Supplemental Material D

Publication bias

TV-off: A funnel plot showed a roughly symmetrical distribution of effect sizes by standard error, and Egger's regression test for funnel plot asymmetry was not significant ($p = 0.137$). The trim and fill method did not impute missing studies; see Figure S2a.

Parental modeling: The funnel plot was slightly skewed to the right. Egger's regression test was not significant ($p = 0.253$). The trim and fill method added three studies, leading to an adjusted effect size of $r = 0.10$, 95% CI [0.06–0.13]; see Figure S2c.

Food quality: The funnel plot was slightly skewed to the right. Egger's regression test for funnel plot asymmetry was significant ($p = 0.03$). Trim and fill analysis method did not indicate any missing studies (see Figure S2b); therefore, we do not consider the threat of publication bias to be grave (see Rothstein, Sutton, & Borenstein, 2005).

Atmosphere: Egger's regression test was not significant ($p = 0.143$). The trim and fill method imputed three additional studies, resulting in an adjusted effect size of $r = 0.10$, 95% CI: [0.04–0.17]; see Figure S2d.

Involvement: The funnel plot was roughly symmetrical; Egger's regression test was not significant ($p = .726$) and the trim and fill method imputed one missing study, resulting in an adjusted effect size of r=0.08, 95% CI: [0.04-0.12]; see Figure S2e.

Duration: The funnel plot was skewed to the right. Egger's regression test for funnel plot asymmetry was significant ($p = 0.008$). Trim and fill analysis imputed three studies, resulting in an adjusted estimate of $r = .12$, 95% CI [0.02–0.23]; see Figure S2f. Although lower, the adjusted effect size was still significant; therefore the impact of meal duration can be considered modest (Rothstein et al., 2005).
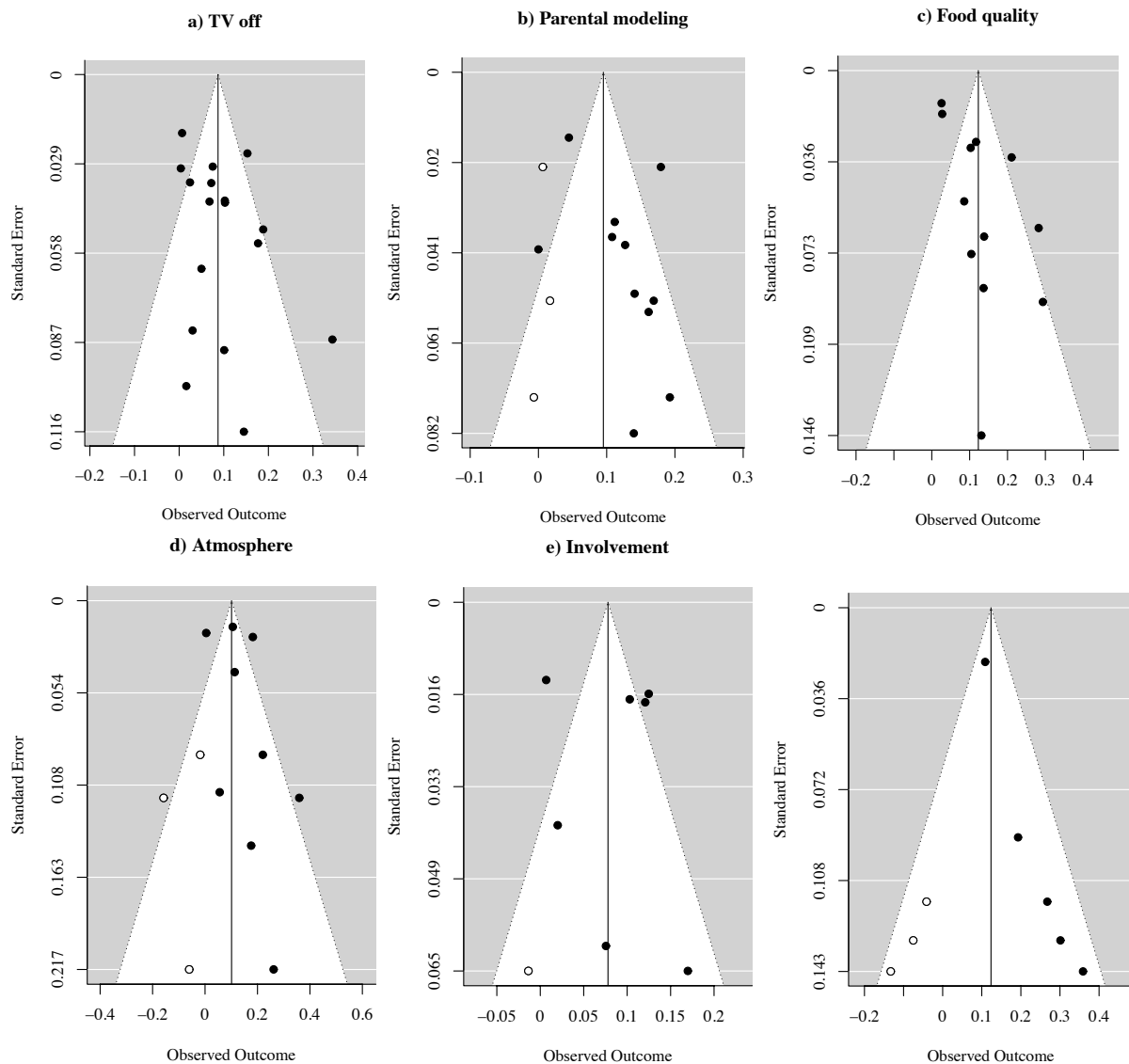
Figure S1. Funnel plots with trimmed and filled effect sizes for (a) TV off, (b) Food quality, (c) Parental modeling, (d) Atmosphere, (e) Involvement.
Note. The vertical lines reflect the pooled mean effect size after trim and fill correction. The diagonal lines are corresponding 95% confidence intervals. Solid circles are the original effect sizes; open circles, the imputed filled effect sizes.

References

Rothstein, H. R., Sutton, A. J., & Borenstein, M. (2005). *Publication bias in meta-analysis:*

Prevention, assessment and adjustment. West Sussex, United Kingdom: John Wiley &

Sons.

Author, Date	Building Block	r [95% CI]

Adolescents

Author, Date	Building Block	r [95% CI]
Ayala et al., 2007	Food quality	0.28 [0.16, 0.38]
Berge et al., 2013	Atmosphere	0.26 [−0.16, 0.60]
Fulkerson et al., 2011	Food quality	0.21 [0.14, 0.27]
Leech et al., 2014	Involvement	0.17 [0.04, 0.29]
Roos et al., 2014	TV off	0.15 [0.10, 0.20]
Chan & Sobal, 2011	Food quality	0.14 [−0.03, 0.30]
Berge et al., 2017	Involvement	0.12 [0.09, 0.16]
Chu et al., 2013	Involvement	0.12 [0.09, 0.15]
Stephens et al., 2011	Atmosphere	0.11 [0.03, 0.19]
Stephens et al., 2011	Parental modeling	0.11 [0.05, 0.18]
de Wit, 2015	Atmosphere	0.11 [0.08, 0.13]
Arcan et al., 2007	Food quality	0.10 [−0.04, 0.24]
Masse et al., 2012	Food quality	0.10 [0.04, 0.16]
Serrano et al., 2014	TV off	0.10 [−0.07, 0.27]
Pearson, 2017	TV off	0.07 [0.00, 0.14]
Stephens et al., 2011	TV off	0.07 [−0.01, 0.15]
Berge et al., 2014; Larson et al., 2015	Parental modeling	0.04 [0.02, 0.07]
Larson et al., 2013	Food quality	0.03 [−0.01, 0.06]
Babajafari et al., 2011	Food quality	0.03 [0.00, 0.05]
Santiago−Torres et al., 2014	TV off	0.02 [−0.18, 0.21]
Larson et al., 2006	Involvement	0.01 [−0.02, 0.03]
Larson et al., 2013	TV off	0.01 [−0.03, 0.04]
Weighted mean effect size for adolescents		0.09 [0.06, 0.12]

Children

Author, Date	Building Block	r [95% CI]
Berge et al., 2014	Atmosphere	0.34 [0.13, 0.53]
Jacobs & Fiese, 2007	Duration	0.34 [0.08, 0.56]
Coon et al., 2001	TV off	0.33 [0.17, 0.47]
Berkowitz et al., 2010	Duration	0.29 [0.04, 0.51]
Trofholz et al, 2017	Food quality	0.29 [0.11, 0.44]
Berge et al., 2014	Duration	0.26 [0.04, 0.46]
Fiese et al., 2012	Atmosphere	0.22 [0.04, 0.38]
Fiese et al., 2012	Duration	0.19 [0.02, 0.35]
Harris & Ramsey, 2015	Parental modeling	0.19 [0.05, 0.32]
Horodynski et al., 2010	TV off	0.19 [0.09, 0.28]
Skafida, 2013	Atmosphere	0.18 [0.14, 0.22]
Skafida, 2013	Parental modeling	0.18 [0.14, 0.22]
Wenhold & Harrison, 2018	TV off	0.18 [0.07, 0.28]
Jacobs & Fiese, 2007	Atmosphere	0.17 [−0.11, 0.43]
Frankel et al., 2018	Parental modeling	0.17 [0.07, 0.26]
Goldman et al., 2012	Parental modeling	0.16 [0.06, 0.26]
Berge et al., 2014	TV off	0.14 [−0.08, 0.36]
Sweetman et al., 2011	Parental modeling	0.14 [0.04, 0.23]
Draxten et al., 2014	Parental modeling	0.14 [−0.02, 0.29]
Appelhans et al., 2014	Food quality	0.14 [0.01, 0.26]
Ferran−Alexander, 2012	Food quality	0.13 [−0.15, 0.39]
Vereecken et al., 2004	Parental modeling	0.13 [0.05, 0.20]
Ayala et al., 2008	Food quality	0.12 [0.06, 0.17]
Skafida, 2013	Duration	0.11 [0.07, 0.15]
Murashima et al., 2011	Parental modeling	0.11 [0.04, 0.18]
de Jong et al., 2015	Involvement	0.10 [0.07, 0.14]
Petty et al., 2013	TV off	0.10 [0.02, 0.18]
Chan, 2018	TV off	0.10 [0.02, 0.18]
MacFarlane et al., 2009	Food quality	0.09 [−0.02, 0.19]
Spurrier et al., 2008	Involvement	0.08 [−0.04, 0.19]
Fitzpatrick et al., 2007	TV off	0.08 [0.02, 0.13]
Bergmeier et al., 2016	Atmosphere	0.06 [−0.16, 0.27]
Goldman et al., 2012	TV off	0.05 [−0.07, 0.17]
Hauser et al., 2014	TV off	0.02 [−0.04, 0.09]
Melbye et al., 2013	Involvement	0.02 [−0.06, 0.10]
Tremblay et al., 2010	Atmosphere	0.00 [−0.03, 0.04]
van Zutphen et al., 2006	TV off	0.00 [−0.06, 0.06]
Melbye et al., 2013	Parental modeling	0.00 [−0.08, 0.08]
Weighted mean effect size for children		0.12 [0.09, 0.15]

−0.3   0   0.3   0.6

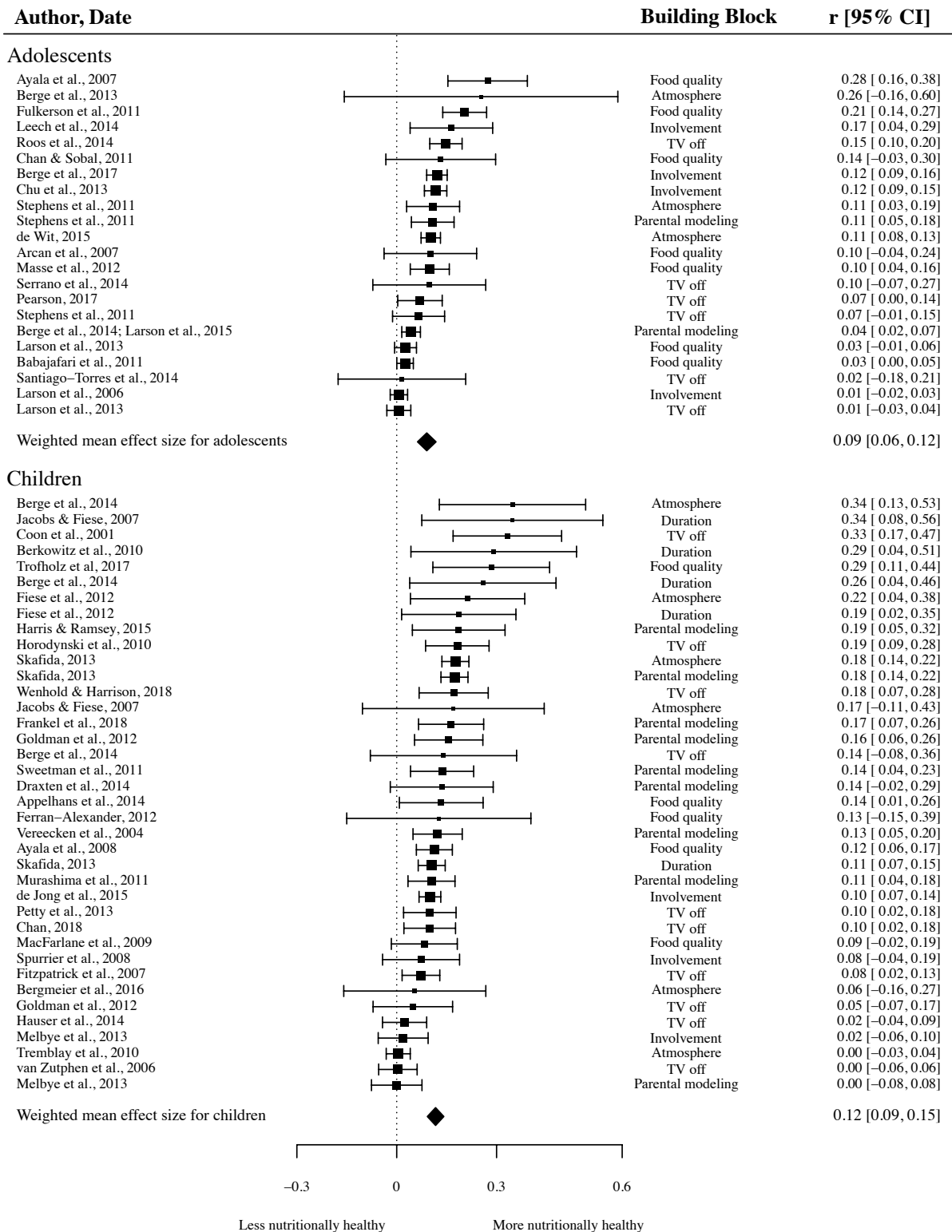Less nutritionally healthy   More nutritionally healthy

Figure S2. Forest plot showing the distribution of effect sizes across all mealtime building blocks, separately for adolescents and children.