

Elintapojen ja omahoidon ohjaus; Sydän ja verisuonisairaudet

Raija Sipilä

Kysymys	Näytön taso	Recommendation	Kirjallisuus	Yhteenveto
Familial hypercholesterolaemia: identification and management; NICE 2017				
What information and support is required for: <ul style="list-style-type: none"> • adults • children and young people? 	NA		No evidence that compared methods of delivery for information and support of individuals with FH was identified.	It should be noted that there is no direct comparative evidence in this population, so generic principles of communication of familial risk were agreed and specific recommendations made based on these. The GDG considered that familial risk communication, rather than genetic counselling per se, was the focus of information sharing and communication, as issues around termination of pregnancy rarely arose in relation to familial hypercholesterolemia.
What is the effectiveness of dietary interventions to improve outcome in adults and children with heterozygous or homozygous FH?	NA	All people with FH should be offered individualised nutritional advice from a healthcare professional with specific expertise in nutrition. <ul style="list-style-type: none"> • fat intake • fruits and vegetables • fish 	There are no long-term studies that indicate a cholesterol lowering diet significantly lowers lipid concentrations in individuals with FH.	There was limited evidence in the FH population and all trials were very short term. However, motivation and compliance levels may be high in the FH population, and therefore levels of persistence may be high, trials of longer term (i.e. over 12 months) may not be needed to demonstrate a sustained effect. To corroborate the effectiveness of these

				interventions, high level, robust evidence from the general population was used to derive recommendations. This is justified as there is evidence that cholesterol concentrations in individuals with FH and treated with statins are lowered to a similar relative degree by dietary interventions as those not taking statins.
What are the key components of assessment and review for individuals (adults and children) with homozygous or heterozygous FH including the information and support required for individuals (adults and children) with FH regarding diet? – exercise and/or regular physical activity – smoking cessation?	NA	Healthcare professionals should advise people with FH to take at least 30 minutes of physical activity a day, of at least moderate intensity, at least 5 days a week, in line with national guidance for the general population	There was limited evidence in the FH population and all trials were very short term.	All 3 meta-analyses were of short term trials with mixed populations and diets; however they did suggest that cholesterol lowering diets can lead to a maximum lipid lowering of 5-10%.
What are the key components of assessment and	NA	Healthcare professionals should offer people with FH who are overweight or obese appropriate advice and support to	No studies on exercise and/or physical activity in FH were identified.	

<p>review for individuals (adults and children) with homozygous or heterozygous FH including the information and support required for individuals (adults and children) with FH regarding exercise and/or regular physical activity?</p>		<p>achieve and maintain a healthy weight in line with NICE guidance on obesity</p>		
<p>What are the key components of assessment and review for individuals (adults and children) with homozygous or heterozygous FH including the information and support required for individuals (adults and children) with FH regarding smoking cessation?</p>	<p>NA</p>	<p>Healthcare professionals should offer people who want to stop smoking support and advice, and referral to an intensive support service, in line with the NICE guidance on smoking cessation</p>	<p>No studies on smoking cessation were identified.</p>	
		<p>A healthcare professional with expertise in FH should provide information to people with FH on their specific level of risk of coronary heart disease, its</p>		

		implications for them and their families, lifestyle advice and treatment options.		
Type 2 diabetes, NICE 2017				
Should self-monitoring be used to manage blood glucose levels in people with type 2 diabetes?	heikko tai kohtalainen	<p>Do not routinely offer self-monitoring of blood glucose levels for adults with type 2 diabetes unless:</p> <ul style="list-style-type: none"> • the person is on insulin or • there is evidence of hypoglycaemic episodes or • the person is on oral medication that may increase their risk of hypoglycaemia while driving or operating machinery or • the person is pregnant, or is planning to become pregnant. For more information, see the NICE guideline on diabetes in pregnancy. 	<p>GRADE tables https://www.nice.org.uk/guidance/ng28/evidence/appendix-d-grade-tables-and-metaanalysis-results-pdf-2185320353</p>	<p>Perustuu useisiin RCT-tutkimuksiin, joiden laatu on heikko tai enintään kohtalainen. Interventiot olivat erilaisia (mittaustapa ja siihen liitetty ohjaus). Näyttää laskevan verensokeriarvoja. Potilailla (n=4710), joilla on ruokavalio tai tablettihoito omaseurannan HbA1c:n keskiero oli -0,21 (-0,29, -0,13) verrattuna sellaisiin, jotka eivät tehneet omaseurantaa. Erilaisten omaseurantakeinojen tulokset olivat samansuuntaisia, myös kun omaseurantaa liitettiin ohjaus. Omaseuranta ei vähentänyt kaikkia hypoglykemioita, RR 1,80 (1,16, 2,79), potilaiden n=1156. Vakavien hypoglykemioiden määrä näytti vähenevän, mutta ero ryhmien välillä ei ollut tilastollisesti merkitsevä.</p>
How to deliver education, including what approaches deliver the intended benefits, and what components of the education process best	NA	<p>Offer structured education to adults with type 2 diabetes and/or their family members or carers (as appropriate) at and around the time of diagnosis, with annual reinforcement and review. Explain to people and their carers that structured education is an integral part of diabetes care.</p>	<p>The clinical effectiveness of diabetes education models for type 2 diabetes: a systematic review' commissioned by the NHS R&D Health Technology Assessment (HTA) programme on behalf of the NCC-CC. Available at www.nchta.org/project/1550.asp</p>	<p>Little robust evidence of the effectiveness of any particular educational approach for people with type 2 diabetes was found. One conclusion was that further research was required, but meanwhile that educational programmes with a theoretical basis demonstrated improved outcomes, and that group education was a more</p>

<p>deliver the surrogate, self-care, and quality of life outcomes.</p>				<p>effective use of resources and may have additional benefits.</p>
	<p>NA</p>	<p>Ensure that any structured education programme for adults with type 2 diabetes includes the following components:</p> <ul style="list-style-type: none"> • It is evidence-based, and suits the needs of the person. • It has specific aims and learning objectives, and supports the person and their family members and carers in developing attitudes, beliefs, knowledge and skills to self-manage diabetes. • It has a structured curriculum that is theory-driven, evidence-based and resource-effective, has supporting materials, and is written down. • It is delivered by trained educators who have an understanding of educational theory appropriate to the age and needs of the person, and who are trained and competent to deliver the principles and content of the programme. • It is quality assured, and reviewed by trained, competent, independent assessors who 	<p>The clinical effectiveness of diabetes education models for type 2 diabetes: a systematic review' commissioned by the NHS R&D Health Technology Assessment (HTA) programme on behalf of the NCC-CC. Available at www.ncchta.org/project/1550.asp</p>	<p>Little robust evidence of the effectiveness of any particular educational approach for people with type 2 diabetes was found.</p> <p>It was noted that to address some of the difficulties in describing and implementing effective structured education and self-management programmes, a Patient Education Working Group (PEWG) had been convened by the Department of Health and Diabetes UK, and had laid out in detail the necessary requirements for developing high-quality patient education programmes. The key criteria had been endorsed by the recent HTA review.</p>

		<p>measure it against criteria that ensure consistency.</p> <ul style="list-style-type: none"> The outcomes are audited regularly. 		
	NA	<p>Offer group education programmes as the preferred option. Provide an alternative of equal standard for a person unable or unwilling to participate in group education.</p>	<p>The clinical effectiveness of diabetes education models for type 2 diabetes: a systematic review' commissioned by the NHS R&D Health Technology Assessment (HTA) programme on behalf of the NCC-CC. Available at www.ncchta.org/project/1550.asp</p>	<p>For those people in whom education delivered in a group setting is appropriate, it is evidently likely to be more cost effective.</p>
<p>What are the optimal strategies to reduce calorie intake (and thus improve sensitivity to endogenous insulin), to control exogenous delivery of free sugars into the circulation, to control blood pressure, and to optimise the blood lipid profile.</p>	Level1+	<p>Provide individualised and ongoing nutritional advice from a healthcare professional with specific expertise and competencies in nutrition.</p> <p>Emphasise advice on healthy balanced eating that is applicable to the general population when providing advice to adults with type 2 diabetes. Encourage highfibre, low-glycaemic-index sources of carbohydrate in the diet, such as fruit, vegetables, wholegrains and pulses; include low-fat dairy products and oily fish; and control the intake of foods containing saturated and trans fatty acids.</p>		<p>6 tutkimusta, 4 RCT:tä ja 2 havainnoivaa. Tavoitteena painonpudotus ja siten vaikuttaa verensokeri-, lipidi- ja RR-tasoihin.</p> <p>The GDG noted that there was little new evidence to warrant any change to previous views in this field. The major consensus-based recommendations from the UK and USA emphasise sensible practical implementation of nutritional advice for people with type 2 diabetes. A dietary plan for people with diabetes would follow the principles of healthy eating in the general population, and thus include carbohydrate from fruits, vegetables, wholegrains, and</p>

				pulses (and thus high fibre and low glycaemic index), reduction in salt intake, the inclusion of low-fat milk and oily fish, and control of saturated and trans fatty acid intake.
		Provide lifestyle advice (see section 0 in this guideline and the lifestyle interventions section in 'Hypertension in adults' [NICE guideline CG127]) if blood pressure is confirmed as being consistently above 140/80 mmHg (or above 130/80 mmHg if there is kidney, eye or cerebrovascular damage). [2009]		
Diabetes (type 1 and type 2) in children and young people: diagnosis and management, NICE 2016				
		Offer children and young people with type 1 diabetes and their family members or carers (as appropriate) a continuing programme of education from diagnosis. Ensure that the programme includes the following core topics: <ul style="list-style-type: none"> • insulin therapy, including its aims, how it works, its mode of delivery and dosage adjustment • blood glucose monitoring, including targets for blood glucose control (blood glucose and HbA1c levels) • the effects of diet, physical activity and intercurrent illness on blood glucose control 	https://www.nice.org.uk/guidance/ng18/evidence/full-guideline-pdf-435396352	A consensus guideline has highlighted education as an essential part of the package of care at diagnosis. [evidence level III] Education for children and young people with newly diagnosed type 1 diabetes, their families and other carers should aim to cover the following topics: [evidence level IV]

		<ul style="list-style-type: none"> managing intercurrent illness ('sick-day rules', including monitoring of blood ketones [beta-hydroxybutyrate]) detecting and managing hypoglycaemia, hyperglycaemia and ketosis 		
		<p>Tailor the education programme to each child or young person with type 1 diabetes and their family members or carers (as appropriate), taking account of issues such as:</p> <ul style="list-style-type: none"> personal preferences emotional wellbeing age and maturity cultural considerations existing knowledge current and future social circumstances life goals. 	https://www.nice.org.uk/guidance/ng18/evidence/full-guideline-pdf-435396352	<p>Diabetes UK suggests that patient education should be a planned life-long process, starting from the point of diagnosis and remaining an essential component of diabetes care. Patient education should be tailored to the individual needs of the child or young person and their family, taking into account the level of knowledge and understanding, and the aim should be to optimise: [evidence level IV]</p>
<p>Nationella riktlinjer för diabetesvård, Socialstyrelsen SWE 2017</p>				
		<p>Potilasohjaus on tärkeä osa hoitoa. Voidaan antaa ryhmässä tai yksilöllisesti. Suositellaan ryhmäohjausta, koska se on tehokasta ja kustannukset ovat alhaisemmat. Merkityksellistä on ohjauksen antajan osaaminen (diabetes ja pedagogiikka). Koskee sekä tyyppin 1 että 2 diabeetikoita.</p>	http://www.socialstyrelsen.se/Lists/Artikelkatalog/Attachments/20633/2017-5-31.pdf	

		<p>Tarjota verensokerin omaseuranta sellaisille diabeetikoille, joilla on insuliinihoito.</p> <p>Tarjota kohdennetusti omaseuranta potilaille, joilla ei ole insuliinihoitoa, mutta joilla on esim. muutettu hoitoa tai verensokeriarvot heittelevät.</p>		
<p>Hypertension in adults: diagnosis and management NICE 2016, Hakua ei päivitetty 2013 elämäntapainterventioiden osalta</p>				
	A-B I-III	<p>Lifestyle advice should be offered initially and then periodically to people undergoing assessment or treatment for hypertension.</p> <ul style="list-style-type: none"> • diet • exercise • alcohol consumption • coffee and other caffeine-rich products • dietary sodium intake • smoking 	<p>https://www.nice.org.uk/guidance/cg127/evidence/full-guideline-pdf-8949179413</p>	<p>Useisiin RCT-tutkimuksiin perustuen</p> <ul style="list-style-type: none"> • Matalakalorinen ruokavalio alentaa verenpainetta lihavilla potilailla. Vaikutus verenpaineeseen vaihtelee (5-6 mmHg). • Säännöllisellä aerobisella liikunnalla on verenpainetta alentava vaikutus (2-3 mmHg). • Ruokavalion ja liikunnan yhdistäminen laskee verenpaine arvoja. <p>Havainnoivien tutkimusten perusteella liiallinen alkoholinkulutus on yhteydessä kohonneisiin verenpaine arvoihin. Strukturoidut interventiot alkoholinkulutuksen vähentämiseksi laskevat RR-arvoja 3-4 mmHg. Liiallinen kofeiinin käyttö nostaa RR-arvoja (2/1 mmHg). Suolankäytön rajoittaminen</p>

				<p>6g/pvä alentaa RR-arvoja (2-3 mmHg). Tupakointi lisää sydän- ja versisuonisairauksien riksiä, vaikka suoraa osoitusta vaikutuksesta verenpaineeseen ei ole.</p>
	NA	<p>Ascertain people's diet and exercise patterns because a healthy diet and regular exercise can reduce blood pressure. Offer appropriate guidance and written or audiovisual materials to promote lifestyle changes.</p>	<p>Kyngas H, Lahdenpera T. Compliance of patients with hypertension and associated factors. J Adv Nurs 1999;29:832-9. 542 Waeber B, Brunner HR, Metry J-M. Compliance with antihypertensive treatment: Implications for practice. Blood Pressure 1997;6:326-331. World Health Organisation. Adherence to long term therapies:evidence for action. WHO 2003. Levine DM, Cohen JD, Dustan HP, Falkner B, Flora JA, Lefebvre RC, Morisky DE. Oberman A. Pickering TG. Roccella EJ. et al. Behavior changes and the prevention of high blood pressure. Workshop II. AHA Prevention Conference III. Behavior change and compliance: keys to improving cardiovascular health. Circulation 1993; 88:1387-90.</p>	<p>Many factors are thought to influence adherence including age, sex, education, understanding and disease perspectives, the mode of delivering advice and the type of health system. Adherence may be improved by good communication between patients and health professionals addressing knowledge about disease, active involvement of patients in decisions, setting achievable goals and good family and community support. Nurse-led initiatives have been shown to be effective at modifying lifestyle behaviours, reducing blood pressure, monitoring medication and ultimately in reducing mortality. Advice alone is less effective than specifically adapted programmes supported by written and audiovisual material. Material tailored to meet the educational and cultural needs of the</p>

			<p>Burke LE, Dunbar-Jacob J, Hill MN. Compliance with cardiovascular disease prevention strategies: a review of the research. <i>Ann Behav Med</i> 1997;19:239-263.</p> <p>Campbell NC, Ritchie LD, Thain J, Deans HG, Rawles JM, Squair JL. Secondary prevention in coronary heart disease: a randomised trial of nurse led clinics in primary care. <i>Heart</i> 1998; 80:447-452.</p> <p>Murchie P, Campbell NC, Ritchie LD, Simpson JA, Thain J. Secondary prevention clinics for coronary heart disease: four year follow up of a randomised controlled trial in primary care. <i>Br Med J</i> 2003;326;84.</p> <p>Uusitupa M, Louheranta A, Lindstrom J, Valle T, Sundvall J, Eriksson J, Tuomilehto J. The Finnish Diabetes Prevention Study. <i>Br J Nutr</i> 2000;83;S137-S42.</p> <p>Kumanyika SK, Adams-Campbell L, Van Horn B, Ten Have TR, Treu JA, Askov E, Williams J, Achterberg C, Zaghoul S, Monsegu D, Bright M, Stoy DB, Malone-Jackson M, Mooney D, Deiling S, Caulfield J. Outcomes of a</p>	<p>population it is targeting has also been shown to be effective</p>
--	--	--	--	---

			cardiovascular nutrition counseling program in African-Americans with elevated blood pressure or cholesterol level. J Am Diet Assoc 1999;99:1380-91.	
	C	A common aspect of studies for motivating lifestyle change is the use of group working. Inform people about local initiatives by, for example, healthcare teams or patient organisations that provide support and promote healthy lifestyle change.		Much of the research evidence for lifestyle change uses regular time spent together in groups for support and encouragement. Patient and healthcare organisations may be able to help provide patients with, or point them to local groups which encourage lifestyle change, particularly those promoting healthy eating and regular exercise.
Cardiovascular disease: risk assessment and reduction, including lipid modification, NICE 2016				
What is the clinical and cost effectiveness of dietary intervention strategies versus usual diet for adults without established CVD (primary prevention) and with established CVD (secondary prevention)?	Low-very low	Advise people at high risk of or with CVD to eat a diet in which total fat intake is 30% or less of total energy intake, saturated fats are 7% or less of total energy intake, intake of dietary cholesterol is less than 300 mg/day and where possible saturated fats are replaced by mono-unsaturated and polyunsaturated fats.	https://www.nice.org.uk/guidance/cg181/evidence/lipid-modification-update-full-guideline-pdf-243786637	Useita RCT-tutkimuksia, joissa erilaiset interventiot ja erilaiset lopputulosmuuttajat. Kuolleisuudessa ei tilastollisesti merkitsevää eroa, mutta esim. sydäninfarkteissa oli.
	NA	Advise people at high risk of or with CVD to: <ul style="list-style-type: none"> • reduce their saturated fat intake. 	https://www.nice.org.uk/guidance/cg181/evidence/lipid-	Useita RCT-tutkimuksia, joissa erilaiset interventiot ja erilaiset lopputulosmuuttajat. Kuolleisuudessa

		<ul style="list-style-type: none"> increase their mono-unsaturated fat intake with olive oil, rapeseed oil or spreads based on these oils and to use them in food preparation. 	modification-update-full-guideline-pdf-243786637	<p>ei tilastollisesti merkitsevää eroa, mutta esim. sydäninfarkteissa oli.</p>
	NA	<p>Advise people at high risk of or with CVD to do all of the following:</p> <ul style="list-style-type: none"> choose wholegrain varieties of starchy food reduce their intake of sugar and food products containing refined sugars including fructose eat at least 5 portions of fruit and vegetables per day eat at least 2 portions of fish per week, including a portion of oily fish eat at least 4 to 5 portions of unsalted nuts, seeds and legumes per week. 	https://www.nice.org.uk/guidance/cg181/evidence/lipid-modification-update-full-guideline-pdf-243786637	<p>A Cochrane systematic review (44 studies) assessed the effects of providing dietary advice to achieve sustained dietary changes or improved cardiovascular risk profile among healthy adults. Dietary advice reduced total serum cholesterol and LDL cholesterol after 3 to 24 months. Mean HDL cholesterol levels and triglyceride levels were unchanged. Compared to no advice, dietary advice increased fruit and</p> <p>Appendix A: summary of evidence from 4-year surveillance of Cardiovascular disease: risk assessment and reduction, including lipid modification (2014) NICE guideline CG181 14 of 64 vegetable intake and dietary fibre intake, while reducing total dietary fat and saturated fat as a percentage of total energy intake.</p>
	NA	<p>Advise people at high risk of or with CVD to do the following every week:</p> <ul style="list-style-type: none"> at least 150 minutes of moderate intensity aerobic activity or 	https://www.nice.org.uk/guidance/cg181/evidence/lipid-modification-update-full-guideline-pdf-243786637	<p>Useita meta-analyysijä, jotka osoittavat fyysisen aktiivisuuden vähentävän kardiovaskulaariskejä</p>

		<ul style="list-style-type: none"> 75 minutes of vigorous intensity aerobic activity or a mix of moderate and vigorous aerobic activity in line with national guidance for the general population 		
	NA	Advise people to do muscle-strengthening activities on 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders and arms) in line with national guidance for the general population	https://www.nice.org.uk/guidance/cg181/evidence/lipid-modification-update-full-guideline-pdf-243786637	
	NA	Advice about physical activity should take into account the person's needs, preferences and circumstances. Agree goals and provide the person with written information about the benefits of activity and local opportunities to be active	https://www.nice.org.uk/guidance/cg181/evidence/lipid-modification-update-full-guideline-pdf-243786637	
	NA	Give advice on diet and physical activity in line with national recommendations	https://www.nice.org.uk/guidance/cg181/evidence/lipid-modification-update-full-guideline-pdf-243786637	<p>New evidence indicates the potential value of a family-centred, physical activity and nutrition "brief" intervention. However, the evidence was derived from a single RCT of limited sample size and is unlikely to impact on the guideline until further evidence becomes available to substantiate the findings.</p> <ul style="list-style-type: none"> New evidence on the following interventions is insufficient to impact on the

				<p>guideline recommendations due to either unknown or small study sizes, lack of validation or inconclusive findings for lipid lowering and CVD outcomes: Internet-based, nurse-led interventions.</p> <ul style="list-style-type: none"> • Lifestyle interventions for behaviour change. • Complex primary care interventions. • Digital health interventions, including the Healthlines service; although evidence indicates this may be a cost effective intervention in the NHS, the intervention has not been validated. • The 'Waste the Waist' group-based intervention.
		Offer people at high risk of or with CVD who are overweight or obese appropriate advice and support to work towards achieving and maintaining a healthy weight	https://www.nice.org.uk/guidance/cg181/evidence/lipid-modification-update-full-guideline-pdf-243786637	
		Be aware that men should not regularly drink more than 3–4 units a day and women should not regularly drink more than 2–3 units a day. People should avoid binge drinking.	https://www.nice.org.uk/guidance/cg181/evidence/lipid-modification-update-full-guideline-pdf-243786637	The new systematic review evidence indicating that alcohol consumption in moderation may reduce the risk of CAD is consistent with the national advice.
		Advise all people who smoke to stop, in line with smoking cessation services.	https://www.nice.org.uk/guidance/cg181/evidence/lipid-	The new systematic review evidence supporting the use of psychosocial

		Offer people who want to stop smoking support and advice, and referral to an intensive support service	modification-update-full-guideline-pdf-243786637	interventions, including individual and telephone counselling,
		Use everyday, jargon-free language to communicate information on risk. If technical terms are used, explain them clearly.	https://www.nice.org.uk/guidance/cg181/evidence/lipid-modification-update-full-guideline-pdf-243786637	
		<p>Offer people information about their absolute risk of CVD and about the absolute benefits and harms of an intervention over a 10-year period. This information should be in a form that:</p> <ul style="list-style-type: none"> • presents individualised risk and benefit scenarios and • presents the absolute risk of events numerically and • uses appropriate diagrams and text. 	https://www.nice.org.uk/guidance/cg181/evidence/appendix-a-evidence-summaries-pdf-4724759774	A secondary analysis(37) of an RCT (n=160) of a CHD adherence intervention (second generation decision aid plus tailored messages) versus usual care explored how the decision aid facilitates adherence. Within the decision aid group, the decision aid significantly increased knowledge of effective CHD prevention strategies and the accuracy of perceived CHD risk, and significantly decreased decisional conflict. Comparing between study groups, the decision aid also significantly increased CHD prevention discussions with providers and improved perceptions of some features of patientprovider interactions. It also increased participants' intentions for any effective CHD risk reducing strategies, with a majority of the effect from the educational component of the decision aid.
Obesity: identification, assessment and management, NICE 2014				

	NA	Multicomponent interventions are the treatment of choice. Ensure weight management programmes include behaviour change strategies (see recommendations 1.5.1–1.5.3) to increase people's physical activity levels or decrease inactivity, improve eating behaviour and the quality of the person's diet, and reduce energy intake.		Tässä päivityksessä on käsitelty VLSD-diettiä ja lihavuusleikkausta ja vain näistä on esitetty evidence summaryt. Ks alla kohdasta Weight management: lifestyle services for overweight or obese adults
	NA	When choosing treatments, take into account: <ul style="list-style-type: none"> • the person's individual preference and social circumstance and the experience and outcome of previous treatments (including whether there were any barriers) • the person's level of risk, based on BMI and, where appropriate, waist circumference (see recommendations 1.2.9 and 1.2.11) • any comorbidities. 		
	NA	Ensure any healthcare professionals who deliver interventions for weight management have relevant competencies and have had specific training.		
	NA	Provide information in formats and languages that are suited to the person. Use everyday, jargon-free language and explain any technical terms when talking		

		<p>to the person and their family or carers. Take into account the person's:</p> <ul style="list-style-type: none"> • age and stage of life • gender • cultural needs and sensitivities • ethnicity • social and economic circumstances • specific communication needs (for example because of learning disabilities, physical disabilities or cognitive impairments due to neurological conditions). 		
	NA	Offer support depending on the person's needs, and be responsive to changes over time.		
	NA	Praise successes – however small – at every opportunity to encourage the person through the difficult process of changing established behaviour.		
	NA	<p>Give people who are overweight or obese, and their families and/or carers, relevant information on:</p> <ul style="list-style-type: none"> • being overweight and obesity in general, including related health risks • realistic targets for weight loss; for adults, please see NICE's guideline on managing overweight and obesity in adults • the distinction between losing weight and maintaining weight 		

		<p>loss, and the importance of developing skills for both; advise them that the change from losing weight to maintenance typically happens after 6–9 months of treatment</p> <ul style="list-style-type: none"> • realistic targets for outcomes other than weight loss, such as increased physical activity and healthier eating • diagnosis and treatment options • healthy eating in general[7] • medication and side effects • surgical treatments • self-care • voluntary organisations and support groups and how to contact them. • Ensure there is adequate time in the consultation to provide information and answer questions. 		
	NA	Deliver any behavioural intervention with the support of an appropriately trained professional.		
		<p>Include the following strategies in behavioural interventions for adults, as appropriate:</p> <ul style="list-style-type: none"> • self-monitoring of behaviour and progress • stimulus control • goal setting 		

		<ul style="list-style-type: none"> • slowing rate of eating • ensuring social support • problem solving • assertiveness • cognitive restructuring (modifying thoughts) • reinforcement of changes • relapse prevention • strategies for dealing with weight regain. 		
	NA	<p>Include the following strategies in behavioural interventions for children, as appropriate:</p> <ul style="list-style-type: none"> • stimulus control • self-monitoring • goal setting • rewards for reaching goals • problem solving. 		
Weight management: lifestyle services for overweight or obese adults, NICE 2014				
<p>How effective and cost-effective are multi-component lifestyle weight management programmes for adults?</p> <p>How does effectiveness vary for different population groups (for example, men, black</p>	Strong	<p>Strong evidence from a meta-analysis indicates that BWMPs can lead to greater weight-loss over 18 to 24 months (pooled mean difference -1.54 kg, 95% CI -1.79 to -1.30) and at 36 months (pooled mean difference -2.21 kg, 95% CI -2.66 to -1.75) than control arms.</p>	<p>https://www.nice.org.uk/guidance/ph53/evidence/evidence-review-1a-pdf-431707933</p>	<p>Loveman 2011 aimed to assess the clinical and cost-effectiveness of multi-component weight management programmes (BWMPs) in overweight and obese adults. These programmes include diet, exercise and behavioural components. Following screening, 12 randomized controlled trials were included. The review did not pool studies due to heterogeneity, and hence results are reported as narrative descriptions only. In</p>

<p>and minority ethnic or low-income groups)? How does effectiveness and cost effectiveness vary based on the components of the individual programmes? Are there any adverse or unintended effects associated with the use of BWMPs?</p>				<p>general, BWMPs tended to produce greater weight loss than in comparator groups, though differences were modest. Järjestelmällisessä katsauksessa löydettiin 30 tutkimusta, joissa oli 14000 potilasta. Interventio käsitti dieetti, liikunta ja käyttäytymisenmuutos -interventioita (behavioural weight management programmes (BWMPs)). 18 tutkimusta hyvälaatuisia. 12 kk kohdalla yksilöohjelmassa keskiero ryhmäohjelmassa -2.73 [-3.12, -2.35], yksilöohjelmissa -1.02 [-1.32, -0.73] ja yhdistelmässä -4.09 [-4.39, -3.79]. Lyhyemmissä interventioissa ei nähty eroa ryhmien välillä. Johtopäätökset (joihin suhtauduttava varoen, heterogeenisuus suurta) Programmes delivered in group and individual formats had the highest pooled mean difference for weight loss. Interventions involving face-to-face contact led to significantly more weight loss than those with remote contact only. Due to wide variation in who delivered the interventions (most interventions were delivered by a</p>
--	--	--	--	---

				<p>variety of health professionals, and it is not clear who the primary person delivering the intervention would have been in each case) we did not conduct a subgroup analysis on this variable.</p> <p>In a subgroup analysis (see Figure 11), programmes that involved supervised exercise were shown to be more effective than those that only recommended exercise</p> <p>Studies in which participants were prescribed a set daily energy intake appeared to be more effective than those which prescribed other diets.</p> <p>Interventions</p> <p>which involved contact at least monthly or contact less than every two months had point estimates that were significantly less effective, but this represented only four studies in total, and is likely to be due to chance due to the non-linear nature of the results.</p> <p>There was weak evidence that BWMPs are cost effective. Only three of the 30 included studies reported cost-effectiveness analyses. These concluded that interventions were cost effective, but</p>
--	--	--	--	--

				there is variability between costs of individual interventions and between the methods of analysis used.
How do components of behavioural weight loss programmes affect the outcome?		<p>Strong evidence from a meta-analysis indicates that BWMPs that involve both diet and exercise can lead to greater weight loss over a 12 to 18 month period than those that involve diet only or exercise only.</p> <p>There was moderate evidence to suggest that interventions that involved contact with a dietitian* were associated with greater weight loss than those which did not involve dietitian contact.</p> <p>There is weak evidence from meta-regression that weight loss at 12 months is not associated with</p>	https://www.nice.org.uk/guidance/ph53/evidence/evidence-review-1b-pdf-431707934	<p>The following behavioural change techniques were present in the majority of interventions: goal setting and review of goals (behaviour and outcome); action planning; barrier identification and/or problem solving; graded tasks; self-monitoring of behaviour; feedback on performance; instruction on how to perform behaviour; and planning social support and/or social change.</p> <p>Pooled results showed that mean weight loss at 12 months was significantly higher in programmes which involved diet and exercise than in those which involved diet alone (mean difference -1.79 kg, 95% CI -2.86 to -0.72).</p> <p>Pooled results from these five studies showed significantly greater weight loss at 12 months in programmes that combined diet and exercise than in those that involved exercise only (mean difference -6.33 kg, 95% CI -7.30 to -5.37)</p> <p>No studies provided direct comparisons based on theoretical orientation (i.e. the model used to explain behaviour or personality).</p>

		<p>programme length. Univariate results suggested that each additional month of programme up to 12 months was associated with an addition 0.3 kg weight loss (95% CI -0.5 to -0.1, p = 0.009). There moderate evidence that weight loss at 12 to 18 months is not associated with the number of intervention sessions offered (up to 12 months).</p> <p>There was strong evidence that the following behavioural change techniques are used in most BWMPs: goal setting and review of goals (behaviour and outcome); action planning; barrier identification and/or problem solving; graded tasks; self-monitoring of behaviour; feedback on performance; instruction on how to perform behaviour; and planning social support and/or social change. There was no evidence that greater use of any particular groups of these techniques are associated with greater weight loss. Findings are from 29 RCTs.¹</p>		<p>Most studies did not report that they had a particular theoretical orientation. Furthermore, there appeared to be no relation between the theoretical orientation and the behavioural change techniques used in the intervention, which would normally be expected, suggesting this was not an important variable.</p> <p>In the univariate model, the inclusion of a set energy prescription was the single most significant association. Length of intervention, number of sessions, and involvement of a dietitian were all significantly associated with weight loss at 12 months when adjusting for the presence or absence of a set energy prescription (see table 4 below) when added to the model one at a time.</p> <p>Only two behavioural techniques demonstrated significant associations in single variable regressions: ‘comparison of behaviour’ and ‘self-belief’. In adjusted models, no significant associations between behavioural technique groupings and weight loss were detected.</p>
Physical activity: brief advice for adults in primary care, NICE 2013				

<p>What elements of the interventions contribute to effectiveness and what is the role of systems and infrastructure in providing effective brief advice for physical activity in primary care?</p>		<p>When delivering brief advice, tailor it to the person's:</p> <ul style="list-style-type: none"> • motivations and goals (see NICE guidance on Behaviour change: the principles for effective interventions [public health guidance 6]) • current level of activity and ability • circumstances, preferences and barriers to being physically active • health status (for example whether they have a medical condition or a disability). 	<p>https://www.nice.org.uk/guidance/ph44/evidence/review-of-effectiveness-and-barriers-and-facilitators-pdf-69102685</p>	<p>21 trials: 12 RCTs, four cluster RCTs and five non-randomised controlled trials (nRCT) were included in the review. Two RCTs and two cluster RCTs. were judged to be at low risk of bias. Eleven studies were judged as at high risk of bias.</p> <p>Moderate evidence from fifteen studies suggests that there is an increase in the self-reported physical activity levels in those participants who received brief advice, or who were seen by primary care professionals trained to deliver brief advice (RR 1.30 [1.12-1.50]).</p> <p>Moderate evidence from five studies, five RCTs suggests that increasing the intensity of the brief advice intervention has no additional benefit in terms of increasing self-reported physical activity. The additional use of behavioural counselling, additional written materials, vouchers, and methods of feedback did not appear to increase the effects of brief advice.</p> <p>Strong evidence from three studies; two RCTs suggests that there is no impact of brief advice upon cardiorespiratory fitness.</p> <p>Strong evidence from four RCTs</p>
---	--	---	--	--

				<p>is inconclusive with respect to mental health outcomes. Weak evidence from nine studies provides inconclusive evidence regarding the effectiveness of intervention of different durations.</p> <p>Evidence from an analysis of the Behaviour Change Techniques (BCTs) incorporates in twenty studies shows that the most common BCTs used in BA interventions on Physical Activity in Primary Care are;</p> <ul style="list-style-type: none"> - Prompt intention formation; - Provide information on consequences; - Providing general information on behaviour links; - Use of follow up or prompts; - Prompt specific goal setting.
		Consider giving a written outline of the advice and goals that have been discussed.		<p>Ks edellä. Oli heikkoa näyttöä siitä, että ammattilaiset kokevat lyhytneuvonnan toteuttamisen esteeksi kirjallisen materiaalin puutteen. Kirjallisen materiaalin olemassa olo ja antaminen neuvonnan yhteydessä voi siis edistää neuvonnan toteutumista, ei niinkään auttaa potilasta toteuttamaan muutosta.</p>
Obesity, SIGN 2010				

		Weight management programmes should include physical activity, dietary change and behavioural components.		<p>There is consistent evidence that combined diet and physical activity is more effective for weight loss than diet alone. 1++</p> <p>The addition of exercise and behavioural therapy to diet programmes in patients with, or at elevated risk of, type 2 diabetes confers additional benefit in terms of weight loss. 1+</p>
		Delivery of evidence based weight management programmes through the internet should be considered as part of a range of options for patients with obesity.		Study results are inconsistent regarding the value of adding in-person support to internet programmes and the benefits of this to weight loss and maintenance.1+
		Individual or group based psychological interventions should be included in weight management programmes.		<p>The range of appropriate psychological interventions and strategies includes:</p> <ul style="list-style-type: none"> ☑ self monitoring of behaviour and progress ☑ stimulus control (where the patient is taught how to recognise and avoid triggers that prompt unplanned eating) ☑ cognitive restructuring (modifying unhelpful thoughts/thinking patterns) ☑ goal setting ☑ problem solving ☑ assertiveness training ☑ slowing the rate of eating ☑ reinforcement of changes

				<input type="checkbox"/> relapse prevention <input type="checkbox"/> strategies for dealing with weight regain 1++
Smoking: brief interventions and referrals, NICE 2006				
Which methods of brief intervention are effective?		For smoking cessation, brief interventions typically take between 5 and 10 minutes and may include one or more of the following: <ul style="list-style-type: none"> • simple opportunistic advice to stop • an assessment of the patient's commitment to quit • an offer of pharmacotherapy and/or behavioural support • provision of self-help material and referral to more intensive support such as the NHS Stop Smoking Services. 	https://www.nice.org.uk/guidance/ph1/evidence/review-25-january-2006-pdf-120989341	A body of level 1+ evidence directly applicable to the UK supports the efficacy of nicotine replacement therapy as part of a brief intervention for smokers wishing to make a quit attempt. A body of level 1+ evidence directly applicable to UK settings marginally supports the efficacy of providing standard self-help materials as a brief intervention (without any face to face contact) for smoking cessation. There is insufficient evidence to draw conclusions about the effectiveness of brief interventions delivered by telephone helpines. A moderately sized body of evidence has not found a benefit of stagematched over unmatched brief interventions. A moderately sized body of evidence has yielded conflicting results on the efficacy of

				<p>stage-matched interventions compared with no intervention.</p> <p>There is insufficient evidence to determine the efficacy of brief multi component interventions involving assessment of smoking status, advice to quit, and assisting a quit attempt and offering NRT and counselling.</p> <p>There is insufficient evidence to determine the efficacy of different components of a provider delivered intervention.</p> <p>A body of level 1+ evidence based on one set of meta-analyses directly applicable to UK health care settings suggests that increasing the length of a brief intervention from <3 to 30 minutes will increase the effect on quitting, but for interventions lasting less than 10 minutes small changes in the time spent will have limited effect on outcome.</p>
	Level 1+	GPs should take the opportunity to advise all patients[3] who smoke to quit when they attend a consultation. Those who want to stop should be offered a referral to an intensive support service. Nurses in primary and community care should advise everyone who smokes[3]	https://www.nice.org.uk/guidance/ph1/evidence/review-25-january-2006-pdf-120989341	The results suggested that brief physician advice delivered in the context of routine care could increase quit rates. More intensive interventions involving follow-up appointments or limited additional support from other

		to stop and refer them to an intensive support service.		healthcare providers may have a small additional benefit. Level 1+ evidence A body of level 1+ evidence directly applicable to the UK supports the efficacy of nurse structured advice as a brief intervention for smoking cessation in primary care and community settings. There is insufficient evidence from direct comparisons to draw firm conclusions about the influence of the profession of a provider delivering a brief smoking cessation intervention, or the influence of features of the profession, on intervention effectiveness.
Risk estimation and the prevention of cardiovascular disease, SIGN 2017				
WHO SHOULD GIVE DIETARY ADVICE?				In one systematic review dietitians were better than doctors at lowering cholesterol through dietary advice alone, but there were no significant differences between dietitians and nurses or self-help resources. 1++
HOW SHOULD DIETARY ADVICE BE GIVEN?		Interventions to improve diet should be based on educational competencies (improved knowledge, relevance, individualisation, feedback, reinforcement and facilitation).		Best practice recommendation
		Brief multicontact interventions should be used to encourage patients to reduce their levels of		brief interventions are the most effective method with increased

		drinking if their current intake is hazardous to their health.		benefit from multicontact interventions. One review concluded that for benefit an intervention had to include two of the three key elements: feedback, advice and goal setting. 1++/1+
Stable angina: management, NICE 2016				
	NA	Assess the person's need for lifestyle advice (for example about exercise, stopping smoking, diet and weight control) and psychological support, and offer interventions as necessary.		
Heart failure, SIGN 2016				
	1+	A motivational interviewing style should be used to promote regular low-intensity physical activity amongst patients with stable heart failure.		
Management of diabetes, SIGN 2010				
WHICH LIFESTYLE INTERVENTIONS HAVE BEEN SHOWN TO WORK IN DIABETES?		<p>Adults with type 2 diabetes should have access to structured education programmes based upon adult learning theories</p> <p>Computer-assisted education packages and telephone prompting should be considered as part of a multidisciplinary lifestyle intervention programme.</p>		<p>Intensive interventions which include frequent contact with health professionals - including telephone contact, multiple injections of insulin and self monitoring of blood glucose have led to improvements in self-management. 1++</p> <p>Computer-assisted programmes which provide education and trigger self-management have a proven benefit in terms of both metabolic and psychosocial outcomes.1+</p>

				Psychological interventions which are varied and include behaviour modification, motivational interviewing, patient empowerment and activation have a positive impact on outcomes (see section 4). 2++ Interventions based on a theoretical model or knowledge base have better outcomes.
	NA	<p>Structured education programmes should adhere to the principles laid out by the Patient Education Working Group. Any programme should have an underpinning philosophy, should be evidence based, and suit the needs of the individual. The programme should have specific aims and learning objectives, and should support the development of self-management attitudes, beliefs, knowledge and skills for the learner, their family and carers.</p> <p>☐ The programme should have a structured curriculum which is theory driven, evidence based, resource effective, have supporting materials and be written down.</p> <p>☐ It should be delivered by trained educators who have an understanding of the educational</p>		

		<p>theory appropriate to the age and needs of the programme learners, and be trained and competent in delivery of the principles and content of the specific programme they are offering.</p> <p>☑ The programme should be quality assured, be reviewed by trained, competent, independent assessors and be assessed against key criteria to ensure sustained consistency.</p> <p>☑ The outcomes from the programme should be regularly audited.</p>		
		<p>Healthcare professionals involved in caring for people with diabetes should advise them not to smoke.</p> <p>B Intensive management plus pharmacological therapies should be offered to patients with diabetes who wish to stop smoking.</p>		<p>Group behaviour therapy is more effective than self help material but has not been proven to be superior to individual advice. 1++</p> <p>There is no clear evidence suggesting that pharmacological intervention or counselling strategies to aid smoking cessation in patients with diabetes should differ to those used in the general population. 4</p>
		<p>Advice about exercise and physical activity should be individually tailored and diabetes specific and should include implications for glucose management and foot care.</p>		<p>An evidence based public health guidance document reported that there was insufficient evidence to recommend the use of exercise referral schemes to promote physical activity other</p>

				than as part of research studies where their effectiveness is being evaluated. 4
--	--	--	--	--