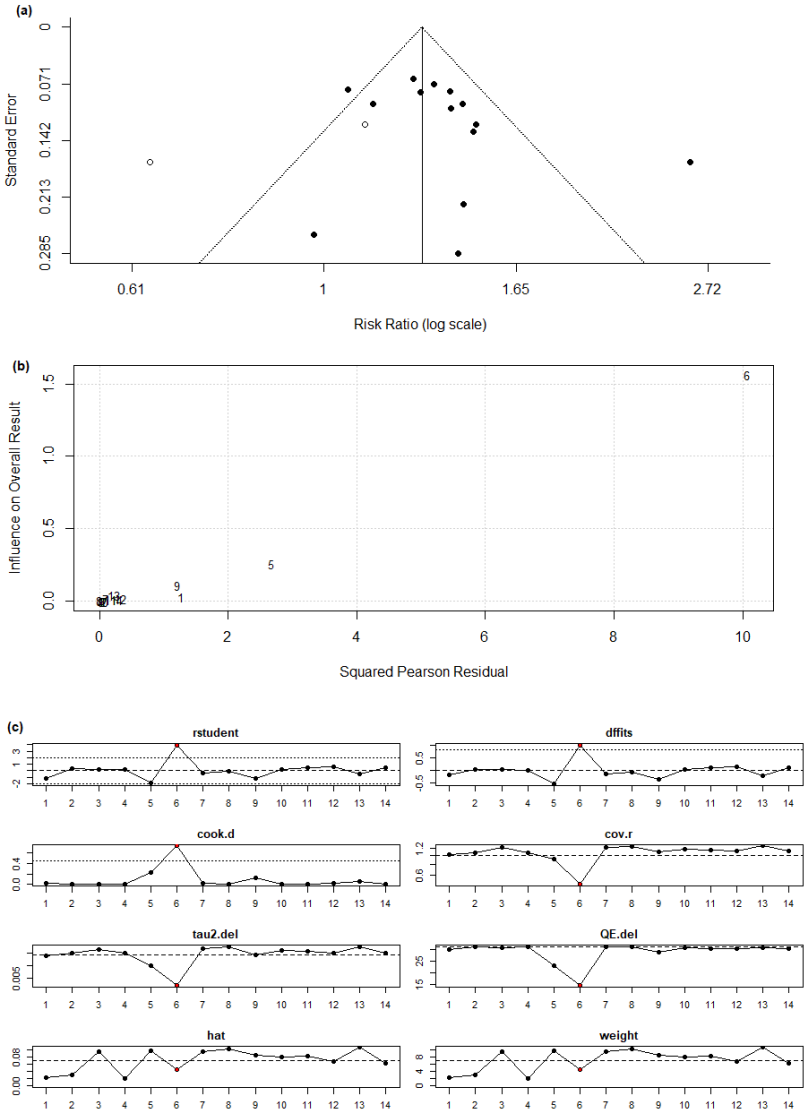
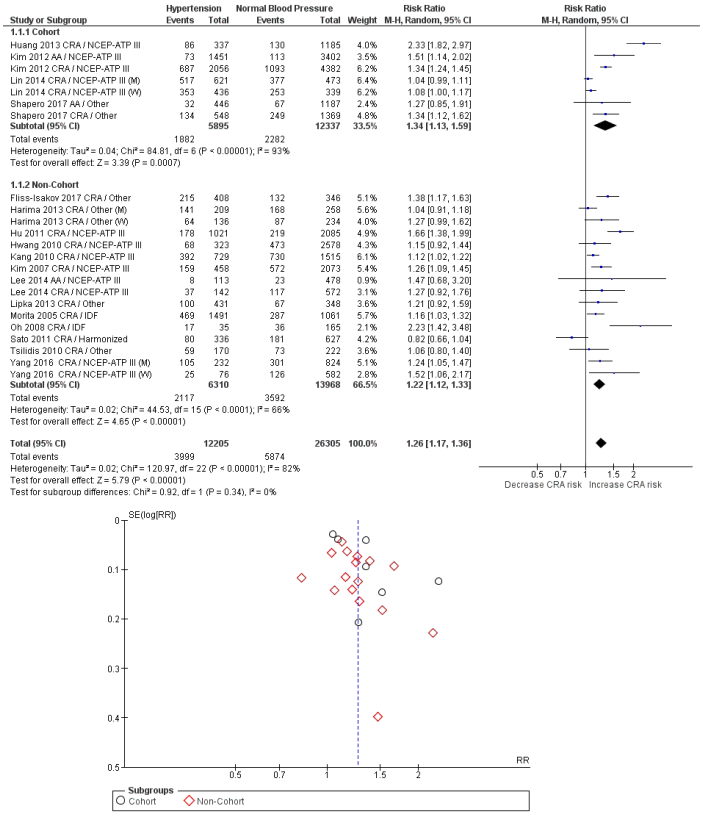


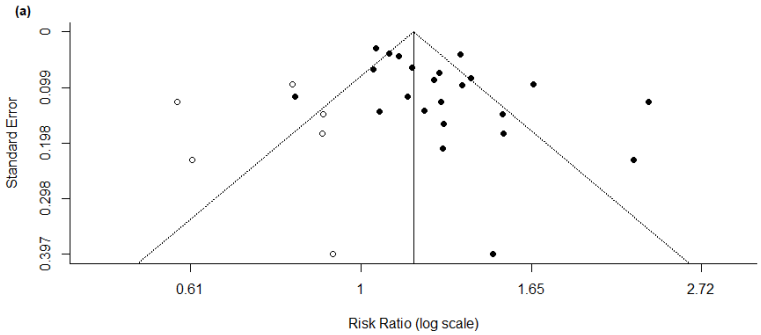
Supplementary Figure 1.1 Association between FBG and CRC incidence: (a) Forest plot; (b) Funnel plot.
CC colon cancer, *CI* confidence interval, *CRC* colorectal cancer, *FBG* fasting blood glucose, *M* men, *M-H* Mantel-Haenszel, *NCEP-ATP III* National Cholesterol Education Program-Adult Treatment Panel III, *RC* rectal cancer, *RR* risk ratio, *W* women.

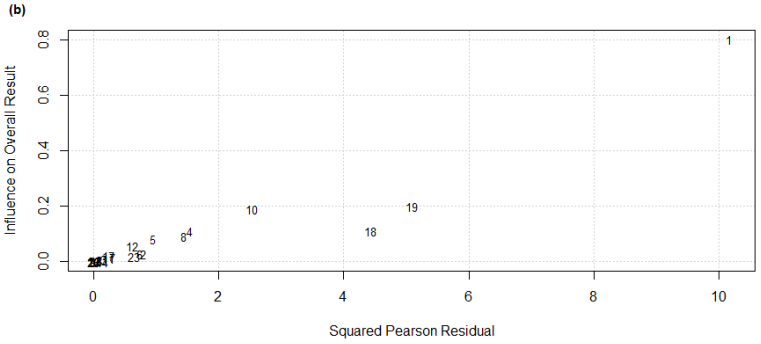


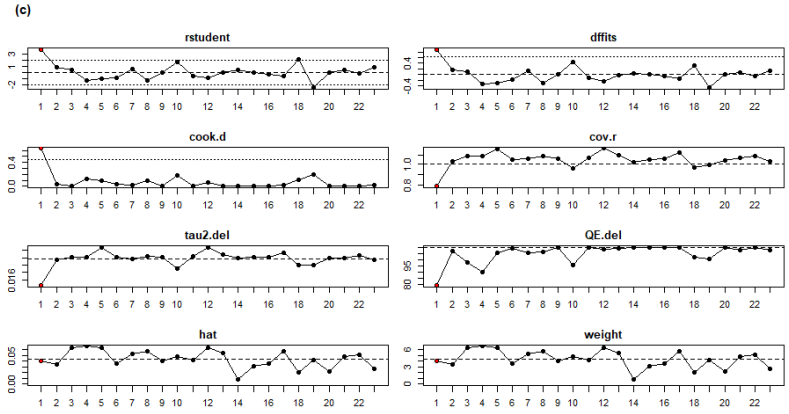
Supplementary Figure 1.2 Additional analyses for the association between FBG and CRC incidence: (a) Funnel plot after adjustment to publication bias with the trim and fill method. Two simulated negative studies were added (hollow circles) to the pooled estimates from the meta-analysis (solid circles). The adjusted RR decreased from (1.35; 95% CI 1.23-1.47) in the initial analysis to (1.29; 95% CI 1.17-1.43) after adjustment. (b) Baujat plot: indicates that the 6th dataset (that falls to the top right quadrant of the Baujat plot which corresponds to (Lin 2014 CRC / NCEP-ATP III (W))) has contributed to the overall heterogeneity and result. (c) Influence plot: as there are one marked datasets (which corresponds to (Lin 2014 CRC / NCEP-ATP III (W))), this dataset has met the criteria as an influential study.



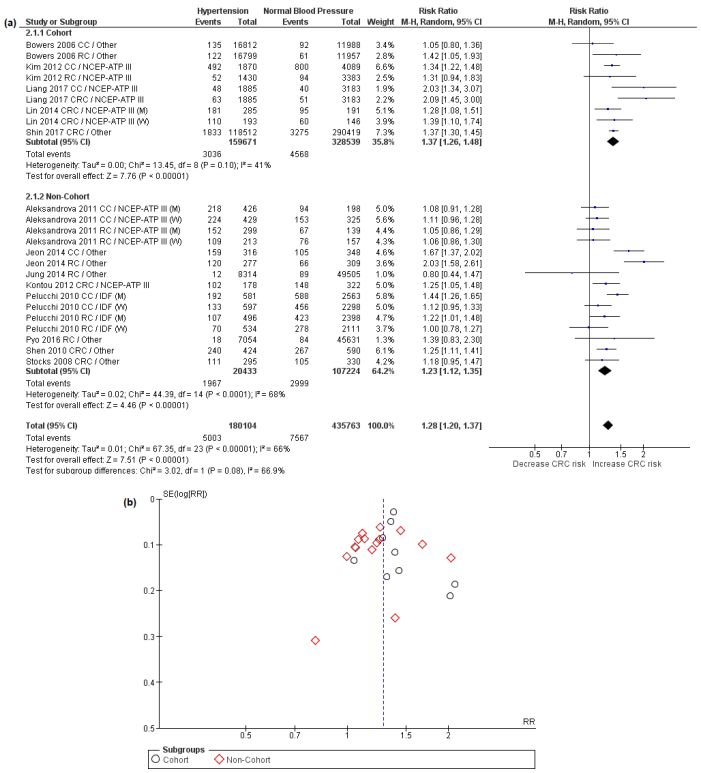
Supplementary Figure 2.1 Association between BP and CRA formation: (a) Forest plot; (b) Funnel plot.
AA advanced adenomas, *CI* confidence interval, *CRA* colorectal adenoma, *df* degree of freedom, *IDF* International Diabetes Foundation, *M* men, *M-H* Mantel-Haenszel, *NCEP-ATP III* National Cholesterol Education Program-Adult Treatment Panel III, *W* women.



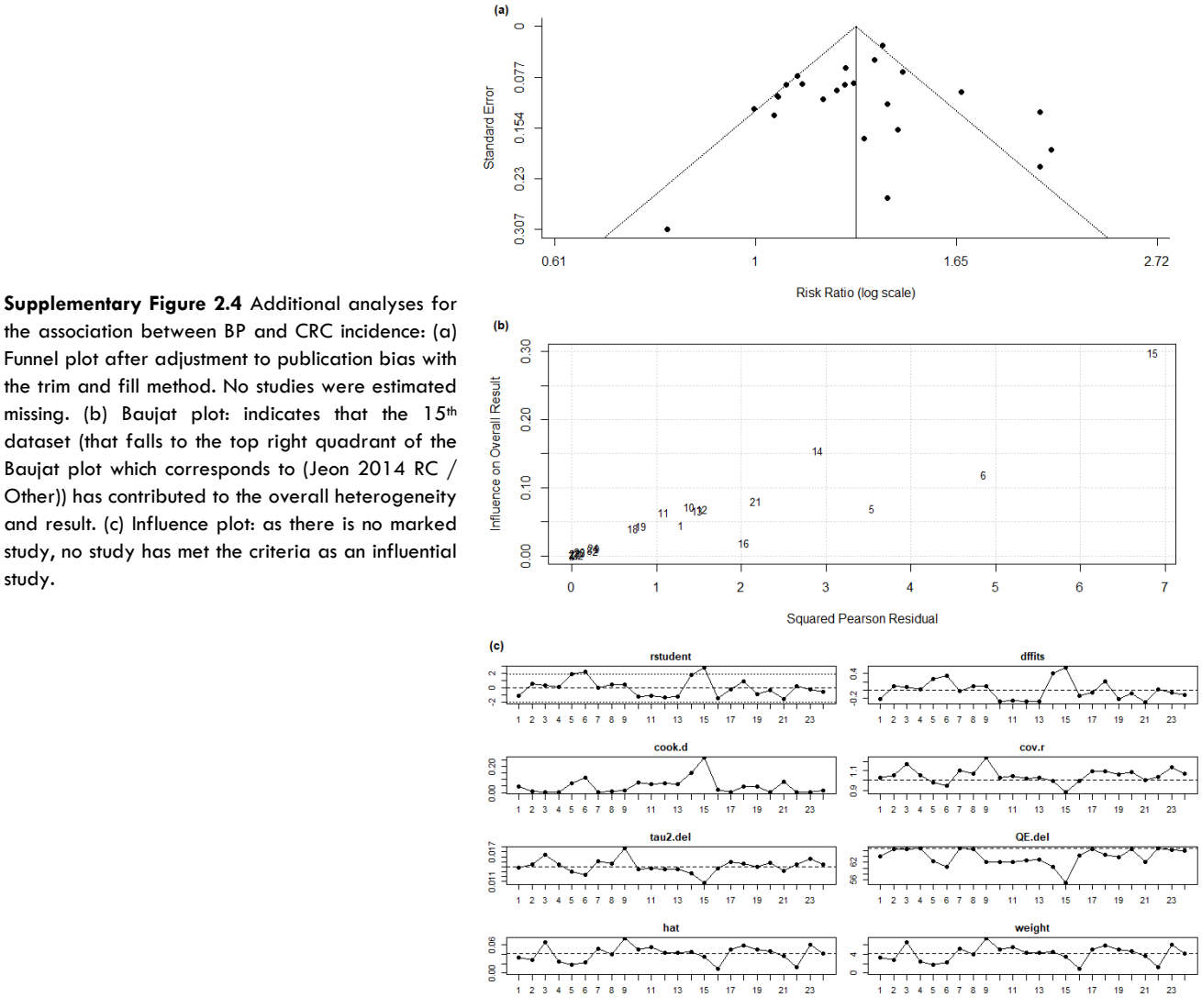




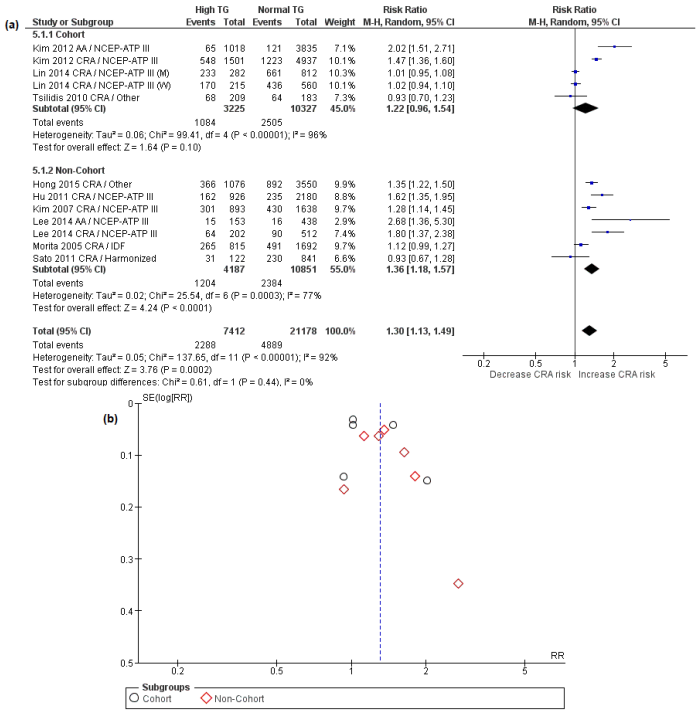
Supplementary Figure 2.2 Additional analyses for the association between BP and CRA development: (a) Funnel plot after adjustment to publication bias with the trim and fill method. Six simulated negative studies were added (hollow circles) to the pooled estimates from the meta-analysis (solid circles). The adjusted RR decreased from (1.26; 95% CI 1.17-1.36) in the initial analysis to (1.17; 95% CI 1.08-1.26) after adjustment. (b) Baujat plot: indicates that the 1st dataset (that falls to the top right quadrant of the Baujat plot which corresponds to (Huang 2013 CRA / NCEP-ATP III)) has contributed to the overall heterogeneity and result. (c) Influence plot: as there are one marked datasets (which corresponds to (Huang 2013 CRA / NCEP-ATP III)), this dataset has met the criteria as an influential study.



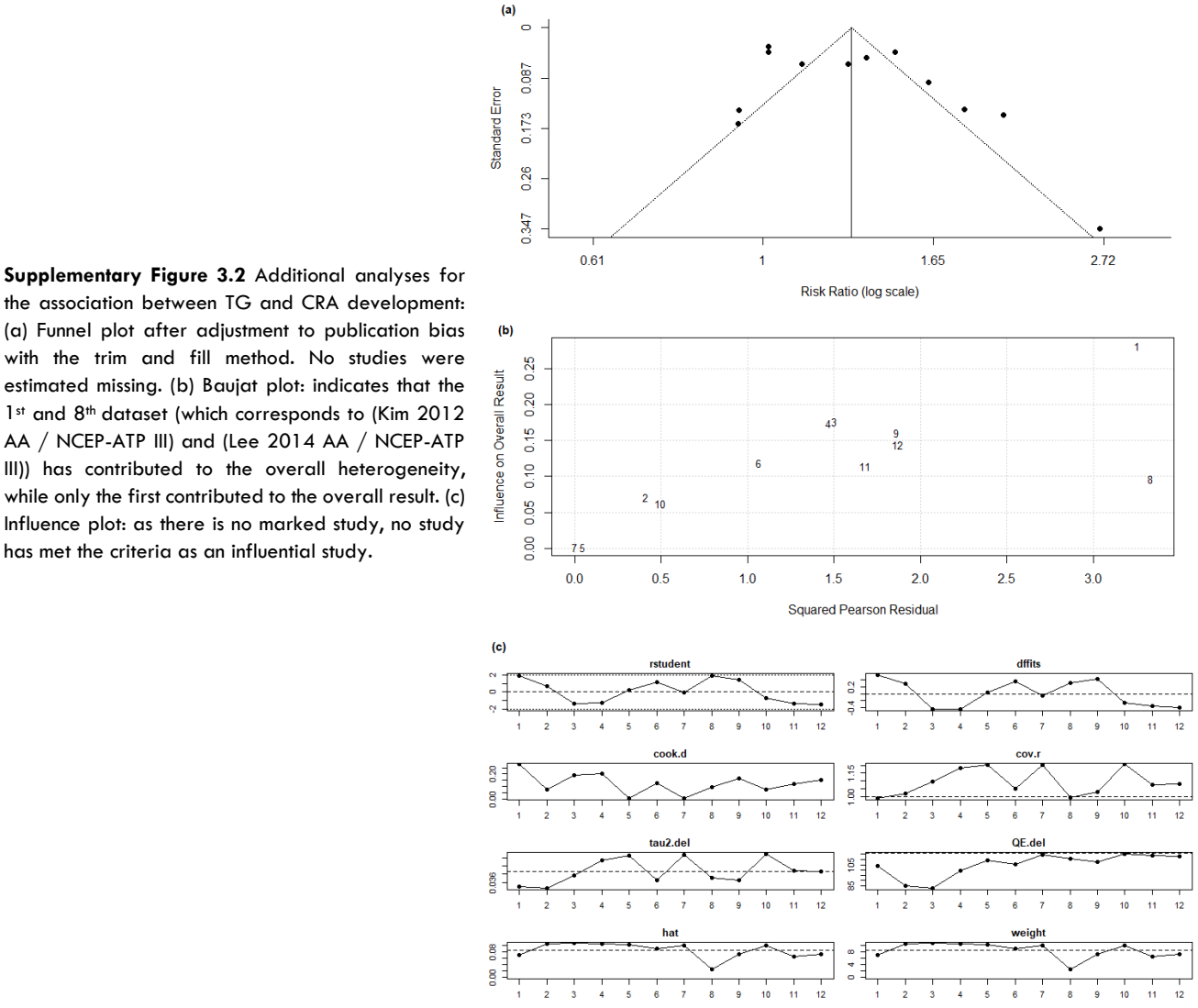
Supplementary Figure 2.3 Association between BP and CRC incidence: (a) Forest plot; (b) Funnel plot.
CC colon cancer, CI confidence interval, CRC colorectal cancer, df degree of freedom, IDF International Diabetes Foundation, M men, M-H Mantel-Haenszel, NCEP-ATP III National Cholesterol Education Program-Adult Treatment Panel III, RC rectal cancer, W women.



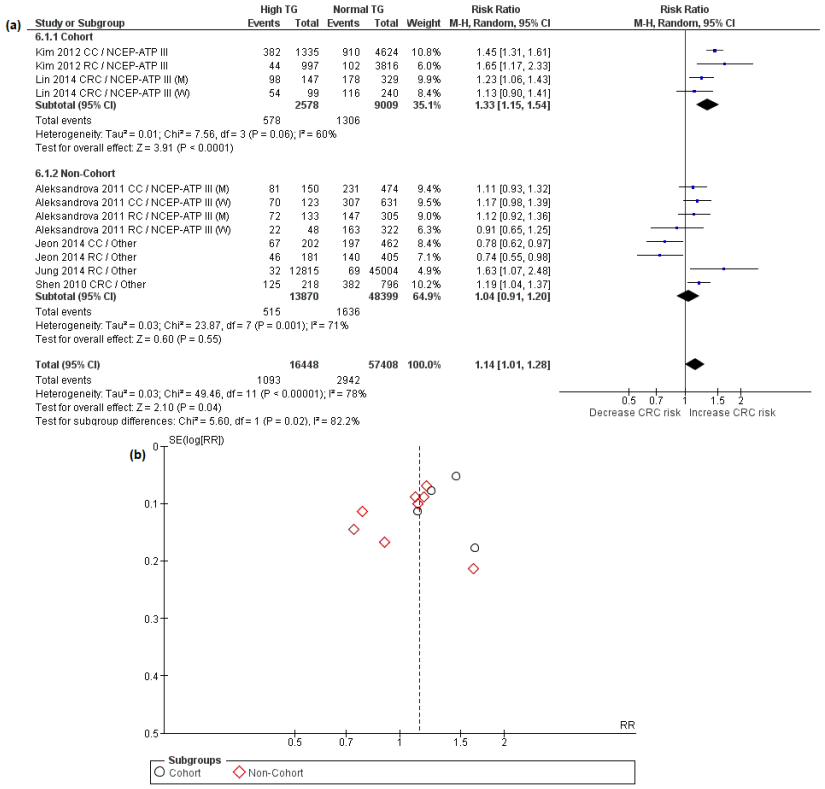
Supplementary Figure 2.4 Additional analyses for the association between BP and CRC incidence: (a) Funnel plot after adjustment to publication bias with the trim and fill method. No studies were estimated missing. (b) Baujat plot: indicates that the 15th dataset (that falls to the top right quadrant of the Baujat plot which corresponds to (Jeon 2014 RC / Other)) has contributed to the overall heterogeneity and result. (c) Influence plot: as there is no marked study, no study has met the criteria as an influential study.



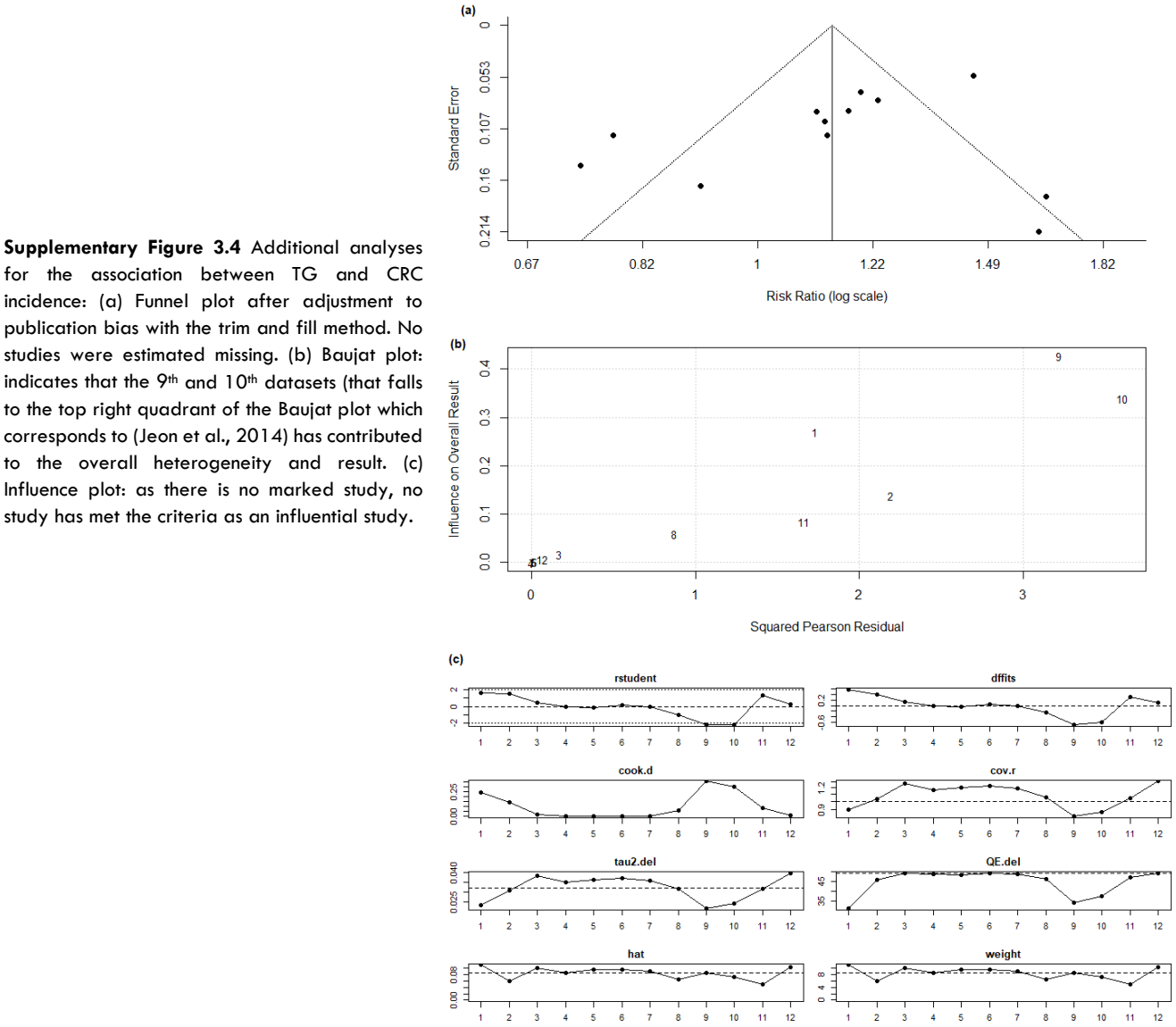
Supplementary Figure 3.1 Association between TG and CRA formation: (a) Forest plot; (b) Funnel plot.
AA advanced adenomas, *CI* confidence interval, *CRA* colorectal cancer, *IDF* International Diabetes Foundation, *M* men, *M-H* Mantel-Haenszel, *NCEP-ATP III* National Cholesterol Education Program-Adult Treatment Panel III, *TG* triglycerides, *W* women.



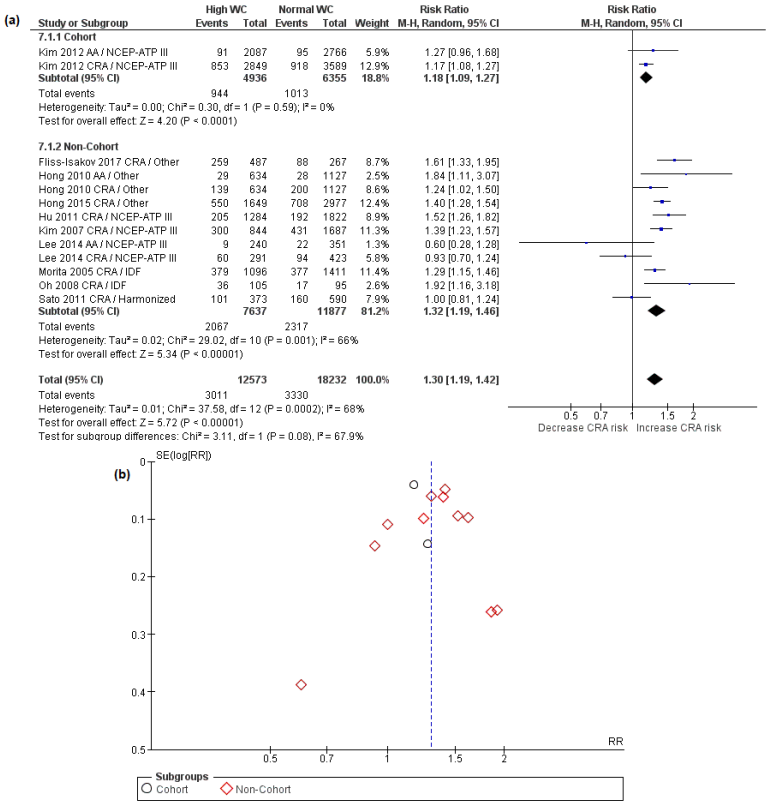
Supplementary Figure 3.2 Additional analyses for the association between TG and CRA development: (a) Funnel plot after adjustment to publication bias with the trim and fill method. No studies were estimated missing. (b) Baujat plot: indicates that the 1st and 8th dataset (which corresponds to (Kim 2012 AA / NCEP-ATP III) and (Lee 2014 AA / NCEP-ATP III)) has contributed to the overall heterogeneity, while only the first contributed to the overall result. (c) Influence plot: as there is no marked study, no study has met the criteria as an influential study.



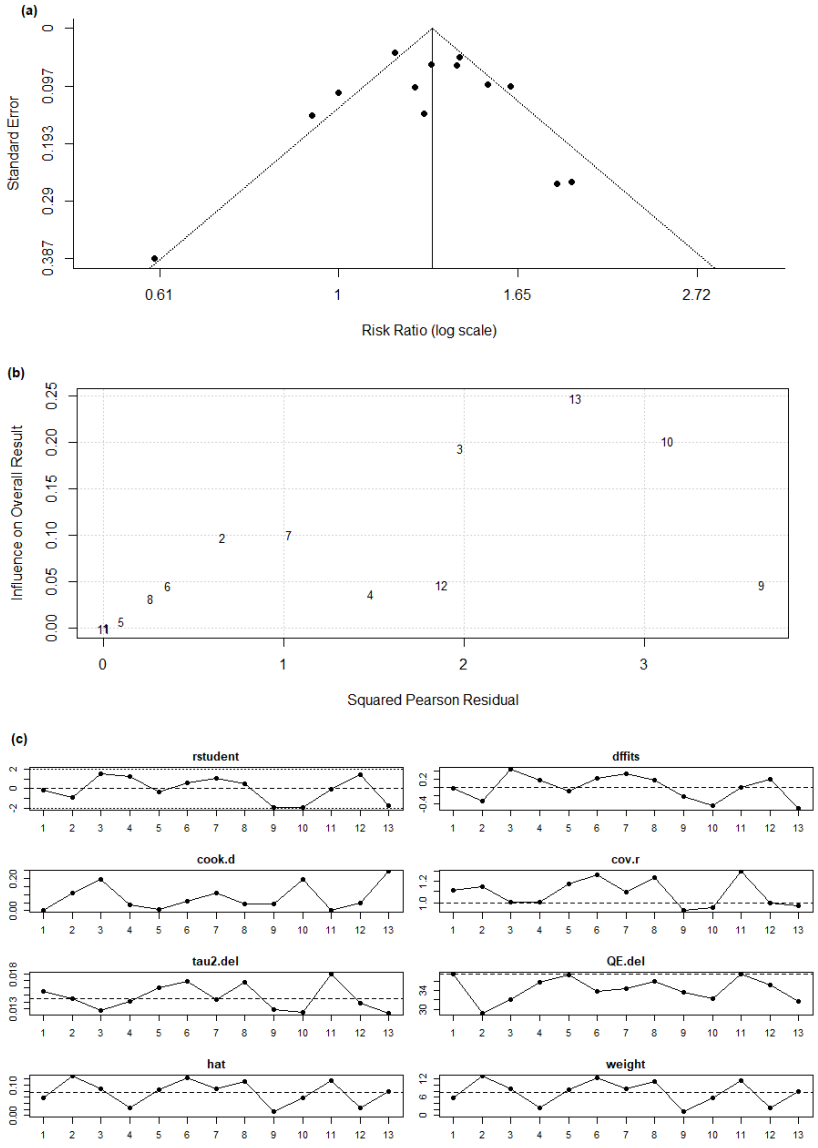
Supplementary Figure 3.3 Association between TG and CRC incidence: (a) Forest plot; (b) Funnel plot.
CC colon cancer, *CI* confidence interval, *CRC* colorectal cancer, *M* men, *M-H* Mantel-Haenszel, *NCEP-ATP III* National Cholesterol Education Program-Adult Treatment Panel III, *RC* rectal cancer, *RR* risk ratio, *TG* triglycerides, *W* women.



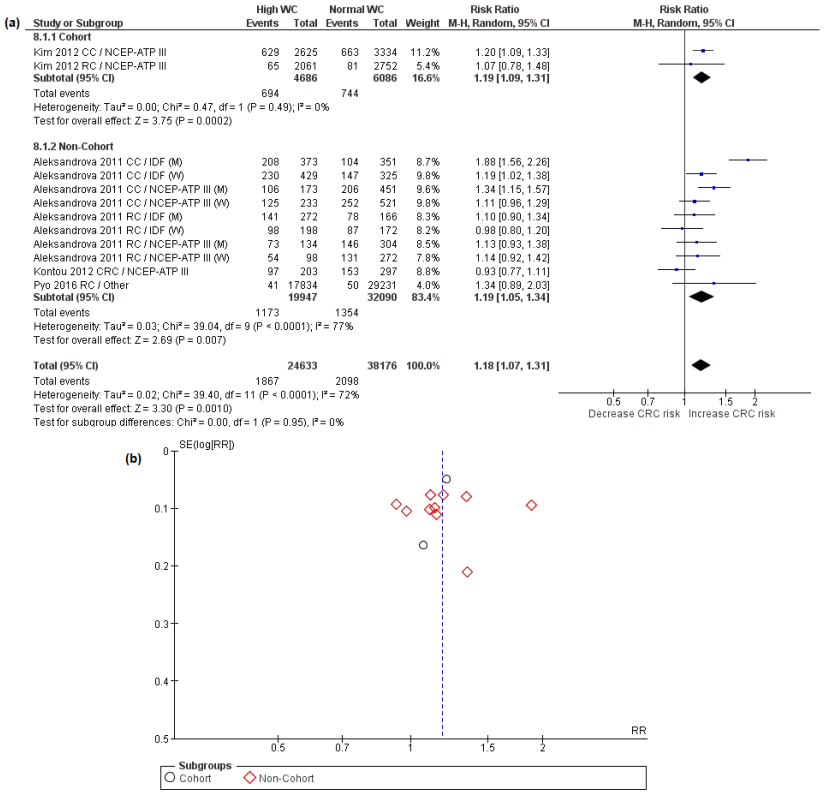
Supplementary Figure 3.4 Additional analyses for the association between TG and CRC incidence: (a) Funnel plot after adjustment to publication bias with the trim and fill method. No studies were estimated missing. (b) Baujat plot: indicates that the 9th and 10th datasets (that falls to the top right quadrant of the Baujat plot which corresponds to (Jeon et al., 2014) has contributed to the overall heterogeneity and result. (c) Influence plot: as there is no marked study, no study has met the criteria as an influential study.



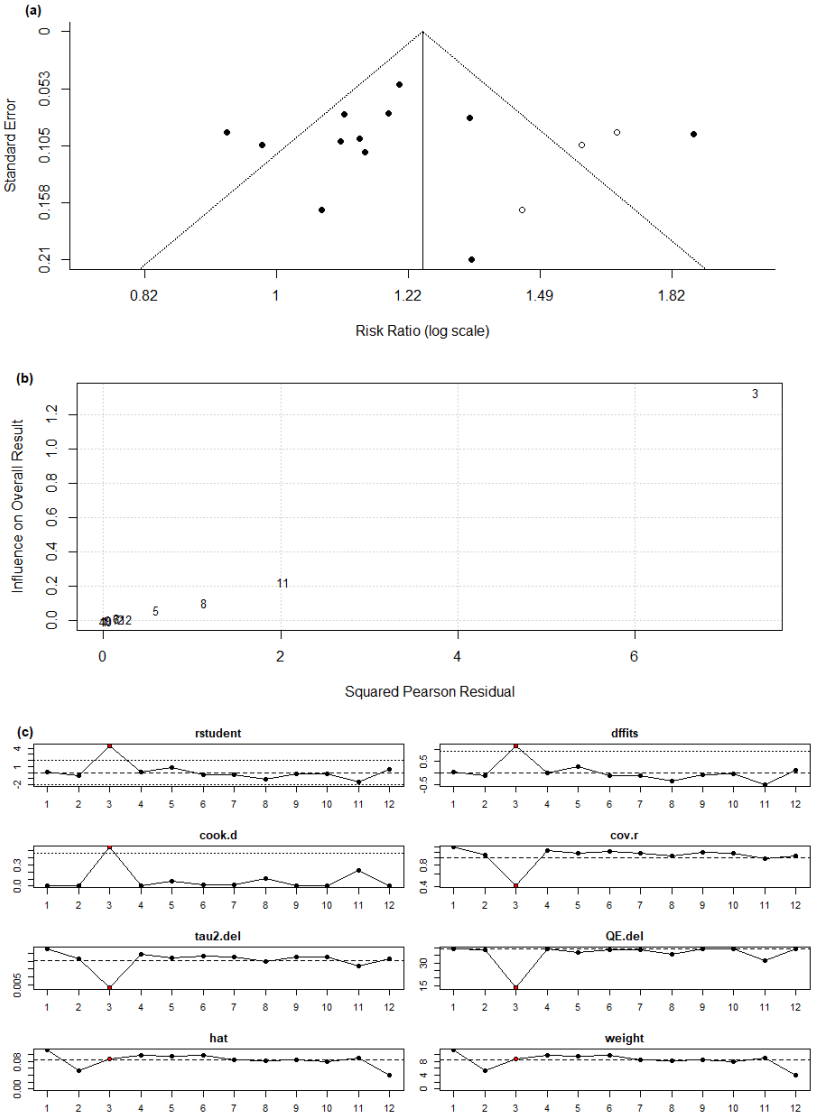
Supplementary Figure 4.1 Association between WC and CRA formation: (a) Forest plot; (b) Funnel plot. *AA* advanced adenomas, *CI* confidence interval, *CRA* colorectal cancer, *M-H* Mantel-Haenszel, *NCEP-ATP III* National Cholesterol Education Program-Adult Treatment Panel III, *WC* waist circumference.



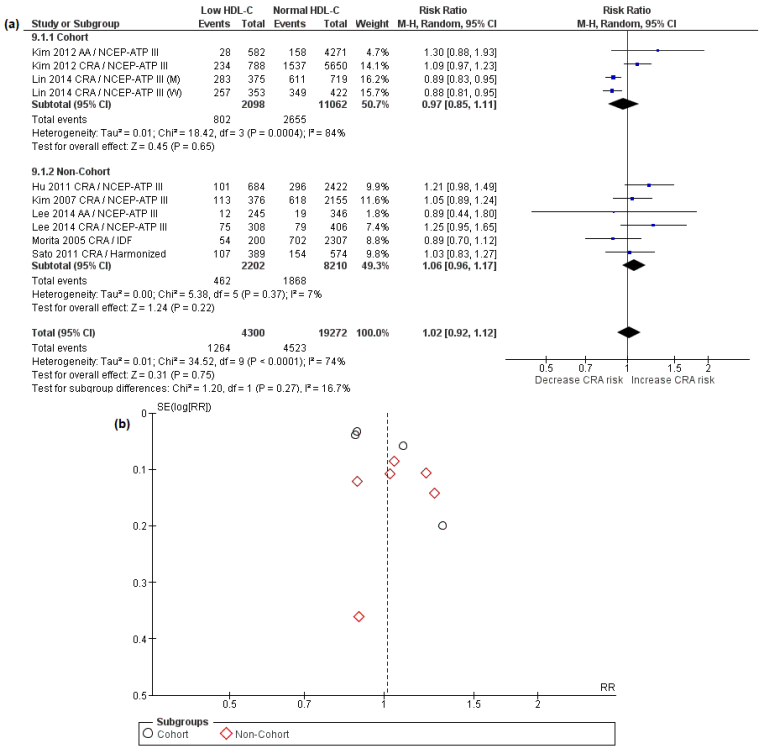
Supplementary Figure 4.2 Additional analyses for the association between WC and CRA development: (a) Funnel plot after adjustment to publication bias with the trim and fill method. No studies were estimated missing. (b) Baujat plot: indicates that the 9th dataset contributed to the overall heterogeneity, the 3rd and the 13th datasets contributed to the overall result, and the 10th dataset contributed to both overall heterogeneity and result (which corresponds to (Lee et al., 2014), (Fliss-Isakov 2017 CRA / AHA), (Sato 2011 CRA / Harmonized)). (c) Influence plot: as there is no marked study, no study has met the criteria as an influential study.



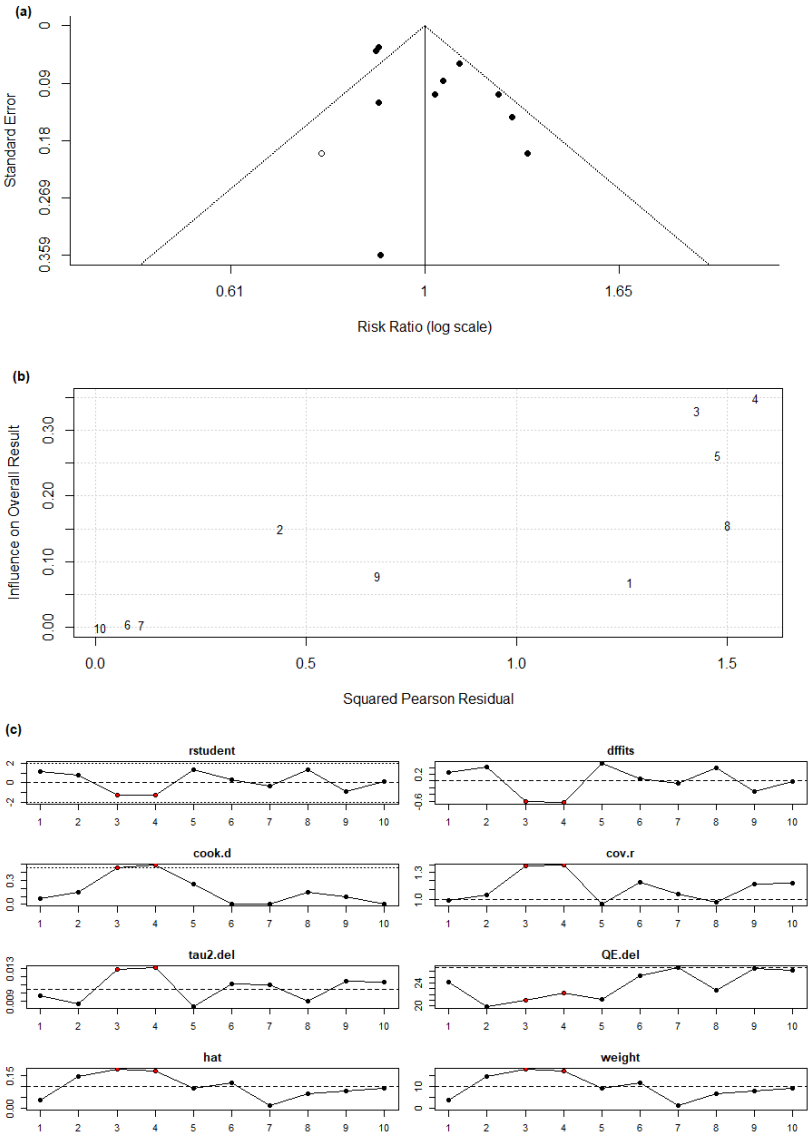
Supplementary Figure 4.3 Association between WC and CRC incidence: (a) Forest plot; (b) Funnel plot.
CC colon cancer, CI confidence interval, CRC colorectal cancer, IDF International Diabetes Foundation, M men, M-H Mantel-Haenszel, NCEP-ATP III National Cholesterol Education Program-Adult Treatment Panel III, RC rectal cancer, RR risk ratio, W women, WC waist circumference.



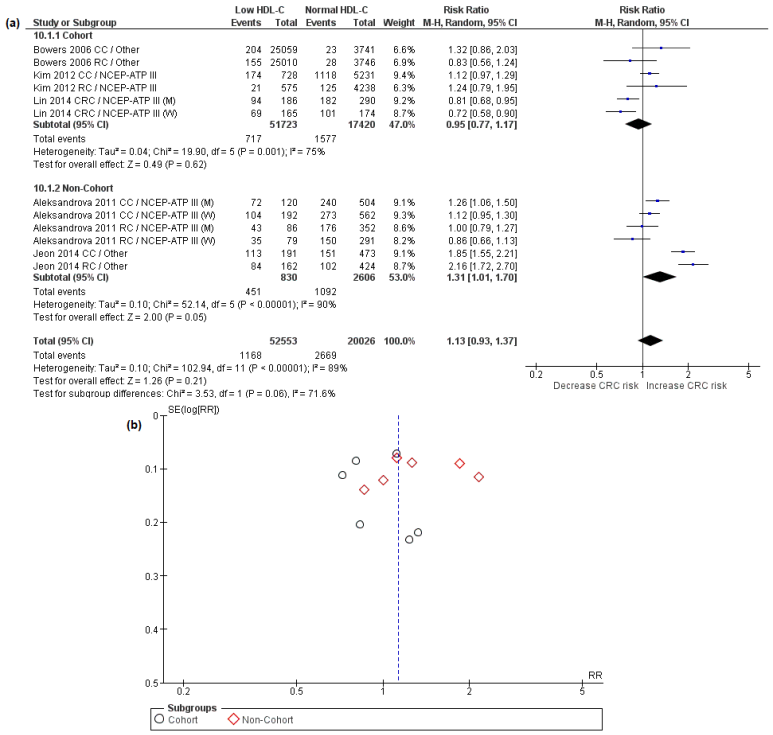
Supplementary Figure 4.4 Additional analyses for the association between WC and CRC incidence: (a) Funnel plot after adjustment to publication bias with the trim and fill method. Three simulated positive studies were added (hollow circles) to the pooled estimates from the meta-analysis (solid circles). The adjusted RR increased from (1.18; 95% CI 1.07-1.31) in the initial analysis to (1.25; 95% CI 1.13-1.38) after adjustment. (b) Baujat plot: indicates that the 3rd dataset (that falls to the top right quadrant of the Baujat plot which corresponds to (Aleksandrova 2011 CC / IDF (M))) has contributed to the overall heterogeneity and result. (c) Influence plot: as there are one marked datasets (which corresponds to (Aleksandrova 2011 CC / IDF (M))), this dataset has met the criteria as an influential study.



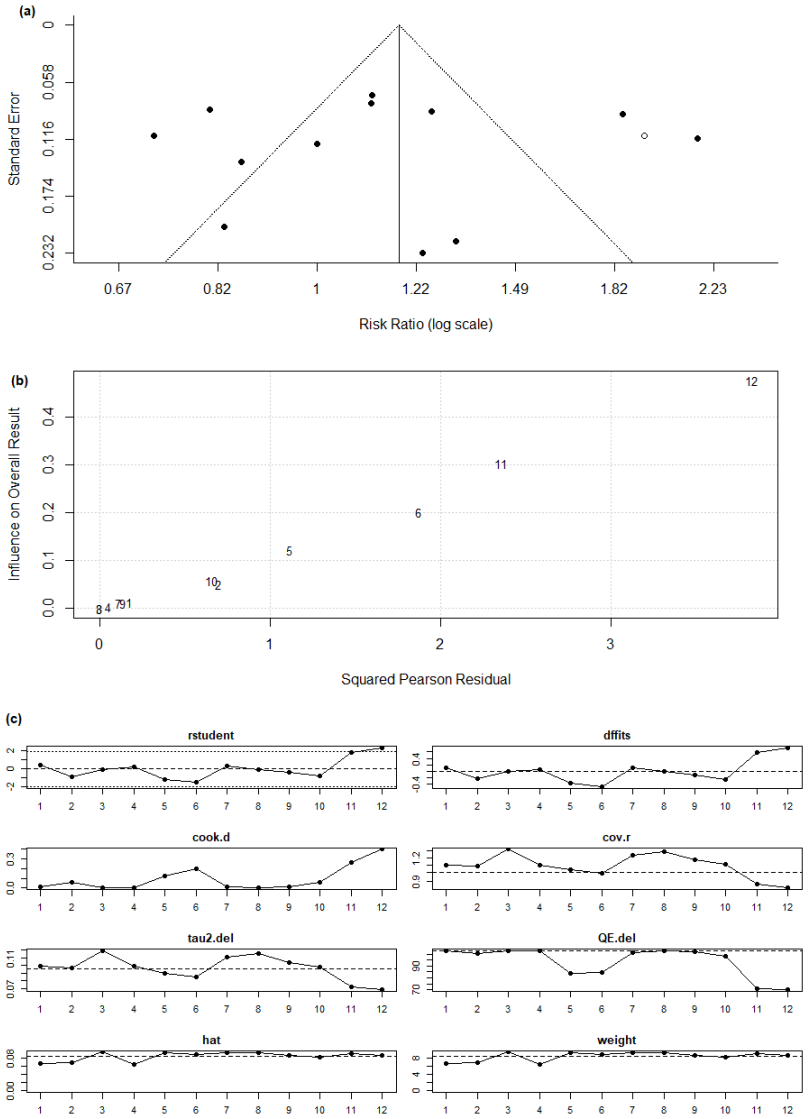
Supplementary Figure 5.1 Association between HDL-C and CRA formation: (a) Forest plot; (b) Funnel plot. *AA* advanced adenomas, *CI* confidence interval, *CRA* colorectal cancer, *HDL*-C high-density lipoprotein-cholesterol, *M* men, *M-H* Mantel-Haenszel, *NCEP-ATP III* National Cholesterol Education Program-Adult Treatment Panel III, *W* women.



Supplementary Figure 5.2 Additional analyses for the association between HDL-C and CRA development: (a) Funnel plot after adjustment to publication bias with the trim and fill method. One simulated negative study was added (hollow circle) to the pooled estimates from the meta-analysis (solid circles). The adjusted RR slightly decreased from (1.02; 95% CI 0.92-1.12) in the initial analysis to (1.00; 95% CI 0.92-1.09) after adjustment. (b) Baujat plot: indicates that the 3rd, 4th, and 5th datasets contributed to the overall heterogeneity and result, and the 8th contributed to the overall heterogeneity (which corresponds to (Lin et al., 2014), (Hu 2011 CRA / NCEP-ATP III), and (Lee 2014 CRA / NCEP-ATP III)). (c) Influence plot: as there are two marked datasets (which corresponds to Lin et al., 2014), this study has met the criteria as an influential study.



Supplementary Figure 5.3 Association between HDL-C and CRC incidence: (a) Forest plot; (b) Funnel plot. *CC* colon cancer, *CI* confidence interval, *CRC* colorectal cancer, *HDL*-C high-density lipoprotein-cholesterol, *M* men, *M-H* Mantel-Haenszel, *NCEP-ATP III* National Cholesterol Education Program-Adult Treatment Panel III, *RC* rectal cancer, *RR* risk ratio, *W* women.



Supplementary Figure 5.4 Additional analyses for the association between HDL-C and CRC incidence: (a) Funnel plot after adjustment to publication bias with the trim and fill method. One simulated positive study was added (hollow circle) to the pooled estimates from the meta-analysis (solid circles). The adjusted RR increased from (1.13; 95% CI 0.93-1.37) in the initial analysis to (1.18; 95% CI = 0.79-1.43) after adjustment. (b) Baujat plot: indicates that the 12th dataset (that falls to the top right quadrant of the Baujat plot which corresponds to (Jeon 2014 RC / Other)) has contributed to the overall heterogeneity and result. (c) Influence plot: as there is no marked study, no study has met the criteria as an influential study.