

Table 3: Intervention outcomes: organised by behavioural target and then by alphabetical order of lead study author

Study reference and follow-up point	Outcome measure	Control group baseline mean n (SD/SE)	Intervention group baseline mean (SD/SE)	Control group endpoint mean (SD/SE) or proportion abstinent from smoking	Intervention group endpoint mean (SD/SE) or proportion abstinent from smoking	Follow-up outcome mean (SD/SE) or proportion abstinent from smoking	Intervention effect as reported in the paper
DIET							
Ahluwalia ^{31,32} (diet) 6 month	SR Portions of fruit and vegetables per day, last 7 days	2.17 (1.63)	2.06 (1.73)	2.44 (2.42)	3.10 (2.48)		<ul style="list-style-type: none"> Mixed linear model found significant difference between groups ($p=.04$)
Auslander ³³ (diet) Post test: 3 month post baseline	SR mean % of calories from fat	36%	35.9%	35.6%	32.1%	<u>6 month follow-up</u> C 34.5% IV 32.3%	<ul style="list-style-type: none"> ANCOVA test and post-hoc tests revealed significant difference between intervention and control group at 3 month post test [$t=-4.01$ $p<.01$] and 6 month follow-up $-[2.50$ $p<.05]$
Chang ^{34,35} (diet) 2 months	SR cups of fruit and vegetables per day	4.25 (2.91)	4.87 (4.41)	4.73 (3.41)	6.33 (3.42)	<u>8 month follow-up</u> C 5.56 (3.50) IV 3.87 (3.52)	<ul style="list-style-type: none"> General linear mixed model found no significant intervention effect at either time point $p>.05$

Elder ³⁶ (2 arms) M2 time point 12 weeks	SR Mean grams of fat per day	56.8 (SD25.2)	Tailored IV group 59 (SD28.6) Promotora IV group 60.2 (SD26.6)	49.1 (SE1.9)	Tailored IV group 49.8 (SE2) Promotora IV group 43.1 (SE1.9)	<u>M3 time point 6 months post- intervention</u> C 48.2 (SE2.0) tailored IV 50(SE2) promotora IV 46.4 (SE2) <u>M4 timepoint '12 months post- intervention</u> C 51.9 (SE2.3) tailored IV 45.3 (SE2.4) promotora IV 50.4 (SE2.3)	<ul style="list-style-type: none"> ▪ Significant differences between groups reported at M2 [$F(2,309)=3.73, p=0.025$] Group differences were not maintained at M3 or M4 (not further specified).
Emmons ³⁷ (diet) Endpoint	SR Fruit and veg servings per day	3.19 (SE0.062)	3.28 (SE0.062)	3.13 (SE0.064)	3.57 (SE 0.064)	-	<ul style="list-style-type: none"> ▪ Significantly greater changes in IV group than C group $p=.005$
Gans ³⁸ (3 arms)	SR Fruit and veg servings per day	NS	NS	Change from baseline 0.42 (2.51)	Change from baseline	<u>7 months</u> C 0.24 (2.52),	<ul style="list-style-type: none"> ▪ At 4 months significant differences between C and ST

4 months					MT IV group 0.72 (2.55) MTI IV group 0.36 (2.58) ST IV group 0.92 (2.92)	MTIV 0.68 (2.63), MTI IV 0.49 (2.58) ST 0.58 (2.69)	(<i>p</i> =.01), ST and MTI (<i>p</i> =.01), MT and MTI (<i>p</i> =.01), C and MT (<i>p</i> =.05) ▪ At 7 month follow-up, only significant differences between C and MT (<i>p</i> =.02)
Jackson ³⁹ (diet) 4 weeks	SR fruit and vegetable intake per day	3.3 (1.7)	3.0 (1.6)	3.1 (1.5) change of -0.2 (1.5)	3.44 (1.6) change of +0.44 (1.6)	-	▪ T test showed significant difference between groups <i>p</i> <.001
Keyserling ^{40,41} (diet) 6 month assessment	End point data: objectively measured fruit and veg intake, via median serum carotenoids (ug/dL) Follow-up data: fruit and vegetable consumption via Dietary Risk Assessment (score range 0-103,	3.8(SE0.05)	3.8(0.06)	3.9 (SE0.03)	4.0 (SE0.03)	<u>12 month assessment:</u> C 32.8(SE0.7) IV 29.2 (SE0.7)	▪ Marginally significant difference between adjusted mean objective measures at 6 month assessment (<i>p</i> =.05) ▪ Significant difference at follow-up 12 month assessment for Dietary Risk Scores (<i>p</i> <.001)

	lower=healthier)						
Nitzke ^{42,43} 12 month assessment	Daily fruit and vegetable intake, servings	4.72(2.61)	4.75 (2.86)	4.60 (2.45)	4.90 (2.35)	-	<ul style="list-style-type: none"> Significant intervention effect from ANOVA [$F=3.49$, $p<.05$]
Parra-Medina ⁴⁴ 12 month assessment	Dietary risk assessment score (rated between 0 and 104, where lower scores equal a lower intake of saturated fat and cholesterol)	32.1 (8.5)	32.0 (9.1)	26.8 (7.3)	21.3 (6.9)		<ul style="list-style-type: none"> Mean reductions in dietary risk assessment score were significantly greater amongst intervention participants ($p<.001$)
Sanchez-Johnsen ⁴⁵ (diet) 6 week assessment	SR fruit and veg servings per day	6.11(3.11)	5.66 (3.80)	4.63 (2.51)	5.33 (3.40)	-	<ul style="list-style-type: none"> ANOVA test suggested significant intervention effect [$F=4.716$, $p=.04$]
Stephoe ⁴⁶ 12 months	SR fruit and veg servings per day	3.67 (2.0)	3.6 (1.81)	0.87 (2.22)	1.49 (2.2)	-	<ul style="list-style-type: none"> Significant difference in change =0.62 servings, [$p=.021$, 95% CI 0.09 to 1.13]
Tessaro ⁴⁷	SR fruit and veg	3.87 (1.90)	3.90 (1.89)	3.55 (2.24)	3.74 (2.11)		<ul style="list-style-type: none"> Paired t test indicated no

3 months	servings per day						significant difference between 3 month follow-up scores ($p=.32$)
PHYSICAL ACTIVITY							
Armitage ²⁵ 1 month	SR metabolic equivalent minutes exercise per week (MET mins)	896.89 (1657.94)	733.12 (945.15)	868.33 (1659.01)	1080.62 (1317.70)	-	▪ Significant intervention effect according to ANCOVA analysis [$F(1,66)=7.28$, $p=.009$]
Chang ^{34,35} (Physical activity) 2 months	SR metabolic equivalent minutes exercise per week (MET mins)	27.28 (29.85)	29.76 (26.74)	33.51 (29.34)	41.09 (29.87)	<u>8 month follow-up</u> C 36.02 (29.3) IV 53.20 (30.24)	▪ General linear mixed model, no significant effect at 2 months (effect size $d=0.25$, CI -0.24 to 0.74) or at 8 months (effect size $d=0.57$, CI -0.04 to 1.18)
Dangour ^{48,49} 24 month assessment	Objectively measured walking capacity: metres walked in six minutes	452.8 (78.4)	447.9 (72.4)	432.8 (77.8)	466.5 (86.7)		▪ Significant difference between groups ($p=.001$)
Dutton ⁵⁰ Post-treatment	SR hours exercise per week	NS	NS	Mean change from baseline: 0.59(10.99)	Mean change from baseline: 0.75 (7.58)		▪ ANOVA test found no significant difference between conditions ($p=.65$)

Emmons ³⁷ (physical activity) Follow-up	SR Mean hours per week	4.93 (SE0.16)	4.8 (SE0.16)	4.91 (SE0.16)	4.77 (0.17).		<ul style="list-style-type: none"> No significant differences between groups at follow-up [$p=.51$]
Jackson ³⁹ (Physical activity) 4 weeks	SR minutes per week of physical activity	122 (SD not reported)	127 (SD not reported)	136 (135) [change of 14]	155 (145) [change of 28]		<ul style="list-style-type: none"> Means not significantly different at 4 week follow-up according to an unpaired Student's t-test $p=.42$
Keyserling ^{40,41} (Physical activity) 6 month assessment	Objectively measured PA; accelerometer moderate minutes per day	13(SE1.2)	11.6 (SE1.3)	11.7(SE1.1)	12.2(SE1.1)	<u>12 month follow-up</u> C12.5(SE1.1), IV 11.0(SE1.1)	<ul style="list-style-type: none"> Not significantly different according to ANCOVA, at 6 months [$p=.74$] or 12 month follow-up [$p=.33$]
Marcus ⁵¹ 6 months post- intervention follow-up	SR moderate to vigorous minutes of physical activity per week	3.02 (10.3)	1.87 (6.86)	32.98 (82.82)	73.36 (89.73)		<ul style="list-style-type: none"> Intervention group significantly more active than control group at 6 months, according to a longitudinal regression controlling for baseline differences ($p<.001$)
Olvera ^{52,53} 12 week assessment	SR activity level on a scale from 0 (sedentary) to 7 (vigorous)	1.2 (1.5)	1.4 (0.9)	1.2 (0.9)	2.1 (1.6)		<ul style="list-style-type: none"> No significant effect according to ANCOVA [F 1.35, $p=2.57$, $d=.4$]
Pekmezi ⁵⁴	SR minutes of	11.88	16.56	96.79 (118.49)	147.27 (241.55)		<ul style="list-style-type: none"> No significant between group

6 months	physical activity per week	(21.99)	(25.76)				differences according to ANOVA [$F(1,91)=1.37$, $p=.25$]
Sanchez-Johnsen ⁴⁵ (Physical activity) 6 week assessment	SR times engaged in activity designed to improve fitness on a scale from 1 (0 times) to 9 (more than 7 times)	2.11 (2.18)	2.11 (1.75)	2.98 (2.48)	3.66 (1.78)		<ul style="list-style-type: none"> No significant difference according to ANCOVA [$F=0.634$, $p=.434$]
Whitehead ⁵⁵ 1 month assessment	SR time spent in physical activities for last 7 days, yielding an estimated caloric expenditure	2507.82 (SE 2.64)	2507.35 (2.55 SE)	2506.72 (2.65)	2511.76 (2.56)	<u>6 month assessment</u> C 2507.67 (2.98) IV 2511.2 (2.89)	<ul style="list-style-type: none"> A doubly multivariate ANOVA with planned comparisons showed significant differential group changes at 1 month [$F(1,205)=17.98$, $p<.001$] and 6 months [$F(1,205)=4.07$, $p<.05$]
SMOKING							
Ahluwalia ^{31,32} (Smoking) 6 month	Biochemically confirmed smoking	All smoked at baseline	All smoked at baseline	9 of 93 abstinent	4 of 57 abstinent	-	<ul style="list-style-type: none"> Adjusted Mantel-Haenszel chi-square statistic revealed no significant difference between

assessment	abstinence 7 days						groups ($p=.73$).
Andrews ^{56,57} 6 month assessment	Biochemically confirmed smoking abstinence 7 days			3 of 52 abstinent	14 of 51 abstinent	-	<ul style="list-style-type: none"> ▪ Odds ratio 4.9, CI -1.51 to 15.89 ▪ Main effect of intervention group variable in multiple regression, $p=.001$.
Bullock ⁵⁸ 2 arms End of pregnancy (T2)	Biochemically confirmed smoking abstinence last 7 days			B control group 27 of 141 C control group 22 of 128	SS+B IV group 22 of 129 SS IV group 29 of 132	<u>Post-delivery follow up (T3)</u> B control group 19 if 141 C control group 17 of 128 SS+B IV group 16 of 129 SS IV group 15 of 132	<ul style="list-style-type: none"> ▪ Likelihood ratio chi-square not significantly different $X^2=1.33$, $p=.72$ at T2 end of pregnancy $X^2=1.39$, $p=.71$ at T3 post-delivery follow-up
Dornelas ⁵⁹ End of pregnancy assessment	Biochemically confirmed smoking abstinence for previous 7 days	-	-	5 of 52	15 of 53	<u>Six months post-partum</u> C2 of 52 IV 5 of 53	<ul style="list-style-type: none"> ▪ Significant difference at end of pregnancy assessment only, according to chi-squared test $X^2=5.94(1)$, $p=.015$.
Fang ⁶⁰ 1 week	SR smoking abstinence, last 7	-	-	8 of 32	15 of 34	<u>1 month</u> C10 of 32, IV	Intervention and Controls not significantly different at 1

assessment	days					19 of 34 <u>3 months</u> C9 of 32, IV 16 of 34	week follow-up according to chi-square test $X^2(1)=2.51$, $p=.11$. Significant differences at 1 month [$X^2(1)=4.06$, $p<0.05$] but not at 3 months [$\chi^2(1)=2.51$, $p=0.11$]
Froelicher ⁶¹ 6 month assessment	Biochemically confirmed abstinence	-	-	3 of 26	3 of 22	<u>12 months</u> C1 of 19, IV 3 of 19	▪ Not significantly different – not further specified.
Gordon ⁶² 7.5 months end point	SR smoking abstinence for last 6 months	-	-	8 of 439	28 of 530	-	▪ Significant between groups effect [$F(1,12)=14.62$, $p<.01$].
Liles ⁶³ 18 month assessment	Biochemically confirmed quit for at least 7 days over study period	-	-	5 of 74	15 of 76	-	▪ Fisher's exact test: difference statistically significant $p=.029$
Miller ⁶⁴ 3 month assessment	SR smoking abstinence: previous day	-	-	97 of 377	397 of 1000	<u>6 months</u> C80 of 377, IV 309 of 1000 <u>12 months</u> C83 of 377 IV 191 of 1000	▪ Chi squared test: significant difference reported at 3 and 6 month assessment [$p\leq.001$] but not at 12 months [p value not specified]
Okuyemi ⁶⁵	Biochemically	-	-	19 of 214	20 of 216	<u>26 weeks</u>	▪ No significant group

8 weeks (post-intervention)	confirmed smoking abstinence: previous seven days					(<u>follow-up</u>) C 12 of 214 IV 20 of 216	difference according to chi squared test at week 8 ($p=0.89$) or week 26 ($p=0.15$)
Reitzel ⁶⁶ Follow-up week 26 post-partum	Biochemically confirmed smoking abstinence following delivery of baby	None smoked at baseline (relapse prevention intervention)	None smoked at baseline (relapse prevention intervention)	19 of 115	31 of 136		<ul style="list-style-type: none"> Main effect of treatment approached significance according to a continuation ratio logit model [$X^2(1)=3.10$, $p=.08$]
Solomon 2000 ⁶⁷ 3 months	Biochemically confirmed smoking abstinence: previous seven days	-	-	30 of 108	44 of 106	<u>6 months</u> C20 of 108 IV 24 of 106	<ul style="list-style-type: none"> Experimental condition strongest predictor in logistic regression at 3 months: OR 2, CI 1.09 TO 3.68. Not a significant predictor at 6 month follow-up (not further specified)
Solomon 2005 ⁶⁸ 3 months	SR smoking abstinence, last 7 days	-	-	58 of 159	82 of 171	<u>6 months</u> C 48 of 159 IV 65 of 171	<ul style="list-style-type: none"> Significant difference at 3 months [$p=.035$] according to Chi square test but not at 6 month follow-up [p value not

							specified]
Sykes ⁶⁹ Follow-up	Biochemically confirmed smoking abstinence: previous seven days	-	-	6 of 107	21 of 122		<ul style="list-style-type: none"> • Significant difference compared to controls [X²(2)=22.339, p<.001]
Volpp ⁷⁰ 30 day assessment	Biochemically confirmed smoking abstinence: previous seven days	-	-	4 of 87	15 of 92	<u>6 months</u> C 4 of 87 IV 6 of 92	<ul style="list-style-type: none"> ▪ Significant difference at 30 day assessment according to Chi squared test [X²=6.46, p=.01], but not at 6 month assessment [X² = 0.31, p= 0.57]
Wu ⁷¹ 6 month assessment	Biochemically confirmed quit at follow-up	-	-	20 of 62	40 of 60	-	<ul style="list-style-type: none"> ▪ Significant difference according to logistic regression, OR 4.32, CI: 2.01 to 9.27, p<.001

Note. SR=self-reported NS=not specified, C=control group IV= intervention group SE=standard error, OR=odds ratio, CI=confidence interval. $p < .05$ was considered statistically significant. Unless otherwise specified, in smoking interventions no participants were abstinent from smoking at baseline