Multimedia Appendix 1 Overview of study and Internet characteristics and objective outcome measures of exposure to Internet interventions presented to behavior

Study ^a , country	Target behavior, target group (N)	Potential exposure promoting elements, within main categories ^b	Objective outcome measure regarding exposure to Internet intervention ^b
A. Physical activity			
1. Carr (2008) [36], USA	Target behavior: physical activity Target group: sedentary overweight non- smoking adults (N=32) with a BMI between 18- 40	IBC: 1. goal setting; 2. activity planning; 3. self-monitoring; 4. feedback on progress IE: virtual partner stories, quizzes, website links PS: - CS: weekly/bi-weekly e-mail/phone contact with facilitator EP: - UD: provision of new lessons II: -	Login: every 11 th day login during the intervention IBC: avg. 13 of 44 online journal activities (30%)
2. Dunton (2008) [37], USA	Target behavior: physical activity Target group: healthy and racially/ethnically- diverse females (N=156) aged 21-65	IBC: 1. feedback on performance, cognitive constructs, and barrier identification and solution IE, PS, CS: - EP: 10 weekly follow-up e-mail newsletters with generic PA promotion information UD, II: -	Login: 0 times 5%; 1-2 times: 21%; 3-5 times: 37%; 6-10 times: 29%; >10 times: 8% EP: avg. 7.44 out of 10 ± 4.1 e-mails opened; 6.65 out of 25 ± 6.33 website links embedded in e-mails were opened (27%)
3. Ferney (2008) [28], Australia	Target behavior: walking and overall physical activity Target group: adults (N=106) aged 45-60 who did not meet current PA guidelines	a. IBC: 1. goal setting; 2. self-monitoring IE: target heart rate calculator, searchable database of local PA opportunities, website links PS: bulletin board CS: possibility to e-mail counselor EP: weekly/bi-weekly/maintenance e-mails with tailored feedback UD: bi-weekly updated news items II: - b. IBC, IE, PS, CS: -	dLogin: avg. 8.2 logins ± 9.0 IBC: 13% used self-monitoring tool; 52% completed at least 1 tailored quiz, avg. 2.2 ± 1.4 quizzes PS: 1 participant posted message on bulletin board CS: 25% e-mailed counselor
		EP: e-mail with non-tailored advice UD, II: -	Login: avg. 2.8 logins \pm 2.4
4. Herman (2006) [38], USA	Target behavior: physical activity Target group: employees of multinational information technology company (N=67,324)	IBC: 1. goal setting; 2. self-monitoring; 3. feedback on progress IE, PS: - CS: ask the expert EP: e-mails with educational and motivational content UD: - II: mementos and cash rebate	Access program content: 53%

5. Hurling (2007) [39], UK	Target behavior: total and moderate to vigorous physical activity Target group: adults (N=77) aged 30-55 with a BMI of 19-30 who were not vigorously active	IBC: 1. feedback on performance, cognitive constructs, and barrier identification and solutions; 2. activity planning; 3. self-monitoring; 4. feedback on progress IE: information library PS: message board CS: - EP: e-mail and/or mobile phone prompts (optional), e-mail and/or mobile phone messages with motivational content (optional) UD, II: -	dVisit duration: avg. 7.5 min ± 0.9 d Login: avg. 2.9 logins ± 0.5 per week resulting in avg. 26.1 logins for 9 weeks IBC: use of activity charts (showing the accelerometer feedback data), schedule (weekly exercise planner) by at least 33% PS: use of chat-room style message board by at least 33%
6. Hurling (2006) [40], UK	Target behavior: physical activity/exercise Target group: adult employees (N=66) aged 23-54 years	a. IBC: 1. feedback on performance, cognitive constructs, and barrier identification and solutions; 2. activity planning; 3. self-monitoring; 4. feedback on progress IE: information library PS: message board CS: - EP: e-mail and/or mobile phone prompts (optional), e-mail and/or mobile phone messages with motivational content (optional) UD, II: -	^d Login: avg. 1.4 logins per week resulting in avg. 14 logins for 10 weeks ^d Completion whole intervention: 75%
		b. IBC: 1. feedback on barrier identification and solution; 2. self-monitoring; 3. feedback on progress IE, PS, CS, EP, UD, II: -	^d Login: avg. 1.0 logins per week; avg. 10 logins for 10 weeks ^d Completion whole intervention: 43%
7. Lewis (2008) [41], Marcus (2007) [42], USA	Target behavior: physical activity and exercise Target group: healthy sedentary adults (N=249) aged 18 and older who were ≤ 90 minutes per week physical active	IBC: 1. feedback on performance and cognitive constructs; 2. goal setting; 3. self-monitoring; 4. feedback on progress IE: website links PS, CS: - EP: e-mail as prompts UD: monthly tailored feedback reports, daily update with tip of the day II: -	^d Duration visit: avg. 7.1 min per session; total avg. 356 min in one year Login: median 50 logins
		b. IBC: 1. self-monitoring IE: website links PS, CS: - EP: e-mail as prompts UD, II: -	^d Duration visit: avg. 6.8 min per session; total avg. 260 min in one year Login: median 38 logins
8. Leslie (2005) [16], Australia	Target behavior: physical activity and exercise Target group: academic and general staff of medium-sized university (N=655)	IBC: 1. feedback on cognitive constructs; 2. goal setting; 3. activity planning IE: target heart rate calculator, rotating photo images of PA options PS, CS: - EP: 4 bi-weekly personalized stage-targeted e-mails UD: daily update with tip of the day II: -	Landing website: 4114 hits Access program content: 46% dDuration visit: avg. 9 min dPages visited: avg. 18 pages IBC: 66% completed at least on stage-based quiz
9. Plotnikoff (2006) [43], Canada	Target behavior: raise awareness for physical activity Target group: general national population (N=3175)	IBC: 1. goal setting; 2. activity planning; 3. self-monitoring; 4. feedback on progress IE, PS, CS, EP, UD, II: -	^d Revisit website: 15%

10. Spittaels (2006) [44], Belgium	Target behavior: physical activity Target group: visitors (N=55) of a university hospital aged 20 to 55	IBC: 1. feedback on performance, cognitive constructs, and barrier identification; 2. activity planning IE: website links PS: forum CS, EP, UD, II: -	Access program content: 28% (46% distributed with personal contact, 7% without personal contact) ^d Completion intervention first visit: 90% (89% distributed with personal contact, 100% without personal contact) IBC/IE: 22% of the visitors used one or more supplementary parts
11. Spittaels (2007) [45], Belgium	Target behavior: physical activity Target group: adults aged 20 to 55 (N=434)	a. IBC: 1. feedback on performance and cognitive constructs; 2. activity planning; 3. feedback on progress IE: website links PS: forum CS: - EP: 7 non-tailored e-mails as prompts to revisit UD: new tailored advice II: - b. IBC: 1. feedback on performance and cognitive constructs; 2. activity planning IE: website links PS: forum CS, EP, UD, II: -	^a Revisit website: 31% to receive second tailored advice
12. Steele (2007) [46, 47], Australia	Target behavior: moderate intensity and lifestyle physical activity Target group: inactive adults (N=192) aged 18 and older being functionally mobile	a. IBC: 1. feedback on cognitive constructs; 2. goal setting; 3. activity planning; 4. self-monitoring IE: quizzes, multimedia video clips PS: - CS: access to online support person EP: weekly e-mail as prompts UD: weekly modules II: opportunity to receive incentives b. IBC: 1. feedback on cognitive constructs; 2. goal setting; 3. activity planning; 4. self-monitoring IE: multimedia video clips	^d Login: avg. 11.8 logins [range 2-90] ^d Login: avg. 11.5 logins [range 2-102]
B. Nutrition		PS: - CS: access to online support person EP: weekly e-mail as prompts UD: weekly modules II: -	
13. Buller (2008) [48],	Target behavior: fruit and vegetable	IBC: -	Access intervention content: 51%
Woodall 2007 [49], USA	consumption Target group: adults (N=755) living in specific area for at least 6 months and being older than 18 years	IE: website links, community directory PS: - CS: community outreach trainer for questions/problems website EP: email as prompts UD: new or updated information II: every 2 months small gift	dDuration visit: avg. of 22.2 minutes total time [range 0-322.7] meaning avg. of 6.7 min per login dLogin: avg. of 3.3 logins [range 1-39] E-mail: 23% responded to at least one of the e-mails by logging in within 5 days of e-mail was sent; 6 participants responded to all of the messages; those who responded to at least one email, 51% responded to half or more of the messages, while 49% responded to fewer than half.
14. Huang (2006) [50], Australia	Target behavior: purchases with saturated fat Target group: adult consumers (N=497) using a commercial online Internet supermarket shopping site	IBC: feedback on performance IE: point of purchase decision making PS, CS, EP, UD, II: - IBC, IE, PS, CS, EP, UD, II: -	Landing website: total of 11% for both interventions ^d Completing first visit: 89% Login: median of 3 shopping episodes [range 1-20] ^d Completing first visit: 94%

15. McNeill (2007) [51], USA 16. Papadaki (2005) [52], Papadaki (2006)	Target behavior: fruit and vegetable consumption Target group: adults (N=52) residing in low-income multiethnic neighborhoods Target behavior: Consumption of four key components of the Mediterranean diet	IBC: - IE: recipes database PS, CS: - EP: e-mail as prompt, and e-mail with feedback on performance and tips on increasing consumption UD: - II: raffle for a small incentive IBC: - IE: self-assessment quizzes, recipe section	Access website content: 75% dPages visited: avg. 24.5 pages out of 192 distinct pages dLogin: avg. 3.8 logins E-mail: 56% login after first reminder; 27% after second reminder; 56% after final reminder Landing website: avg. 150 hits each month dLogin: avg. 15.5 logins
[53], Scotland	Target group: healthy females university employees (N=72) aged 25 to 55	PS: bulletin board CS: - EP: 6 e-mails with feedback letters on performance, cognitive constructs, barrier identification and solution, progress, and progress; weekly e-mails as prompts including tips for relevant sections at the website with respect to goal UD: regular updates with tip of the day and new recipes II: -	
C. Weight management			
17. Cussler (2008) [54], USA	Target behavior: weight maintenance through diet, physical activity and weight gain prevention Target group: premenopausal women (N=135) aged 40 to 55 with BMI between 25 and 38, non smokers	IBC: 1. self-monitoring; 2. feedback on progress IE: communication tools, website links PS: self-organized support groups meeting online, bulletin board, chat rooms CS: optional counselor support through e-mail, bulletin board and chat EP: e-mail as intervention content UD: new added information/articles II: several web-based incentive programs	IBC: diet log: 90%, avg. 53.4 ± 62.3 [range 0-299]; weekly weight log: 100%, avg. 26.9 ± 19.9 [range 1-69]; physical activity log: 84%, avg. 67.5 ± 76.3 [range 0-294]; 'your week' log: 71%, avg. 9.2 ± 12.2 [range 0-42] PS: 81%; avg. 84.3 ± 157.1 [range 0-835]
18. Glasgow (2007) [21], USA	Target behavior: weight loss through nutrition and physical activity Target group: health plan members (N=2311) with BMI < 30 for general membership and < 25 for those with chronic disease	a. IBC: 1. feedback on performance, cognitive constructs, and barrier identification and solution; 2. goal setting; 3. action planning IE, PS, CS: - EP: 6 e-mail as prompt to view follow-up action plans and tailored newsletters UD: 6 tailored newsletters II: -	Access program content: 13% accessed initial program content; 6% accessed extended program content
		b. IBC: 1. feedback on performance, cognitive constructs, barrier identification and solution; 2. goal setting; 3. action planning IE, PS, CS: - EP: 3 e-mails as prompt to view follow-up action plans UD: 3 tailored newsletters II: -	Access program content: 62% accessed initial program content; 25% accessed extended program content
		c. IBC: 1. feedback on performance, cognitive constructs, barrier identification and solution; 2. action planning IE, PS, CS: - EP: 6 e-mails as prompt to view follow-up action plans and tailored newsletters UD: 6 tailored newsletters II: -	Access program content: 19% accessed initial program content; 8% accessed extended program content

		d. IBC: 1. feedback on performance, cognitive constructs, barrier identification and solution; 2. action planning IE, PS, CS: - EP: 3 e-mails as prompt to view follow-up action plans UD: 3 tailored newsletters II: -	Access program content: 90% accessed initial program content; 49% accessed extended program content
19. Gold (2007) [55], USA ^c	Target behavior: weight loss through reducing calorie intake and increase aerobic activity Target group: adults (N=124) aged 18 and older with a BMI between 25 and 39.9	 a. IBC: 1. feedback on performance; 2. goal setting; 3. self-monitoring; 4. feedback on progress IE: contests, menu/recipe planner, food and exercise-calorie database, target heart rate, BMI calculator PS: bulletin boards, e-mail possibilities with peers CS: weekly/bi-weekly therapist-led chat meetings; weekly/bi-weekly e-mails from therapist with feedback on completed assignments EP: weekly/biweekly e-mails with intervention content from counselor UD: weekly new lesson; weekly updated story, new flashes and tips; periodically updated motivation page and local events guide II: periodically contests with prizes 	Login: median 193/0-6 [range 120-309]; 90/6-12 months [range 21-154] IBC: self-reported weight median 24/0-6 months [range 20-25]; 8/6-12 months [range 2-12] CS: attendance online meeting median 21/0-6 months [range 19-23); 11/6-12 months [range 6-14]
		b. IBC: 1. feedback on cognitive constructs; 2. self-monitoring; 3. feedback on progress IE: FAQ with expert responses PS: chat-rooms, discussion boards, mentor section to team up with more experienced member CS: professional facilitated online meetings EP, UD, II: -	Login: median 47/0-6 months [range 25-65]; 14/6-12 months [range 8-23] IBC: self-reported weight median 16/0-6 months [range 8-22]; 8/6-12 months [range 2-13] CS: attendance online meeting median 1/0-6 months [range 0-3]; 0/6-12 months [range 0-0]
20. Harvey-Berino 2002) [56], USA	Target behavior: weight loss maintenance through modification of eating and exercise habits Target group: overweight adults (N=122) aged 18 and older with a BMI >25	IBC: 1. self-monitoring IE: short videos from group therapist PS: self-initiated chat room meetings, bulletin board CS: counselor support through bi-weekly chat sessions and e-mails EP: bi-weekly e-mails from group therapist UD: - II: participation in weekly \$25-lottery and opportunity to earn points for lottery tickets	IBC: submitting online date 19% CS: attendance chat sessions 39%
21. Hunter (2008) [57], USA	Target behavior: weight gain prevention and weight loss through restricting calorie intake and fat intake and increasing physical activity Target group: air force personnel (N=446) aged 18 to 65 with a BMI > 25 for women and > 27.5 for men and remain in local area for 1 year	IBC: 1. goal setting; 2. self-monitoring IE: quizzes PS: - CS: internet counselor provided weekly feedback on performance and progress EP: internet counselor made two brief motivational interviewing telephone calls UD: weekly lessons II: -	dLogin: avg. 49.1 logins [range 1-707]
22. McConnon (2007) [58], UK	Target behavior: Weight loss through dietary and physical activity Target group: adults (N=221) aged 18 to 65 with a BMI > 30	IBC: 1. feedback on performance; 2. self-monitoring; 3. feedback on progress IE, PS, CS: - EP: e-mails as prompts UD, II: -	^d Login: avg. 15.8 times ± 15.2 [range 1-77]

23. McCoy (2005) [59], Australia	Target behavior: weight loss through changing physical activity and dietary behavior Target group: adults (N=808) of the general population	IBC: 1. feedback on cognitive constructs; 2. action planning IE, PS, CS, EP, UD, II: -	Access program content: 68% Pages visited: participants viewed in total 83,111 pages Login: participants used the program in total 6058 times with avg. 29 homepage visits per participant IBC: participants used in total the wellness record page 1792 times, the exercise planner 2487 times, and the diet planner 1344 times
24. Micco (2007) [60], USA ^c	Target behavior: weight loss through changing eating and exercise behavior Target group: Adults (N=123) aged 18 and older with a BMI between 25 and 39.9, nonsmoking	a. IBC: 1. feedback on performance; 2. goal setting; 3. self-monitoring; 4. feedback on progress IE: contests, menu/recipe planner, food and exercise-calorie database, target heart rate, BMI calculator PS: bulletin boards, e-mail possibilities with peers CS: weekly/bi-weekly therapist-led chat meetings; weekly/bi-weekly e-mails from therapist with feedback on completed assignments EP: weekly/biweekly e-mails with intervention content from counselor UD: weekly new lesson; weekly updated story, new flashes and tips; periodically updated motivation page and local events guide II: periodically contests with prizes	Login: 0-6 months total of 223 hits; 7-12 months total of 99 hits IE: use BMI calculator avg. 2.6 times ± 3.0 CS: attendance online meetings 0-6 months 76% ± 21%; 7-12 months: 58% ± 33%
		b. IBC: 1. feedback on performance; 2. goal setting; 3. self-monitoring; 4. feedback on progress IE: contests, menu/recipe planner, food and exercise-calorie database, target heart rate, BMI calculator PS: bulletin boards, e-mail possibilities with peers CS, EP: - UD: weekly new lesson; weekly updated story, new flashes and tips; periodically updated motivation page and local events guide II: periodically contests with prizes	Login: 0-6 months total of 206 hits; 7-12 months total of 90 hits IE: use BMI calculator avg. 1.0 times ± 1.5 CS: attendance online meetings 0-6 months 54% ± 14%; 7-12 months: 55% ± 34%
25. Petersen (2008) 61], USA	Target behavior: weight management by creating life long habits Target group: Employees of a multinational information technology company (N=7743)	IBC: 1. feedback on performance; 2. goal setting; 3. self-monitoring; 4. feedback on progress IE: interactive tools, e.g. meal planners, grocery lists, serving size calculator, information library PS: message boards CS: expert assistance EP: weekly e-mail newsletters, e-mails individualized to visitors' goals UD: - II: 'fictive' points that can be earned in interaction with website features	Access program content: 6% Login: 0-2 days 42%; 3-11 days 36%; ≥12 days 22%
26. Tate (2001) [62], USA	Target behavior: weight loss through calorie restriction and increased physical activity Target group: Overweight hospital employees (N=91) aged 18 to 60 with a BMI of 25 to 36	a. IBC: 1. self-monitoring IE: website links PS: bulletin board CS: weekly e-mail from therapist with feedback on progress, recommendations and strategies for improvement, answers on questions and encouragement EP: weekly behavioral weight loss lesson, and personal e-mail to motivate to continue for participants not sending log UD, II: -	IBC: mean submission of 13.65 ± 6.4 self-monitoring diaries PS: 28% posted a note on bulletin board [range 1-7] dLogin: avg. 19 logins ± 10.9
		b. IBC: 1. self-monitoring IE: website links PS, CS, EP, UD, II: -	^d Login: avg. 8.5 logins ± 10.4

27. Tate (2006) [63], USA	Target behavior: weight loss through calorie restriction and increased physical activity	a. IBC: 1. feedback on performance; 2. self-monitoring; 3. feedback on progress	Login: median 20 logins on both public and study website (median 2 logins to public website)
	Target group: overweight adults (N=192) aged	IE: -	IBC: avg. 11.4 ± 9.2 online diary submissions
	20 to 65 with a BMI of 27 to 40, willing to use	PS: e-buddy network system, message board	
	meal replacements	CS: -	
		EP: 2 weekly emails with prompts, behavioral lessons and weight loss	
		tips UD. II: -	
		b. IBC: 1. self-monitoring	Login: median 32.5 logins on both public and study website (median 9
		IE: -	logins to public website)
		PS: e-buddy network system, message board	IBC: avg. 17.2 ± 8.7 online diary submissions
		CS: counselor support containing feedback on progress through weekly	
		e-mails	
		EP: 2 weekly emails with prompts, a behavioral lesson and weight loss	
		tips, weekly e-mail from counselor with feedback on performance,	
		progress and overcoming barriers, motivation and answers to questions	
		UD, II: -	
		c. IBC: 1. self-monitoring; 2. feedback on progress IE: -	Login: median 34 logins on both public and study website (median 20
		PS: e-buddy network system	logins to public website)
		CS: -	
		EP: weekly emails with prompts and weight loss tips	
		UD, II: -	
28. Webber (2008) [64],	Target behavior: weight loss through physical	a. IBC: 1. self-monitoring	^d Login: avg. 42.8 logins
USA	activity and dietary habits	IE: website links	IBC: avg. 7.5 completed weekly self-monitoring diaries
	Target group: adult women (N=66) aged 22 to	PS: message board	PS: avg. 2.4 postings on message board
	65 with a BMI of 25 to 40	CS: counselor support through weekly moderated online chat group	CS: avg. 8 attended chat sessions
		sessions EP: -	
		UD: weekly lessons	
		II: -	
		b. IBC: 1. self-monitoring	^d Login: avg. 39.7 logins
		IE: website links	IBC: avg. 9.1 completed weekly self-monitoring diaries
		PS: message board	PS: avg. 7.2 postings on message board
		CS, EP: -	
		UD: weekly lessons	
		II: -	
29. Van Wier (2009)	Target behavior: weight loss through	IBC, IE, PS: -	Access program content: 86%
[65], Netherlands	sustainable lifestyle changes (reduction of calories through fat, sugar and alcohol and	CS: counselor support through e-mail by commenting on homework assignments and answering of additional questions	^d Completion first visit: 74% completed at least first module CS: median 5 counseled sessions [IOR 1 to 10]
	increasing physical activity)	EP: counselor e-mail with intervention content, e-mail/phone prompt	CS. median 3 counseled sessions [IQK 1 to 10]
	Target group: employees (N=1386) aged 18	max twice a week by not logging on	
	years and older with a BMI of 25 or higher	UD: weekly modules	
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30. Wing (2006) [66], USA	Target behavior: weight gain prevention with emphasis on daily self-weighing and self-regulation Target group: adults (N=314) with a loss of at least 10% of their body weight during prior 2 years	IBC: 1. self-monitoring IE: - PS: message board, CS: counselor-led weekly chat sessions (1st month), monthly chat sessions (2-18 months), counselor support through e-mail depending on weight gain during program EP: e-mail with intervention content in case of weight gain during program UD: weekly tips II: small gifts by maintaining weight	IBC: reporting weight 82%/baseline to 6 months, 69%/7-12 months, 55%/13-18 months CS: attendance chat room sessions 66%/ baseline to 6 months, 41%/7-12 months), 34%/13-18 months)
D. Smoking cessation			
31. Balmford (2008) [67], Australia	Target behavior: smoking cessation Target group: general smoking population (N=23,656)	IBC: 1.feedback on cognitive and behavioral processes; 2. feedback on progress IE, PS, CS: - EP: e-mail prompts UD, II: -	dRevisit website: 27%; revisit before prompt 20%; revisit after prompt 80%
32. Brendryen (2008) [68], Norway	Target behavior: smoking cessation Target group: adults (N=290) aged 18 and older, willing to quit without NRT	IBC: 1. action planning; 2. self-monitoring IE, PS, CS: - EP: e-mail prompts, mobile phone text messages and voice response messages (reactive log-on calls), and post-quitting, support phone calls (proactive log-off calls) UD: daily, during first phase of intervention II: -	Landing website: 0.3% out of $947,059$ times the banner was displayed ^d Login: avg. $26 \text{ logins} \pm 13 (59\%)$ [range 0 -44] ^d Completion whole intervention: 60% EP: avg. $26 \pm 16 (62\%)$ log-on calls [range 0 -42]; avg. $53 \pm 37 (52\%)$ log-off calls [range 0 -102]
33. Brendryen (2008) [69], Norway	Target behavior: smoking cessation Target group: adults (N=396) aged 18 and older, smoking 10 or more cigarettes daily who were willing to quit	IBC: 1. action planning; 2. self-monitoring IE, PS, CS: - EP: e-mail prompts, mobile phone text messages and voice response messages (reactive log-on calls), and post-quitting, support phone calls (proactive log-off calls) UD: daily, during first phase of intervention II: -	dLogin: avg. 30 logins \pm 13 (68%) [range 0-44] dCompletion whole intervention: 77% EP: avg. 30 ± 16 (71%) log-on calls [range 0-42]; avg. 69 ± 35 (66%) log-off calls [range 0-104]
34. Cobb (2005) [70], USA	Target behavior: smoking cessation Target group: adult smokers (N=1501)	IBC: 1. feedback on cognitive and behavioral processes; 2. setting quit date; 3. self-monitoring IE: money and 'life saved' calculator, real time notification of forum/chat/internal e-mail messages, identification of quitting buddies, and searchable list of smoking cessation resources PS: forums, internal e-mail system, chat rooms, and buddy system CS: individual counseling support by online counselors, and ask the expert in online forum EP: tailored e-mail support messages UD, II: -	Duration visit: quitters median 12 min per session [range 7-20]; smokers median 14.5 min [range 8-23]; quitters median 103 min total online [range 33-339]; smokers median 33 min [range 17-82.5] Pages visited: quitters median 128 pages [range 31-366]; smokers median 34 pages [range 17-87] Login: quitters median 9 logins [range 1-42]; smokers median 2 [range 1-5] dRevisit website: 53% PS: 19% quitters and 5% smokers posted on forum; 19% quitters and 10% smokers with at least one buddy; 25% quitters and 9% smokers sent e-mail to at least one person; 41% quitters and 21% smokers received e-mail from at least one person

35. Danaher (2006) [32], USA	Target behavior: cessation of smokeless tobacco Target group: adult smokeless tobacco users (N=2375)	a. IBC: 1. feedback on cognitive and behavioral processes; 2. planning to quit IE: video based testimonials, and website links PS: support forum CS: ask the expert forum EP: e-mails prompts, and support e-mails UD: new information in stay quit part II: - b. IBC: - IE: website links PS, CS, EP, UD, II: -	Access program content: 96% Visit duration: median overall 28.99 min dCompletion first visit: 64% continued on day of enrolment Login: median 2 logins IBC: 63% setting quit date IE: 18% used outside links; 68% video testimonial PS: 38% posted message CS: 5% posted message Access program content: 93% Visit duration: median overall 12.50 min dCompletion first visit: 39% continued on day of enrolment Login: median 1 logins IE: 32% used outside links
36. Feil (2003) [71], USA	Target behavior: smoking cessation Target group: adults (N=606) aged 18 and older in at least contemplator stage of quitting	IBC: 1. planning to quit IE: anti-tobacco entertainment, e.g., puzzles and video's, and website links PS: bulletin board, and chat room CS: ask the expert EP: e-mail messages as intervention component UD, II: -	dLogin: avg. 7.9 logins ± 38.8; women 8.3 logins ± 39.2; men 6.7 logins ± 41.5 IBC: 63% accessed personalized quit-plan segment PS: avg. 3.7 posting ± 30.3; women 4.4 postings ± 34.6; men 1.8 postings ± 14.2
37. Graham (2007) [72], USA	Target behavior: smoking cessation Target group: smoking employees of a multinational information technology company (N=1776)	IBC: 1. feedback on cognitive and behavioral processes; 2. setting quit date; 3. self-monitoring IE: money and 'life saved' calculator, real time notification of forum/chat/internal e-mail messages, identification of quitting buddies, and searchable list of smoking cessation resources PS: forums, internal e-mail system, chat rooms, and buddy system CS: individual counseling support by online counselors, and ask the expert in online forum EP: tailored e-mail support messages UD: - II: benefits premium discount of \$11 per month to a maximum of \$132 for the year, for use of intervention	dVisit duration: avg. 15 min per visit ± 10.3 min, median 12 min; avg. 205 min in total ± 2161, median 23 min dPages visited: avg. 95 pages ± 518; median of 18 pages dLogin: avg. 12 logins ± 89.7; median 2 logins [range 0-1846] dRevisit: 53%; never accessed program <1%, 1 time 46%, 2 times 19%; 3 times 10%, 4 or more times 24% IBC: 62% used expert system for quit date; 18% used medication expert system PS: 7% quitters and 0.4% continued smokers posted on forum; 8% quitters and 4% continued smokers had a buddy; 9% quitters and 2% continued smokers belonged to club; 12% quitters and 6% continued smokers sent e-mail to other members
38. Houston (2008) [73], USA	Target behavior: smoking cessation Target group: current smokers (N=231)	a. IBC: 1. feedback on cognitive constructs; 2. planning to quit IE: small games and quizzes, decisional balance calculator, and library PS: forum CS: ask the expert EP, UD, II: - b. IBC: 1. feedback on cognitive constructs; 2. planning to quit IE: small games and quizzes, decisional balance calculator, and library PS: forum CS: ask the expert EP, UD, II: -	Duration visit: median 18 min; <3 min 24%, 3-10 min 13%, >10-25 min 31%, >25 min 32% Remark: 16% of both phases used forum; 4% of both phases used ask the expert; 1% (3 participants)j of both phases revisited the website IBC: 69% used self-management strategies; 50% used family help module; 56% used talking to your doctor module Duration visit: median 8 min; <3 min 31%, 3-10 min 30%, >10-25 min 15%, >25 min 23% IBC: 58% used self-management strategies; 29% used family help module; 33% used talking to your doctor module
39. Lenert (2003) [22], USA	Target behavior: smoking cessation Target group: smokers (N=49) who had completed a previous web-based survey on cessation needs and who had failed to quit but were ready to quit	IBC: 1. feedback on behavior; 2. self-monitoring IE, PS, CS: - EP: e-mail prompts UD, II: -	Access program content: 86% dCompleting first visit: 25% completed all modules; avg. 2 of 8 modules were completed Login: median 2 logins IBC: 82% set quit date

40. McKay (2008) [74], USA	Target behavior: a. smoking cessation; b. smoking cessation, through improving physical activity Target group: current smokers (N=2328) aged 18 and older interested in quitting in next 30	a. IBC: 1. feedback on cognitive and behavioral processes; 2. planning to quit IE: - PS: forum CS: ask the expert forum	dDuration visit: avg. 8.4 min per visit; total avg. 18.04 min ± 22.18 dLogin: avg. 2.14 logins ± 3.66
	days and willingness to engage in moderate PA	EP, UD, II: - b. IBC: 1. feedback on performance; 2. goal setting; 3. action planning; 4. self-monitoring; 5. feedback on progress IE: - PS: forum CS, EP, UD, II: -	dDuration visit: avg. 8.1 min per visit; total avg. time 14.02 min \pm 17.09 dLogin: avg. 1.74 logins \pm 2.43
41. Saul (2007) [75], USA	Target behavior: smoking cessation Target group: adult (N=607) aged 18 and over who accessed the site as a current smoker and had not already quit at the time of registration	IBC: 1. feedback on cognitive constructs; 2. setting quit date; 3. self-monitoring IE: money and 'life saved' calculator, real time notification of forum/chat/internal e-mail messages, identification of quitting buddies, and searchable list of smoking cessation resources PS: forums, internal e-mail system, chat rooms, and buddy system CS: individual counseling support by online counselors, ask the expert in online forum EP: tailored e-mail support messages UD, II: -	
42. Severson (2008) [31], USA	Target behavior: smoke free tobacco cessation Target group: adult smokeless tobacco users (N=2523) aged 18 and over who were thinking of quitting	a. IBC: 1. feedback on cognitive and behavioral processes; 2. planning to quit IE: video's and website links PS: forum CS: ask the expert forum EP: e-mail support and e-mail prompts UD: new information in stay quit part II: -	Access program content: 95% ^d Duration visit: avg. 11.1 min per visit; total avg. 37.51 min; median 27.59 min [range 0.01-439] ^d Login: avg. 3.39 logins; median 2 logins [range 1-37] PS: avg. 2.91 posts on forum; median 1 post [range 1-106] CS: avg. 0.33 posts on expert forum; median 1 post [range 1-17]
		b. IBC: - IE: website links and FAQ PS, CS, EP, UD, II: -	Access program content: 93% dDuration visit: avg. 8.3 min per visit; total avg. 15.77 min; median 11.62 min [range 0.04-186] dLogin: avg. 1.9 logins; median 1 logins [range 1-25]
43. Stoddard (2005) [76], USA	Target behavior: smoking cessation Target group: smokers (N=538) aged 18 and over who smoked 1 or more cigarettes daily	IBC: 1. feedback on nicotine dependency and depressive symptoms IE: website links PS, CS, EP, UD, II: -	Landing website: 0.5% of direct mail dCompletion first visit: 91%
44. Stoddard (2008) [77], USA	Target behavior: smoking cessation Target group: adult federal employees and contractors (N=1375) aged 18 and over who were willing to quit smoking	a. IBC: 1. feedback on cognitive processes IE: - PS: bulletin board/forum CS: online counseling EP: e-mail support and prompt messages UD, II: -	^d Duration visit: avg. 18.0 min IBC: hits various tools varied from 242 to 437 hits PS: 12% used bulletin board

45. Strecher (2005) [78], England and	Target behavior: smoking cessation among nicotine patch users	b. IBC: 1. feedback on cognitive processes IE, PS: - CS: online counseling EP: e-mail support and prompt messages UD, II: - a. IBC: 1. feedback on cognitive and behavioral processes IE, PS, CS:	d'Duration visit: avg. 11.1 min IBC: hits various tools varied from 240 to 413 hits Access program content: 88%
Ireland	Target group: adult smokers (N=3971) aged 18 and older smoking more than 10 cigarettes a day, who purchased nicotine patches and target quit date within 7 days	EP: e-mail support messages UD: three sequential newsletters via website II: -	
		b. IBC, IE, PS, CS: - EP: e-mail support messages UD, II: -	Access program content: 88%
46. Strecher (2008) [79, 80], USA	Target behavior: smoking cessation Target group: adult smokers (N=944) aged 21- 70, smoked at least 100 cigarettes in lifetime and currently smoking at least 10 cigarettes a day, who were seriously considering quitting in next 30 days	a. IBC: 1. feedback on cognitive and behavioral processes, and on barrier identification and solutions; 2. setting quit date IE: success stories PS, CS: - EP: e-mail prompts UD: weekly new opened sections II: -	IBC: avg. 2.6 opened sections
		b. IBC: 1. feedback on cognitive and behavioral processes, and on barrier identification and solutions; 2. setting quit date IE: success stories PS, CS, EP, UD, II: -	IBC: avg. 3.1 opened sections
47. Swartz. (2006) [81], USA	Target behavior: smoking cessation Target group: smokers (N=351) aged 18 and older, currently smoking daily, willing to make quit attempt in the next 30 days	IBC: 1. feedback on cognitive and behavioral processes and barrier identification; 2. planning to quit IE: video segments, and audio segments in combination with animated graphics PS, CS, EP, UD, II: -	IBC: 56% viewed quit plan module and set actual quit date; 49% viewed overcoming barriers; 42% viewed voiding situations that prompt cravings; 42% viewed dealing with cravings; 35% viewed benefits of quitting smoking; 70% viewed at least one optional section within modules
48. Wang (2004) [82], Switzerland	Target behavior: smoking cessation Target group: smokers in general (N=18,361)	IBC: 1. feedback on cognitive and behavioral processes; 2. feedback on progress IE: - PS: forum CS: - EP: bi-monthly e-mail prompts UD, II: -	^d Revisit website: 20%
E. Alcohol reduction			
49. Cloud (2001) [83], USA	Target behavior: abstaining or controlled drinking Target group: adult problem drinkers (N=2813) aged 18 and older	IBC: 1. feedback on performance and cognitive constructs IE: FAQ and website links PS, CS, EP, UD, II: -	Landing website: 10,253 hits during 172 study period Access program content: 27% dPages visited: avg. 1.4 additional web pages

50. Cunningham (2000)	Target behavior: problem drinking, drinking	IBC: 1. feedback on performance	Landing website: more than 500 hits each month
[84], Canada	habits	IE, PS, CS, EP, UD, II: -	Accessed program content: 14%
	Target group: NR (N=214)		^d Completion first visit: 88%
51. Lieberman (2006)	Target behavior: alcohol abuse	a. IBC: 1. feedback on cognitive constructs	Access program content: 89%
[85], USA	Target group: adults (N=288)	IE: online guide	dCompletion first visit: 90% completed all 4 modules; 0% 1 module;
		PS, CS, EP, UD, II: - b. IBC: 1. feedback on cognitive constructs	0% 2 modules; 10% 3 modules
			dCompletion first visit: 83% completed all 4 modules; 5% 1 module;
50 Y: 1 (000 t) 50 (1		IE, PS, CS, EP, UD, II: -	4% 2 modules; 9% 3 modules
52. Linke (2004) [86],	Target behavior: excessive alcohol	IBC: 1. feedback on performance and cognitive constructs; 2. self-	Landing website: 7,581 hits during 6-month study period
Linke (2005) [87], UK	consumption Target group: adults (N=1319) with a FAST	monitoring IE: quizzes, recreational area, blood alcohol concentration calculator,	Accessed program content: 17% dCompletion first visit: 62%
	score of 3 of above	FAQ about heavy drinking, mouse-overs	dCompletion whole intervention: 6% completed all 6 modules (1
	score of 3 of above	PS: discussion group	module 62%, 2-5 modules 32%, 3 modules 20%, 4 modules 14%, 5
		CS: -	modules 10%)
		EP: e-mail/SMS as intervention content, e-mail as prompt	modules 1070)
		UD: new consecutive intervention modules	
		II: -	
53. Linke (2007)[88],	Target behavior: promotion of sensible	IBC: 1. feedback on performance and cognitive constructs; 2. self-	^d Completion first visit: 89%
UK	drinking	monitoring	^d Completion whole intervention: 17% completed all 6 weeks (89%
	Target group: adults (N=10,000) with a FAST	IE: quizzes, recreational area, blood alcohol concentration calculator,	week 1, 40% week 2, 30% week 3, 24% week4, 19% week 5)
	score of 3 of above	FAQ about heavy drinking, mouse-overs	
		PS: discussion group	
		CS: -	
		E-mail/Phone: e-mail/SMS as intervention content, e-mail as prompt	
		Update: new consecutive intervention modules	
54 M-t (2007) [00]	T4b-bd	II: -	A
54. Matano (2007) [89], USA	Target behavior: reduction of alcohol consumption	a. IBC: 1. feedback on performance, stress levels, and cognitive constructs; 2. self-monitoring; 3. feedback on progress	Access program content: 72% ^d Duration visit: avg. 16.7 min ± 12.3 for moderate-risk, avg. 19.7 min ±
USA	Target group: employees at a worksite (N=229)		16.0 for low-risk
	with low or moderate risk for alcohol-related	PS: forum	d Login: avg. 1.3 logins \pm 0.5 for moderate-risk, avg. 1.3 logins \pm 0.5 for
	problems	CS EP UD II.	low-risk
	5100101115	b. IBC: 1. feedback on stress levels and cognitive constructs; 2. self-	Duration visit: avg. 18.9 min ± 16.4 for moderate-risk, avg. 16.8 min ±
		monitoring; 3. feedback on progress	12.9 for low-risk
		IE: mini-workshop, animations, website links	Login: avg. 1.4 logins \pm 0.9 for moderate-risk, avg. 1.4 logins \pm 0.9 for
		PS: forum	low-risk
		SC, EP, UD, II: -	
55. Riper (2008) [90],	Target behavior: reduction of alcohol	a. IBC: 1. feedback on behavior and cognitive constructs; 2. goal	Access program content: 45%
Netherlands	consumption	setting; 3. self-monitoring; 4. feedback on progress	
	Target group: excessive and hazardous	IE: animations, website links	
	drinkers (N=261) aged 28-65 without	PS: discussion forum	
	professional help	CS, EP: -	
		Update: tip of the day	
		II; -	
56 G 'r (2004) F013		b. IBC, IE, PS, CS, EP, UD, II: -	Access program content: 51%
56. Saitz (2004) [91],	Target behavior: Alcohol use	IBC: feedback on performance	dDuration visit: average of 5.25 min
USA	Target group: adult website visitors	IE: online information library, searchable national database, website	IBC: after receiving results 19% chose the 'Learn More' or 'Get Help'
	(N=39,842) aged 18 and above who complete	links PS, CS, EP, UD, II: -	option
	screening about their own drinking	ro, co, er, up, ii: -	

57. Westrup (2003) [92], USA	Target behavior: reduction of alcohol consumption Target group: highly educated workforce (N=187)	a. IBC: 1. feedback performance, stress levels and cognitive constructs; 2. self-monitoring; 3. feedback on progress IE: mini-workshop, animations, website links PS: forum CS, EP, UD, II: - b. IBC: 1. feedback on stress levels and cognitive constructs: 2. self-monitoring; 3. feedback on progress IE: mini-workshop, animations, website links PS: forum CS, EP, UD, II: -	Remark: no distinction was made between Internet interventions regarding visit duration and login Duration visit: avg. 19.9 min ± 14.2 [range 3-68]; high risk avg. 19.9 min ± 13.3, moderate risk avg. 14.6 min ± 10.8, low risk avg. 14.8 ± 10.7) Login: 1 login 78%, 2 logins 16%, 3 logins 4%, 4 or 5 logins 3%
F. Combination of behaviors			
58. Cook (2007) [93], USA	Target behavior: nutrition/weight management, fitness/physical activity, and stress management Target group: employees of human resources company (N=419)	IBC: 1. feedback on performance and cognitive constructs; 2. goal setting; 3. action planning; 4. self-monitoring; 5. feedback on progress IE: BMI and target heart rate calculator, video testimonials and skills training, interactive exercises and videos, FAQ, website links PS, CS, EP, UD, II: -	Access program content: 10% IBC: 14% never used nutrition module, 45% one time, 25% twice, 15% more than twice; 20% never used physical activity module, 55% one time, 16% twice, 9% more than twice
59. Cowdery (2007) [94], USA	Target behavior: Smoking cessation, weight management, nutrition, physical activity, alcohol, injury prevention, mental health, skin protection Target group: university staff (N=90)	IBC: 1. Feedback on performance and cognitive constructs IE: website links PS, CS, EP, UD, II: -	^a Completing first visit: 13% of eligible participants
60. Oenema (2008) [95], Netherlands	Target behavior: saturated fat intake, physical activity, smoking cessation Target group: adult participants (N=2159) of an online research panel aged 30 and older	IBC: 1. feedback on performance and cognitive constructs; 2. action planning; 3. feedback on progress IE, PS, CS, EP, UD, II: -	Access program content: 81% dCompleting first visit: 93% completed at least one module IBC: 72% visited saturated fat module, 72% physical activity module, 60% of the smokers visited smoking module
61. Verheijden (2007) [23], Netherlands	Target behavior: health promotion through several lifestyle behaviors aimed at physical activity as core behavior, and dietary habits, alcohol intake, smoking, work, cardiorespiratory fitness, and muscle strength Target group: general adult population (N=6272)	IBC: 1. feedback on performance; 2. feedback on progress IE: self-tests on anthropometrics, cardio-respiratory fitness, and muscle strength PS, CS: - EP: email as prompt UD: availability of follow-up modules II: -	^d Revisit website: 10%; 2 times 8%, 3 times 2%, 4 times <1%
62. Ware (2008) [96], UK	Target behavior: Weight loss, weight maintenance, physical activity Target group: office and manufacturer workers (N=265)	IBC: 1. feedback on performance and barrier identification; 2. goal setting; 3. action planning; 4. self-monitoring; 5. feedback on progress IE: - PS: community message boards, discussion forums CS: - EP: e-mail and/or mobile phone reminder messages UD, II: -	Access program content: 88% dDuration visit: avg. 11.6 min week 1, avg. 8.6 min week 2, avg. 7 min weeks 3-12, resulting in avg. 7.5 min per week dLogin: week 1-2 avg. 6 logins per week, week 3-12 avg. 2 logins per week, resulting in 32 logins during intervention period dCompletion whole intervention: 22%

63. Winett (2007) [97],	Target behavior: fat, fiber, and fruit and	a. IBC: 1. feedback on cognitive constructs; 2. goal setting; 3. self-	Access program content: 80%
USA	vegetable intake, physical activity	monitoring; 4. feedback on progress	^d Completion whole intervention: 50%
	Target group: adult church members (N=1071)	IE: audio narrator 'guide', virtual restaurant	IBC: avg. 7.0 modules were viewed; 50% viewed all modules
		PS, CS, EP: -	
		UD: weekly new modules	
		II: -	
		b. IBC: 1. feedback on cognitive constructs; 2. goal setting; 3. self-	Access program content: 57%
		monitoring; 4. feedback on progress	^d Completion whole intervention: 25%
		IE: audio narrator 'guide', virtual restaurant	IBC: avg. 4.6 modules were viewed; 25% viewed all modules
		PS, CS, EP: -	
		UD: weekly new modules	
		II: -	
64. Woolf (2006) [98],	Target behavior: healthy diet, physical activity,	IBC: 1. feedback on performance and cognitive constructs	Landing website: 932 hits of 25,488 unique patients visited practice
USA	smoking cessation, and reduced problem	IE: website links, resource library	during study period
	drinking	PS, CS: -	Access program content: 29%
	Target group: adults (N=273) with unhealthy	EP: e-mail prompts	^d Completion first visit/intervention: 94%
	behaviors	UD, II: -	
		b. IBC, IE, PS, CS, EP, UD, II: -	

Notes: NR = not reported; BMI = body mass index; NRT = nicotine replacement therapy; FAST = fast alcohol screening test

^a Information of publications that evaluated and reported on the same interventions but were separate studies were combined. This applies to the following studies: both studies of Hurling [39, 40], Gold [55] and Micco [60], both studies of Brendryen [68, 69], Cobb [70] with Graham [72] and Saul [75], Danahar [32] and Severson [31], both studies of Linke [86-88], and Matano [89] and Westrup [92]

b The main categories of potential exposure promoting elements are abbreviated as: IBC = interactive behavior change strategy; IE = interactive elements; PS = peer support; CS = counselor/therapist support; EP = e-mail and/or phone contact; UD = update intervention website; II = intervention incentive

Both Internet interventions a. from Gold [55] and Micco [60] are identical as they come from the same study but are compared in two publications to a another intervention d Indicate that these exposure measures are incorporated in Table 3 and 4