

HEARTS



Technical package for cardiovascular disease management in primary health care



Healthy-lifestyle counselling





Technical package for cardiovascular disease management in primary health care

Healthy-lifestyle counselling



WHO/NMH/NVI/18.1

© World Health Organization 2018

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: “This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition”.

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization.

Suggested citation. HEARTS Technical package for cardiovascular disease management in primary health care: healthy-lifestyle counselling; Geneva: World Health Organization; 2018 (WHO/NMH/NVI/18.1). Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at <http://apps.who.int/iris>.

Sales, rights and licensing. To purchase WHO publications, see <http://apps.who.int/bookorders>. To submit requests for commercial use and queries on rights and licensing, see <http://www.who.int/about/licensing>.

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

General disclaimers. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

This publication contains the collective views of the organizations participating in the HEARTS collaborative initiative and does not necessarily represent the policies or the official position of the individual organizations.

The mark “CDC” is owned by the United States Department of Health and Human Services and is used with permission. Use of this logo is not an endorsement by the Department of Health and Human Services or the Centers for Disease Control and Prevention of any particular product, service or enterprise.

Design and layout by Myriad Editions.

Printed in Switzerland.



Contents

Acknowledgements	5
HEARTS Technical Package	6
Introduction	8
Target users of this module	8
1 The four main behavioural risk factors for CVD	9
Unhealthy diet	9
Insufficient physical activity	10
Tobacco use	11
Harmful use of alcohol	12
2 Behaviour change	14
Understanding behaviour change	14
Counselling for behaviour change through brief interventions	14
3 Brief interventions to encourage behaviour change	16
General theory of the 5As brief interventions	16
4 Next steps	23
Annex: Material supporting healthy lifestyles	24
References	27
For more information	28

Figures

Figure 1: Factors contributing to the development of cardiovascular disease and related complications	8
Figure 2: Calculation of money spent on tobacco	12

Boxes

Box 1: What are saturated fats, trans-fats and unsaturated fats?	9
Box 2: What are free sugars?	10
Box 3: Communication techniques – “OARS”	14
Box 4: Key principles of motivational interviewing	14

Tables

Table 1: The 5As: General theoretical framework for how to do it	17
Table 2: 5As brief intervention for a healthy diet – example fruit and vegetables	18
Table 3: 5As brief intervention to increase physical activity	19
Table 4: 5As brief intervention to quit tobacco	20
Table 5: 5As brief intervention to screen for harmful use of alcohol	22

Acknowledgements

The HEARTS technical package modules benefited from the dedication, support and contributions of a number of experts from American Heart Association; Centre for Chronic Disease Control (India); International Diabetes Federation; International Society of Hypertension; International Society of Nephrology; United States Centers for Disease Control and Prevention; Resolve to Save Lives, an initiative of Vital Strategies; World Health Organization Regional Office for the Americas/Pan American Health Organization; World Health Organization; World Heart Federation; World Hypertension League; and World Stroke Organization.

Staff at WHO headquarters, in WHO regional offices and in the WHO country offices in Ethiopia, India, Nepal, Philippines and Thailand also made valuable contributions to ensure that the materials are relevant at the national level.

WHO wishes to thank the following organizations for their contributions to the development of these modules: American Medical Association (AMA), Programme for Appropriate Technology in Health (PATH), The Integrated Management of Adolescent and Adult Illness (IMAI) Alliance, McMaster University Canada, and All India Institute of Medical Sciences. WHO would also like to thank the numerous international experts who contributed their valuable time and vast knowledge to the development of the modules.



HEARTS Technical Package

More people die each year from cardiovascular diseases (CVDs) than from any other cause. Over three-quarters of heart disease and stroke-related deaths occur in low- and middle-income countries.

The HEARTS technical package provides a strategic approach to improving cardiovascular health. It comprises six modules and an implementation guide. This package supports Ministries of Health to strengthen CVD management in primary care and aligns with WHO's Package of Essential Noncommunicable Disease Interventions (WHO PEN).

HEARTS modules are intended for use by policymakers and programme managers at different levels within Ministries of Health who can influence CVD primary care delivery. Different sections of each module are aimed at different levels of the health system and different cadres of workers. All modules will require adaptation at country level.

The people who will find the modules most useful are:

- **National level – Ministry of Health NCD policymakers responsible for:**
 - developing strategies, policies and plans related to service delivery of CVD
 - setting national targets on CVD, monitoring progress and reporting.
- **Subnational level – Health/NCD programme managers responsible for:**
 - planning, training, implementing and monitoring service delivery
- **Primary care level – Facility managers and primary health care trainers responsible for:**
 - assigning tasks, organising training and ensuring the facility is running smoothly
 - collecting facility-level data on indicators of progress towards CVD targets.

Target users may vary, based on context, existing health systems and national priorities.

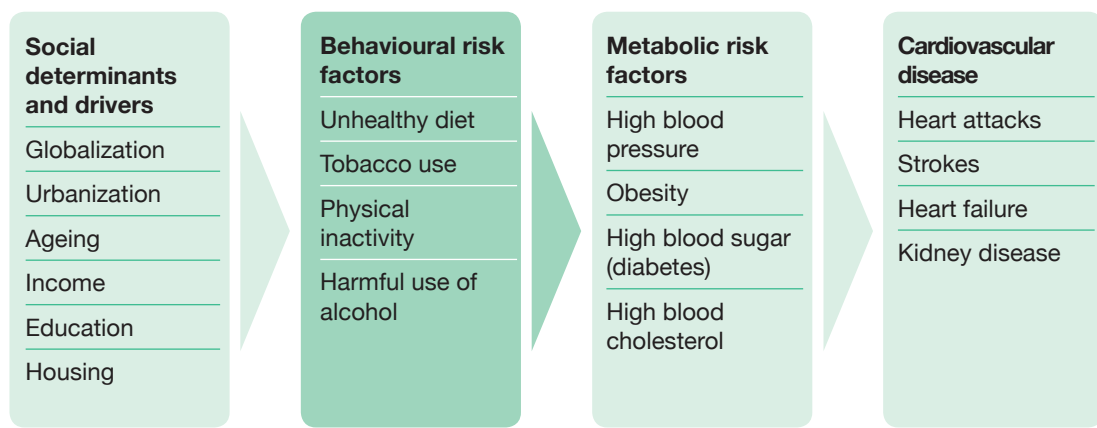
MODULES OF THE HEARTS TECHNICAL PACKAGE				
Module	What does it include?	Who are the target users?		
		National	Subnational	Primary care
H ealthy-lifestyle counselling	Information on the four behavioural risk factors for CVD is provided. Brief interventions are described as an approach to providing counselling on risk factors and encouraging people to have healthy lifestyles.		✓	✓
E vidence-based protocols	A collection of protocols to standardize a clinical approach to the management of hypertension and diabetes.	✓	✓	✓
A ccess to essential medicines and technology	Information on CVD medicine and technology procurement, quantification, distribution, management and handling of supplies at facility level.	✓	✓	✓
R isk-based CVD management	Information on a total risk approach to the assessment and management of CVD, including country-specific risk charts.		✓	✓
T eam-based care	Guidance and examples on team-based care and task shifting related to the care of CVD. Some training materials are also provided.		✓	✓
S ystems for monitoring	Information on how to monitor and report on the prevention and management of CVD. Contains standardized indicators and data-collection tools.	✓	✓	✓



Introduction

The risk factors for CVD include behavioural factors, such as tobacco use, an unhealthy diet, harmful use of alcohol and inadequate physical activity, and physiological (metabolic) factors, including high blood pressure (hypertension), high blood cholesterol and high blood sugar or glucose. Both kinds of factor are linked to underlying social determinants and drivers (Fig. 1). (1)

Figure 1: Factors contributing to the development of cardiovascular disease and related complications



This module focuses on the behavioural risk factors and provides information on:

- tobacco use, unhealthy diet, insufficient physical activity and harmful use of alcohol as important contributors to CVDs
- behavioural change, brief interventions for counselling and key points for motivational interviewing
- the theory of the 5As for brief interventions, as well as sample brief interventions for each risk factor, using the 5As.

Target users of this module

This module is intended for trainers of primary health care workers, including physicians, nurses, and other health workers.

Primary care workers should be trained on the risk factors and counselling approaches, adapting to local customs, culture and context.

NCD programme managers may also use it for planning purposes.

1 The four main behavioural risk factors for CVD

Unhealthy diet

The risk of CVD is increased by an unhealthy diet, characterized by a low intake of fruit and vegetables and high intakes of salt, fats (described in further detail in Box 1) and sugars. An unhealthy diet contributes to obesity and overweight, which are also risk factors for CVD. Unhealthy eating habits can also result in a range of other conditions, including cancer, diabetes and micronutrient deficiencies. (2)

What is a healthy diet?

A healthy diet is important to address hypertension, diabetes and obesity and help prevent heart attack and stroke. The composition of a healthy diet depends on individual needs (for example, age, sex, lifestyle, degree of physical activity), cultural context and locally available foods. However, the basic elements of a healthy adult diet remain constant (2):

a) a variety of foods

- o a range of fruits, vegetables, legumes (for example, lentils, beans) and nuts
- o whole grains such as unprocessed maize, millet, oats, wheat and brown rice, and starchy tubers or roots such as potato, yam, taro or cassava
- o foods from animal sources (for example, meat, fish, eggs and milk).

b) at least 400 g (five portions) of vegetables and fruits per day

- o one portion is equivalent, for example, to a single orange, apple, mango, banana, or 3 tablespoons of cooked vegetables. (Potatoes, sweet potatoes, cassava or other starchy tubers or roots do not count as one of these portions.)

c) less than 5 g of salt per day (equivalent to approximately 1 level teaspoon) (3)

- o including salt added while cooking or eating, as well as salt contained in foods such as processed foods and bread.

d) a total daily energy intake from fats of less than 30%

- o unsaturated fats are preferable to saturated fats (Box 1)
- o less than 10% of total energy intake should be from saturated fats

Box 1: What are saturated fats, trans-fats and unsaturated fats?

Saturated fats are found mainly in animal products such as meat, milk, butter, cream, cheese, ghee and lard. They can also be found in palm and coconut oil. Many saturated fats are solid, such as the fat in meat. Consuming saturated fats in unhealthy amounts can lead to raised cholesterol levels and can increase the risk for heart attack and stroke.

Trans-fats (also called hydrogenated or partially hydrogenated vegetable oils) are liquid vegetable oils that have been processed to make them solid. This makes them unhealthy. Trans-fats are often found in processed food, fast food, snacks, fried food, frozen pizza, pies, cookies, margarines and spreads.

Unsaturated fats/oils are generally found in plant foods such as seeds, grains, nuts, vegetables (for example, avocado) and fruit, and also in fish. They can be either polyunsaturated (as in sunflower, soya, corn, and sesame oils), or monounsaturated (for example, olive and rapeseed oils). Consuming unsaturated fats/oils instead of saturated fats can help to control cholesterol levels and reduce the risk of heart attack and stroke.

- o trans-fats are not part of a healthy diet and should be avoided.
- e) total daily energy intake from free sugars of less than 10%** (Box 2) (4)
- o equivalent to 50 g (or approximately 12 level teaspoons) for a person of healthy body weight
 - o for additional health benefits, less than 5% of total energy intake from free sugars is ideal.

Box 2: What are free sugars?

Free sugars are those added to foods such as cakes, cookies and sweets or drinks (for example, soda, sweetened milk, fruit juices). Free sugars are also naturally present in honey, syrups, fruit juices and fruit juice concentrates.

Insufficient physical activity

Insufficient physical activity is one of the leading risk factors for premature death worldwide. People who are insufficiently active are between 20% and 30% more likely to die prematurely than those who are sufficiently active. Insufficient physical activity is a key risk factor for CVD, cancer and diabetes.

What is physical activity?

WHO defines physical activity as any movement produced by the skeletal muscles of the human body that uses energy. It covers a range of bodily movements and activities of daily life, such as playing, working, walking, household chores and recreational activities. Physical activity includes exercise, a subcategory of physical activity that is planned, structured and repetitive, with the objective of improving or maintaining physical fitness. (5)

What are the benefits of physical activity?

Regular and adequate levels of physical activity help to reduce the risk of hypertension, heart attack, stroke, diabetes, various types of cancer (including breast and colon cancer) and depression. Physical activity also contributes to weight control, diabetes control, improved blood pressure and improved levels of cholesterol and other blood lipids. (5)

What are healthy levels of physical activity for adults?

Some physical activity is better than none. Inactive people can start with small amounts of physical activity (even as a part of their normal daily activities) and gradually increase duration, frequency and intensity. (5)

Adults should perform:

- at least 150 minutes of moderate physical activity (a mild increase in heart rate or breathing rate resulting from, for example, brisk walking, climbing stairs, dancing, gardening or doing household chores) spread throughout the week, or
- at least 75 minutes of vigorous physical activity (including vigorous gardening, running, fast cycling, fast swimming, or playing sport) spread throughout the week), or
- an equivalent combination of moderate and vigorous activity;
- muscle-strengthening activities involving major muscle groups on two or more days a week. (6)

For additional health benefits, moderately intense physical activity should be increased to 300 minutes per week, or equivalent. Those with reduced mobility should perform physical activity on three or more days per week in order to improve balance and prevent falls. These recommendations apply to all adults, including those with CVD

and diabetes, unless there is a specific medical recommendation to the contrary. If the recommended regime of physical activity cannot be undertaken because of health constraints, it should be adapted as abilities and conditions allow. (5)

Tobacco use

Tobacco kills nearly half of its users and causes 6 million deaths every year. Ten per cent of these deaths are the result of inhaling secondhand smoke in homes, restaurants, offices or other enclosed spaces. (7)

What is tobacco use?

Tobacco can be smoked, sucked, chewed or sniffed. Tobacco products can generally be divided into two types:

- smoked tobacco (in cigarettes, cigars, pipes and water pipes)
- smokeless tobacco (in chewing tobacco and snuff).

All tobacco products contain the addictive substance nicotine that is absorbed into the bloodstream when a tobacco product is used.

Consequences for health

All tobacco products are harmful. Tobacco smoke contains at least 250 harmful chemicals, of which at least 69 are known to cause cancer. Tobacco use can damage every part of the body and is one of the main risk factors for CVD. It causes an estimated 10% of all CVD deaths. (7)

What are the benefits of quitting tobacco use?

Quitting is the best action tobacco users can take to improve their health. Quitting has immediate and long-term health benefits, including living up to 10 years longer.

a) Benefits to health (7)

Within a few months of quitting smoking, coughing and shortness of breath decrease. After a year of quitting, the risk of heart attack and angina is about half that of a smoker. Fifteen years after quitting, the risk of heart attack and angina is the same as that of a non-smoker. Additionally, quitting smoking after a heart attack reduces the chances of having another heart attack by 50%.

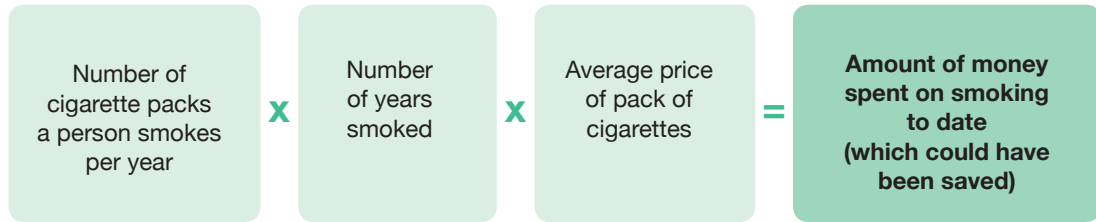
Quitting tobacco use reduces the likelihood of problems such as impotence, difficulties in getting pregnant, premature births, low birth weight and miscarriage. It also reduces the risk of childhood diseases related to secondhand smoke, such as asthma and middle-ear disease.

Other benefits of quitting smoking include: better ability to taste food, improved sense of smell, greater physical well-being, better performance in physical activities, and improved appearance, including reduced wrinkling/ageing of skin and whiter teeth. Quitting also improves the health of family members. Quitting tobacco use is also likely to slow progressive kidney function loss among those with chronic kidney disease.

b) Financial benefits (7)

At an individual level, there are substantial savings to be made on money previously spent on tobacco (see Figure 3). At a national level, potential health care costs (related to illnesses caused by tobacco) are prevented.

Figure 2: Calculation of money spent on tobacco



c) Social benefits (7)

Someone who quits tobacco use will find that their personal environment (home, car), clothing and breath will smell better. Their self-esteem is likely to increase and, as tobacco-free zones become accessible, social isolation they might have experienced will reduce. A person's productivity, too, will be greater as a result of quitting tobacco use, since smoking breaks will no longer be necessary. Once a parent has stopped smoking, their children become less likely to start the habit and more likely to quit if they smoke already.

Harmful use of alcohol

The harmful use of alcohol is a risk factor for CVD and has many negative health and social consequences. Harmful use of alcohol is a causal factor in more than 200 diseases and injuries. Beyond health consequences, the harmful use of alcohol brings significant social and economic losses to individuals and society at large. Like tobacco, alcohol can have a marked impact on the health of people other than the drinker. (8)

What is harmful use of alcohol?

Harmful use of alcohol, when defined as a public health problem, refers to “drinking that causes detrimental health and social consequences for the drinker, the people around the drinker and society at large, as well as patterns of drinking associated with increased risk of adverse health outcomes.” (9)

Harmful use includes high-level drinking each day, as well as single or repeated episodes of drinking to intoxication.

The risks related to alcohol are linked to the pattern of drinking, the amount of alcohol consumed and, sometimes, the quality of the alcohol consumed. There is no definition for safe or non-harmful use of alcohol. However, individuals are generally considered to be at lower risk for negative consequences of alcohol use if they drink no more than two units of alcohol per day and do not drink on at least two days of the week. (8, 9)

The alcohol content of a drink depends on the strength (alcohol percentage) of what is consumed and the volume of the container. There are wide variations from country to country in the strength of alcoholic drinks and in the sizes of drinks served. Therefore, when providing health information on alcohol use, it is essential to define “a drink” according to what is most common in the local context. (9)

What are the risks of harmful use of alcohol?

High levels of alcohol consumption and regular heavy episodic drinking are clearly associated with increased risk of CVD, since harmful use of alcohol damages the heart muscle, increases the risk of stroke and can cause cardiac arrhythmia. There may also be an increased risk among light-to-moderate drinkers who have irregular heavy drinking episodes. Whilst low-level consumption without any episodes of heavy drinking may be associated with a reduced CVD risk in some cases, overall alcohol consumption is associated with multiple health risks that may outweigh potential benefits. (9)

Brief interventions in primary care have been shown to be useful in identifying and managing people with alcohol problems. (10) However, the 5As brief intervention on harmful use of alcohol in this module should be used only to screen for potential harmful use and to provide basic information to patients on the harmful effects of alcohol. Detailed guidance for alcohol problems is outside the scope of this module and requires further training and resources. Some tools and guidance are referenced below:

- ASSIST: The Alcohol, Smoking and Substance Involvement Screening Test. Manual for use in primary care. Geneva: World Health Organization; 2010 (http://www.who.int/substance_abuse/publications/assist/en/, accessed 31 March 2017)
- AUDIT: The Alcohol Use Disorders Identification Test. Guidelines for use in primary care. 2nd edition. Geneva: World Health Organization; 2001 (http://www.who.int/substance_abuse/activities/sbi/en, accessed 31 March 2017)
- Brief intervention for Hazardous and Harmful Drinking. A manual for use in primary care. Geneva: World Health Organization; 2001 (http://www.who.int/substance_abuse/publications/audit_sbi/en/, accessed 31 March 2017)

2 Behaviour change

Understanding behaviour change

Reducing health risks may require changes to be made in some behaviours. Behaviour change is a complex issue and is not a one-off event but rather a set of different stages through which a person moves.

Behaviour change takes time, and different people go through the stages at various speeds. Some may remain indefinitely at one stage: for example, they may recognize and think they need to change but not be ready to make the change. Even though a person intends to start or maintain a new behaviour, for a range of reasons they may move back to an earlier stage. A relapse into an old behaviour can occur at any point and does not necessarily mean a failure to change. Many people who eventually adopt a new behaviour make several attempts before it is maintained over the long term. A person may feel disappointed, frustrated or tired, and relapse as a consequence. (11)

Understanding behaviour change is important for primary health care providers as they usually provide the first point of contact for patients accessing the health system. It is therefore necessary for the primary health care worker to assess and understand the different stages of readiness of the patient to make the required change in behaviour. This allows for more contextual, relevant and patient-centred counselling. Every visit or interaction with a healthcare provider is an opportunity for providing information and counselling on the risk factors, particularly for people with existing NCDs.

Counselling for behaviour change through brief interventions

Counselling can be described as professional guidance and support to help a person to solve a problem. Counselling for healthy lifestyles involves guiding and supporting patients toward making changes in certain behaviours to reduce the risk of heart attack, stroke and other conditions (diabetes, lung disease and cancer). A brief intervention is a short interaction of between three and 20 minutes between health worker and patient. It aims to identify a real or potential problem, provide information about it and then motivate and assist the patient to do something about it. A brief intervention involves two important aspects: how and what.

“How” refers to the communication style that the health worker uses to interact with the patient during the brief intervention. Communications techniques (Box 3) and motivational interviewing (Box 4) can be used as approaches to deliver the brief interventions.

Box 3: Communication techniques – “OARS”

- Open-ended questions
- Affirm
- Reflective listening
- Summarize

“What” refers to the structure of the counselling process and the content that should be covered during the brief intervention. An example of a brief intervention that can be used for healthy-lifestyle counselling is the 5As (see Section 3).

Motivational interviewing

Motivational interviewing is a style of talking with a person that can help in motivating them to change. In motivational interviewing, the counsellor does not try to convince the person to change, but instead guides them to reach conclusions themselves, and draws out the internal motivations unique to the person.

A central idea in motivational interviewing is that most people experience some ambivalence or mixed feelings about change. They have some reasons to change and also some reasons for staying the same, and may remain caught in the middle, unable to change. Motivational interviewing encourages people to explore these mixed feelings so that they can move toward positive change.

Box 4: Key principles of motivational interviewing

- Don't tell the person what to do
- Listen and show empathy
- Help the patient see the gap between where they are and where they want to be
- Let the patient tell you they need to change
- Help the patient to feel confident about changing
- Roll with resistance

Boxes 3 and 4: Adapted from: Latchford G, Duff A. Motivational interviewing: a brief guide. Leeds: University of Leeds; 2010.

3 Brief interventions to encourage behaviour change

General theory of the 5As brief interventions

Primary health care workers play an important role in helping patients to change their unhealthy behaviours and maintain healthy behaviours. Short interactions of between three and 20 minutes, called brief interventions, aim to identify a real or potential problem, provide information about it and motivate and assist the patient to do something about it. (10, 12)

The 5As is a tool used for brief interventions. It summarizes what a health worker can do to help someone who is ready to change. (10, 12) This can be integrated into regular visits by health providers of any level, either at community or facility level. Risk-factor counselling should be integrated with existing programme delivery at all levels of care.

Table 1 provides a general theoretical framework and further details on the 5As and how to use this tool. This framework can be adapted for each CVD behaviour risk factor, and samples are provided in Tables 2 to 5. (The sample for unhealthy diet focuses on fruit and vegetables, but can be expanded to include salt, fats and oils and sugars.)

Table 1: The 5As: General theoretical framework for how to do it

5As	What to say/do and how to say/do it									
Ask	<p>Ask the patient about the relevant risk factor(s) at every visit. Ask in a friendly way, without being judgmental. Keep the questions simple. Record the information in the patient's medical record/notes.</p>									
Advise	<p>Health workers have special authority because of their training. Patients usually respect this expertise. Provide information, key messages and advice in a clear, simple, and personalized manner. Link the advice to something that is relevant for the person. For example:</p> <ul style="list-style-type: none"> • a person with hypertension may be interested in the benefits of reducing salt intake • people with young children may be concerned about the effects of secondhand smoke. 									
Assess	<p>Assess the patient's readiness to start making a change by asking two questions:</p> <ol style="list-style-type: none"> 1. Are you ready to have a diet that includes more healthy options? Be more physically active? Be a non-smoker? Be a lower-risk drinker? 2. Do you think you will be able to make the change? <table border="1" data-bbox="293 875 810 1010"> <tr> <td>Question 1</td> <td>Yes</td> <td>Not sure</td> <td>No</td> <td rowspan="2">Any answer in the shaded area indicates that the person is not yet ready to change. In this case, effort needs to be made to increase motivation for change.</td> </tr> <tr> <td>Question 2</td> <td>Yes</td> <td>Not sure</td> <td>No</td> </tr> </table> <p>Answers in the white area suggest that you and the patient can move on to the next step.</p>	Question 1	Yes	Not sure	No	Any answer in the shaded area indicates that the person is not yet ready to change. In this case, effort needs to be made to increase motivation for change.	Question 2	Yes	Not sure	No
Question 1	Yes	Not sure	No	Any answer in the shaded area indicates that the person is not yet ready to change. In this case, effort needs to be made to increase motivation for change.						
Question 2	Yes	Not sure	No							
Assist	<p>Help the person to develop a plan that can increase the chance of success. Provide practical counselling that focuses on:</p> <ul style="list-style-type: none"> • provision of basic information about the risk factor • identification of situations that could trigger relapse • ways of coping with trigger situations. <p>Provide social support including:</p> <ul style="list-style-type: none"> • providing encouragement • communicating interest and concern • encouraging the person to talk about the change process with family and friends. <p>Provide and ensure availability of health education materials and details about additional resources, such as support groups, quit lines, etc.</p>									
Arrange	<p>Arrange a follow-up contact, by phone or in person. Discuss timing of follow-up with patients. At follow-up for all patients:</p> <ul style="list-style-type: none"> • identify problems already experienced as well as new ones that could arise • remind them of the additional support that is available • schedule next follow-up visit. <p>Refer to specialist services if needed and available.</p> <p>For those who have made the planned changes:</p> <ul style="list-style-type: none"> • congratulate them on their success. <p>For those who have challenges:</p> <ul style="list-style-type: none"> • remind them to view this as a learning experience • review their circumstances and motivate them to re-commit • link to more intensive support, if available. 									

Table 2: 5As brief intervention for a healthy diet – example fruit and vegetables

5As	Fruit and vegetables								
Ask	<p>How many portions of fruit and vegetables do you eat each day?</p> <p>1 portion = 1 orange, apple, mango, banana, or 3 tablespoons of cooked vegetables*.</p> <p>Provide local examples and equivalent serving sizes.</p> <p>*Potatoes, sweet potatoes, cassava or other starchy tubers or roots do not count as one of these portions.</p>								
Advise	<p>Eat at least 5 portions of fruit and vegetables per day.</p> <p>Eat a variety of fruits, vegetables, legumes (lentils, beans), nuts and whole grains (unprocessed maize, millet, oats, wheat, brown rice), starchy tubers or roots (potato, yam, taro or cassava) and foods from animal sources (meat, fish, eggs and milk). Provide local examples.</p> <p>Advantages:</p> <ul style="list-style-type: none"> Eating a variety of these foods every day helps you to take in the right amounts of essential nutrients. Eating enough healthy food helps to avoid unhealthy foods that can lead to overweight and obesity, and diseases such as hypertension, diabetes, heart attack and stroke. 								
Assess	<p>1. Are you ready to make some changes to your diet in order to include more healthy food options?</p> <p>2. Do you think you will succeed in making the changes?</p> <table border="1" data-bbox="300 938 817 1075"> <tr> <td>Question 1</td> <td>Yes</td> <td>Not sure</td> <td>No</td> </tr> <tr> <td>Question 2</td> <td>Yes</td> <td>Not sure</td> <td>No</td> </tr> </table> <p>Any answer in the shaded area indicates that the person is not yet ready to change. In this case, effort needs to be made to increase motivation for change.</p> <p>Answers in the white area suggest that you and the patient can move on to the next step.</p>	Question 1	Yes	Not sure	No	Question 2	Yes	Not sure	No
Question 1	Yes	Not sure	No						
Question 2	Yes	Not sure	No						
Assist	<p>Help the patient to set goals and make a plan to start introducing some changes to their eating habits.</p> <p>Provide practical counselling about unhealthy foods and healthier choices. For example:</p> <ul style="list-style-type: none"> Avoid deep fried foods. Eat fresh vegetables and fruit that are in season. Have fresh fruit available and in plain sight. <p>Engage the patient in the conversation and allow time for them to share ideas:</p> <ul style="list-style-type: none"> Can you think of ways to increase the amount of fruit and vegetable you eat every day? Can you think of healthier types of food that you enjoy and that you could eat instead of the less-healthy option? <p>Provide social support:</p> <ul style="list-style-type: none"> Invite the patient to bring family members to the next visit in order to discuss healthier diet options for the whole family. Provide health and nutrition education materials. 								
Arrange	<p>Refer to specialist support services (dietician, nutritionist) if needed and available</p> <p>Follow-up: decide the timeline and method and schedule the next appointment.</p> <p>Ask about successes and challenges.</p> <p>For those of have made the planned changes to their eating habits:</p> <ul style="list-style-type: none"> Congratulate them on their success. <p>For those experiencing challenges:</p> <ul style="list-style-type: none"> Remind them to view the process as a learning experience and that it takes time to establish new habits Review circumstances, discuss ways to address challenges and encourage recommitment to their plan. <p>Link with more intensive support, if available. Remind all patients of any additional support and resources that are available.</p>								

Table 3: 5As brief intervention to increase physical activity

5As	Physical activity								
Ask	<p>In the past week, on how many days have you been physically active for a total of 30 minutes or more? For example: walking, cycling, cleaning, gardening, climbing stairs, dancing or playing sport. <i>Adapt examples to local context.</i></p>								
Advise	<p>All adults should do at least 2½ hours (150 minutes) of physical activity per week. This can be spread over short sessions throughout the day and week, starting from as little as 10 minutes per session.</p> <p>Being more active can start in small ways which are part of daily life. This can include going for a walk, playing with children, gardening and domestic chores. <i>Adapt examples to local context.</i></p> <p>Advantages of physical activity:</p> <ul style="list-style-type: none"> • Reduces the risk of heart attack and stroke or of developing hypertension, diabetes and cancer • Can help to control blood pressure, cholesterol and diabetes • Helps with weight loss and weight control • Helps to prevent and manage depression. • Some physical activity is better than none. 								
Assess	<p>1. Are you ready to start being more physically active? 2. Do you think you will be able to succeed in increasing your activity levels?</p> <table border="1" data-bbox="300 958 817 1093"> <tr> <td>Question 1</td> <td>Yes</td> <td>Not sure</td> <td>No</td> </tr> <tr> <td>Question 2</td> <td>Yes</td> <td>Not sure</td> <td>No</td> </tr> </table> <p>Any answer in the shaded area indicates that the person is not yet ready to change. In this case, effort needs to be made to increase motivation for change.</p> <p>Answers in the white area suggest that you and the patient can move on to the next step.</p>	Question 1	Yes	Not sure	No	Question 2	Yes	Not sure	No
Question 1	Yes	Not sure	No						
Question 2	Yes	Not sure	No						
Assist	<p>Help the patient to develop a plan to start increasing physical activity. Provide practical counselling.</p> <ul style="list-style-type: none"> • Help the patient to identify areas of their daily life where they could start to increase their activity levels. • Help to identify activities that they would enjoy doing. • Help to identify possible challenges and suggest how to overcome them. • Provide social support. • Encourage the patient to talk with family, friends and work colleagues about their efforts to increase activity levels. • Provide health education materials and information on additional resources. • These could include contact details for organizations such as walking groups and activity clubs <p><i>Adapt to local context.</i></p> <p>Provide (if available) or advise on devices to help motivate or monitor activity e.g. a pedometer.</p>								
Arrange	<p>Refer to specialist support services if needed and available. Follow-up: decide the timeline and method and schedule the next appointment. Ask about successes and challenges.</p> <p>For those who have become more physically active:</p> <ul style="list-style-type: none"> • Congratulate them on their success. <p>For those experiencing challenges:</p> <ul style="list-style-type: none"> • Remind them to view the process as a learning experience and that it takes time to establish new habits. • Review circumstances, discuss ways to address challenges and encourage recommitment to their plan. • Link with more intensive support if available. <p>Remind all patients of any additional support and resources that are available.</p>								

Table 4: 5As brief intervention to quit tobacco (12)

5As	Tobacco									
Ask	<p>Have you smoked or used any other tobacco product in the past 12 months? (for example, cigarettes (including home-made), cigars, pipe, water-pipe, chewing tobacco, snuff):</p> <p style="text-align: right;">Yes No</p> <p>Do you currently smoke or use any other tobacco product?:</p> <p style="text-align: right;">Yes No</p> <p>Does anyone smoke around you at home or at work, or do you often go to places where there is a lot of smoke such as restaurants or bars?</p> <p style="text-align: right;">Yes No</p> <p>If No to all these questions:</p> <ul style="list-style-type: none"> Advise not to start tobacco use smoke and to avoid secondhand exposure <p>If Yes to any questions:</p> <ul style="list-style-type: none"> Advise on risks of exposure to secondhand <p style="text-align: center;">▼</p>									
Advise	<p>Quitting tobacco is the most important thing you can do to protect your health now and in the future.</p> <p>Advantages:</p> <ul style="list-style-type: none"> Tobacco use is a major cause of heart attack and stroke, of serious lung problems and certain cancers. Tobacco can damage every part of the body. Secondhand smoke damages the health of your family and others around you. <p style="text-align: center;">▼</p>									
Assess	<p>1. Are you interested in quitting tobacco use?</p> <p>2. Do you think you will succeed in quitting?</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td style="text-align: center;">Question 1</td> <td style="text-align: center;">Yes</td> <td style="background-color: #d9ead3; text-align: center;">Not sure</td> <td style="text-align: center;">No</td> <td rowspan="2" style="padding-left: 10px; vertical-align: middle;">Any answer in the shaded area indicates that the person is not yet ready to change. In this case, effort needs to be made to increase motivation for change.</td> </tr> <tr> <td style="text-align: center;">Question 2</td> <td style="text-align: center;">Yes</td> <td style="background-color: #d9ead3; text-align: center;">Not sure</td> <td style="text-align: center;">No</td> </tr> </tbody> </table> <p>Answers in the white area suggest that you and the patient can move on to the next step.</p> <p style="text-align: center;">▼</p>	Question 1	Yes	Not sure	No	Any answer in the shaded area indicates that the person is not yet ready to change. In this case, effort needs to be made to increase motivation for change.	Question 2	Yes	Not sure	No
Question 1	Yes	Not sure	No	Any answer in the shaded area indicates that the person is not yet ready to change. In this case, effort needs to be made to increase motivation for change.						
Question 2	Yes	Not sure	No							
Assist	<p>Help the patient to develop a quit plan using the STAR method:</p> <p>Set a quit date, ideally within 2 weeks.</p> <p>Tell family and friends about quitting and ask for support.</p> <p>Anticipate challenges in the quit attempt.</p> <p>Remove tobacco products from personal environment and make home smoke-free.</p> <p>Provide practical counselling:</p> <ul style="list-style-type: none"> Provide basic information about tobacco use and quitting. Help the patient to identify situations (e.g. feelings, places, activities) that could increase the risk of smoking or relapse. Help to identify and practise ways of coping with these situations. <p>Provide social support.</p> <ul style="list-style-type: none"> Provide encouragement in the quit attempt by showing care and concern. Encourage the patient to talk about the quitting process. <p>Provide health education materials and information on additional resources, e.g. support groups, quit lines.</p> <p>Recommend the use of medications if indicated and available, e.g. nicotine replacement therapy.</p> <p style="text-align: center;">▼</p>									

5As	Tobacco
Arrange	<p>Refer to specialist support services if needed and available.</p> <p>Follow-up:</p> <ul style="list-style-type: none"> • Decide the timeline and method and schedule the next appointment. • Ask about successes and challenges. <p>For those who have quit:</p> <ul style="list-style-type: none"> • Congratulate them on their success. <p>For those who have used tobacco again:</p> <ul style="list-style-type: none"> • Remind them to view any failures as a learning experience. • Review circumstances and encourage them to recommit to quitting. • Link with more intensive support if available. <p>For all patients:</p> <ul style="list-style-type: none"> • Identify problems and discuss ways to address them. • Remind them of additional support and resources that are available. • Assess use of medications and any problems experienced.

Please also refer to the WHO publication *Strengthening health systems for treating tobacco dependence in primary care. Part III: Training for primary care providers: Brief tobacco interventions*, listed in Selected further reading.

Table 5: 5As brief intervention to screen for harmful use of alcohol

5As	Alcohol	
Ask	Do you ever drink alcohol?	Yes No
	<p>If Yes:</p> <ul style="list-style-type: none"> How often do you have an alcoholic drink? How many alcoholic drinks do you have on a usual day when you are drinking? 	
Advise	<p>For people drinking fewer than 2 units (according to local drink strengths and commonly available sizes) per day and drinking on 5 or fewer days per week, inform them of the following:</p> <ul style="list-style-type: none"> Use of alcohol can increase the risk of having a heart attack or stroke. It also increases the risks of getting certain cancers and can cause damage to other parts of the body. Overall, the best way to avoid the health risks of alcohol use is to abstain. If you do drink alcohol, keep in mind that “less is better”. Avoid having more than two units on any single day and do not drink any alcohol on at least two days per week. Do not drink alcohol for “health” reasons. Do not use alcohol when you are: <ul style="list-style-type: none"> driving operating machinery pregnant or breastfeeding taking medications that interact with alcohol. living with medical conditions that are made worse by alcohol having difficulties controlling how much you drink. 	
	<p>For people who drink two or more units per day, who drink on more than five days per week and/or have any indication that alcohol could potentially be a problem, say:</p> <ul style="list-style-type: none"> “Your drinking habits could be harmful to your health. May I ask you a few more questions to have a better idea of the possible risks?” 	
Assess		Yes No
Assist and Arrange	<p>If No:</p> <ul style="list-style-type: none"> Give brief advice. End the discussion positively by saying, “This can be a difficult issue to discuss but I am here to help you.” Provide health education materials and information about additional resources such as help lines, counselling, support groups. At the next visit, repeat the brief intervention. 	
	<p>If Yes:</p> <ul style="list-style-type: none"> Give brief advice and refer for further counselling and tests (for which further training, tools and resources are required). See AUDIT test (link below). The score will determine next steps. 	

4 Next steps

The theoretical information on the four risk factors (unhealthy diet, physical inactivity, tobacco use and harmful use of alcohol) has been provided. Similarly, the theory on behaviour change and sample frameworks using the 5As brief interventions has also been presented. The next step will entail adaptation of this information and frameworks to support local implementation.

This should be done in the country by relevant working groups who are knowledgeable about the topic, country dynamics, culture, locally appropriate languages as well as what has worked in other similar areas of health.

A variety of supporting materials can be developed at the local level including but not limited to:

- job aids
- flip charts
- patient information leaflets
- posters
- mobile apps


Examples of these materials are provided in the Annex.

Annex: Material supporting healthy lifestyles


Examples from *Healthy lifestyles for patients with hypertension (13)*

Healthy lifestyles for patients with hypertension


Healthy lifestyles for patients with hypertension




Eat healthy




Be physically active



Stop harmful use of alcohol



Quit smoking



Manage your stress

1


FOR PATIENTS

Eat healthy (low-salt diet)


Patient education

- A balanced diet is very important for people with hypertension. It is also vital to eat less salt.
- For example, instead of drinking the soup broth, eat only the ingredients in the soup.
- Also cut back on pickled and processed foods like ketchup, sausage and ham.
- It is highly recommended to eat fresh and healthy local food.


- Eat less soup broth
- Eat less pickled and processed food
- Eat fresh, local food



X



X



O

REFERENCES:
Weber, Michael A., et al. Clinical practice guidelines for the management of hypertension in the community. The Journal of Clinical Hypertension, 2014, 16:1, 14-26.
James, Paul A., et al. 2014 Evidence-based guideline for the management of high blood pressure in adults: report from the panel members appointed to the Eighth Joint National Committee (JNC 8). JAMA, 2014, 311:5, 507-520.
Department of Health and Human Services, National Institutes of Health, National Heart, Lung, and Blood Institute (United States). Your guide to lowering your blood pressure with DASH. DASH eating

Good exercises for patients with hypertension

Aerobic exercise

- Strengthens heart and lung function
- Strengthens joints and increases body flexibility
- Strengthens bones and muscles

Examples of recommended exercises



Walking/
Jogging



Running



Cycling



Swimming

17

FOR PATIENTS

Smoking and hypertension

Patient Education

- It is best to stop smoking.
- Smoking increases the risk of lung diseases, cancer and cardiovascular diseases such as angina and stroke.
- If you wish to stop, but have failed, you can visit any clinic or doctor to get help.

Smoking is

the most important risk factor for chronic lung disease, cancer, cardiovascular disease, stroke and peripheral vascular disease.

- If you quit smoking, antihypertensive drugs become more effective.
- The risk of cardiovascular disease halves after a year of not smoking.
- The risk of cardiovascular disease becomes similar to non-smokers after 15 years of not smoking.



REFERENCES:
Weber, Michael A., et al. Clinical practice guidelines for the management of hypertension in the community. The Journal of Clinical Hypertension, 2014, 16.1: 14-26.
Chobanian, Aram V., et al. Seventh report of the joint national committee on prevention, detection, evaluation, and treatment of high blood pressure. Hypertension, 2003, 42.6: 1206-1252.
Department of Health and Human Services (United States). The health consequences of smoking—50 years of progress: a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014, 17.

22

FOR PHYSICIANS

Alcohol and hypertension

Patient education

- Drinking alcohol lowers the effect of antihypertensive drugs and causes more side-effects.
- Alcohol also supplies many calories without any nutrition, disturbing body-weight management, so cutting alcohol intake is important.
- It is recommended that men limit drinking to less than two glasses a day and women limit drinking to less than one glass a day.

Harmful use of alcohol could cause:

- blood pressure to rise
- drug effectiveness to weaken
- unwanted side-effects of medication to increase
- malnutrition
- body weight to increase



REFERENCES

Weber, Michael A., et al. Clinical practice guidelines for the management of hypertension in the community. The Journal of Clinical Hypertension, 2014, 16 1: 14-26.
Chobanian, Aram V., et al. Seventh report of the joint national committee on prevention, detection, evaluation, and treatment of high blood pressure. Hypertension, 2003, 42 6: 1206-1252.

Take-home message Healthy lifestyles



Eat healthy
Eat less salt
Eat a low-fat diet



Be physically active
More than 150 minutes
a week walking, cycling,
swimming



Quit smoking

**Stop harmful
use of alcohol**
Maximum of
one or two
drinks per day



**Manage your
stress**

References

1. HEARTS Technical package for cardiovascular disease management in primary health care. Geneva: World Health Organization; 2016 (http://www.who.int/cardiovascular_diseases/hearts/en/, accessed 31 March 2017).
2. Healthy diet fact sheet. Geneva: World Health Organization; 2015 (<http://www.who.int/mediacentre/factsheets/fs394/en/>, accessed 7 March 2017).
3. Guideline: sodium intake for adults and children. Geneva: World Health Organization; 2012 (http://www.who.int/nutrition/publications/guidelines/sodium_intake/en/, accessed 31 March 2017).
4. Guideline: sugars intake for adults and children. Geneva: World Health Organization; 2015 (http://www.who.int/nutrition/publications/guidelines/sugars_intake/en/, accessed 31 March 2017).
5. 10 facts on physical activity. Geneva: World Health Organization; 2017 (http://www.who.int/features/factfiles/physical_activity/en/, accessed 31 March 2017).
6. Global strategy on diet, physical activity and health: What is moderate-intensity and vigorous-intensity physical activity?. Geneva: World Health Organization (http://www.who.int/dietphysicalactivity/physical_activity_intensity/en/, accessed 20 April 2017).
7. Capacity building for tobacco control training package 4: strengthening health systems for treating tobacco dependence in primary care. Geneva: World Health Organization; 2013 (http://www.who.int/tobacco/publications/building_capacity/training_package/treatingtobaccodependence/en/, accessed 31 March 2017).
8. Alcohol fact sheet. Geneva: World Health Organization; 2015 (<http://www.who.int/mediacentre/factsheets/fs349/en/>, accessed 31 March 2017).
9. Global status report on alcohol and health 2014. Geneva: World Health Organization; 2014
10. Brief intervention for hazardous and harmful drinking. A manual for use in primary care. Geneva: World Health Organization; 2001 (http://www.who.int/substance_abuse/publications/audit_sbi/en/, accessed 31 March 2017)
11. Prochaska JO, Velicer WF. The transtheoretical model of health behavior change. *American Journal of Health Promotion*. 1997;12(1):38–48.
12. Toolkit for delivering the 5A's and 5R's brief tobacco interventions in primary care. Geneva: World Health Organization; 2014 (http://www.who.int/tobacco/publications/smoking_cessation/9789241506953/en/, accessed 31 March 2017).
13. Noncommunicable disease education manual for primary health care professionals and patients. Healthy lifestyles for patients with hypertension. Western Pacific Region, World Health Organisation 2017 (<http://iris.wpro.who.int/bitstream/handle/10665.1/13561/9789290617983-hyp-mod2-eng.pdf>, accessed 05 January 2018).

For more information

ASSIST: The Alcohol, Smoking and Substance Involvement Screening Test. Manual for use in primary care. Geneva: World Health Organization; 2010 (http://www.who.int/substance_abuse/publications/assist/en/, accessed 31 March 2017).

AUDIT: The Alcohol Use Disorders Identification Test. Guidelines for use in primary care. 2nd edition. Geneva: World Health Organization; 2001 (http://www.who.int/substance_abuse/activities/sbi/en/, accessed 31 March 2017)

Global atlas on cardiovascular disease prevention and control. Policies, strategies and interventions. Geneva: World Health Organization; 2011 (http://www.who.int/cardiovascular_diseases/publications/atlas_cvd/en/, accessed 31 March 2017).

Implementation tools: package of essential noncommunicable (PEN) disease interventions for primary health care in low-resource settings. Geneva: World Health Organization; 2013 (http://www.who.int/cardiovascular_diseases/publications/implementation_tools_WHO_PEN/en/, accessed 31 March 2017).

Know the facts about heart disease [fact sheet]. Atlanta: Centers for Disease Control and Prevention (https://www.cdc.gov/heartdisease/docs/consumered_heartdisease.pdf, accessed 28 March 2017).

Know the facts about high blood pressure [fact sheet]. Atlanta: Centers for Disease Control and Prevention (https://www.cdc.gov/bloodpressure/docs/consumered_hbp.pdf, accessed 28 March 2017).

Know the facts about high cholesterol [fact sheet]. Atlanta: Centers for Disease Control and Prevention (https://www.cdc.gov/cholesterol/docs/consumered_cholesterol.pdf, accessed 28 March 2017).

Know the facts about stroke [fact sheet]. Atlanta: Centers for Disease Control and Prevention (https://www.cdc.gov/stroke/docs/consumered_stroke.pdf, accessed 28 March 2017).

Lexicon of alcohol and drug terms. Geneva: World Health Organization (http://www.who.int/substance_abuse/terminology/who_lexicon/en/, accessed 28 March 2017).

Prevention of cardiovascular disease: pocket guidelines for assessment and management of CVD risk. Geneva: World Health Organization; 2007 (http://www.who.int/cardiovascular_diseases/guidelines/PocketGL.ENGLISH.AFR-D-E.rev1.pdf, accessed 31 March 2017).

Strengthening health systems for treating tobacco dependence in primary care. Part III: Training for primary care providers: brief tobacco interventions. Geneva: World Health Organization 2013.

The 3 Fives. Five keys to safer food, Five keys to a healthy diet, Five keys to appropriate physical activity. (http://www.who.int/foodsafety/areas_work/food-hygiene/3_fives/en/, accessed 31 March 2017).

Tips for eating healthy with diabetes [fact sheet]. Atlanta: Centers for Disease Control and Prevention (https://www.cdc.gov/diabetes/pdfs/managing/tip_for_eating_healthy.pdf, accessed 28 March 2017).