

## Supplementary Appendix 1. Instrument to Measure the Lifestyle of People Living with Diabetes (IMEVID)

This is a questionnaire designed to understand the lifestyle of people with type 2 diabetes. Please read the following questions carefully and answer what you consider best reflects your lifestyle in the last **3** months.

Choose a single option by marking an X in the box containing the chosen answer.

We kindly ask you to answer all questions.

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Sex: F / M

Age: \_\_\_\_\_ years

1	How often do you eat vegetables?	Every day	Some days	Hardly ever
2	How often do you eat fruit?	Every day	Some days	Hardly ever
3	How many pieces of bread do you eat per day?	0 to 1	2	3 or more
4	How many tortillas do you eat per day?	0 to 3	4 to 6	7 or more
5	Do you add sugar to your food or drinks?	Hardly ever	Sometimes	Frequently
6	Do you add salt to your food?	Hardly ever	Sometimes	Frequently
7	Do you eat between meals?	Hardly ever	Sometimes	Frequently
9	When you finish eating the amount initially served, do you ask for more?	Hardly ever	Sometimes	Frequently
10	How often do you get at least 15 minutes of exercise (e.g., walk fast, run or something else)?	3 or more times a week	1 to 2 times a week	Hardly ever
11	Do you stay busy outside of your usual work activities?	Hardly ever	Sometimes	Frequently
12	What do you do most often in your free time?	Go out of the house	Work at home	Watch television
13	Do you smoke?	No	Sometimes	Daily
14	How many cigarettes do you smoke per day?	None	1 to 5	6 or more
15	Do you drink alcohol?	Never	Rarely	Once a week
16	How many alcoholic drinks do you drink on each occasion?	None	1 to 2	3 or more

17	<b>How many talks for people living with diabetes have you attended?</b>	4 or more	1 to 3	None
18	<b>Do you try to find information about diabetes?</b>	Almost always	Sometimes	Hardly ever
19	<b>Do you get angry easily?</b>	Hardly ever	Sometimes	Almost always
20	<b>Do you feel sad?</b>	Hardly ever	Sometimes	Almost always
21	<b>Do you have pessimistic thoughts about your future?</b>	Hardly ever	Sometimes	Almost always
22	<b>Do you do your best to keep your diabetes under control?</b>	Almost always	Sometimes	Hardly ever
23	<b>Do you follow a diabetes diet?</b>	Almost always	Sometimes	Hardly ever
24	<b>Do you forget to take your diabetes medications or your insulin?</b>	Hardly ever	Sometimes	Almost always
25	<b>Do you follow the medical instructions indicated for your care?</b>	Almost always	Sometimes	Hardly ever

Source: López-Carmona et al., 2004

**Supplementary Appendix 2. Behavioral Outcomes, performance objectives, personal-external determinants and change objective matrices for each self-care topic developed**

**1) Correct nutrition**

**Behavioral Outcome 1: the person living with diabetes eats a correct diet on a regular basis.**

Performance objectives (POs)	Change objectives (CO)									
	Personal determinants								External determinants	
	Knowledge	Observational learning	Behavioral capacity	Perceived susceptibility	Perceived severity	Perceived barriers	Perceived benefits (expectations)	Self-efficacy	Reinforcement (motivation)	Cues to action
PO1.1 Organizes menus according to his/her nutritional requirements.	CO1.1A Describes food groups.  CO1.1B. Identifies servings for each food group.  CO1.1C Recognizes his/her nutritional requirements.  OC.1.1D Identifies local and seasonal foods.		CO1.1E Chooses local and seasonal foods, in addition to establishing portions according to his/her requirements.				CO1.1F Realizes that by choosing local and seasonal foods he/she will be able to eat healthily without harming his/her finances.  CO1.1G Realizes that by developing menus according to his/her requirements he/she will better control his/her blood glucose and, therefore, have better health.	CO1.1H Feels able to identify local foods and establish portions appropriate to his/her requirements.	CO1.1I The MAG reinforces and motivates individual and group achievements.	CO1.1J Facilitators teach the basics of nutrition and eating to develop healthy and low-cost menus.
PO1.2 Establishes preparation and consumption times.	CO1.2A Identifies strategies to reduce preparation and		CO1.2B Analyzes his/her activities and chooses viable schedules to prepare and			CO1.2E Perceives that within his/her activities he/she will be able to				CO1.2F Facilitators promote reflection to cope with situations that make it

	consumption times.		consume his/her food.  CO1.2C Analyzes the barriers that make it likely that he/she will not comply with his/her eating plan properly and in a timely manner, such as being at a party, a meeting, a restaurant or a store.  CO1.2E Establishes actions to overcome barriers.			find time to acquire, prepare and consume his/her food, and will be able to overcome the difficulties in doing so.				difficult to comply with eating plans properly and in a timely manner.
PO1.3 Eats his/her food properly and in a timely manner every day.	CO1.3A Recognizes that healthy eating is part of a successful treatment to control blood glucose and prevent complications in the short, medium and long term.			CO1.3B Feels susceptible to having episodes of hyper or hypoglycemia by not consuming food properly and in a timely manner.  CO1.3C. Feels susceptible to developing medium- and long-term complications by not adhering to a healthy eating plan.	CO1.3D Perceives that the complications of diabetes in the short, medium and long terms are serious and should be avoided at all costs.		CO1.3E Realizes that by adhering to an eating plan he/she will better control his/her blood glucose and, therefore, be healthier.	CO1.3F Feels able to consume his/her food properly and in a timely manner, avoiding skipping meal times, as well as eating less or overeating.	CO1.3G MAG members share their difficulties and achievements as well as new solutions for eating healthy.	

## Supplementary Appendix 2. Continuation...

### 2) Exercise

#### Behavioral Outcome 2: the person living with diabetes does exercise regularly.

Performance Objectives (POs)	Change objectives (CO)									
	Personal determinants								External determinants	
	Knowledge	Observational learning	Behavioral capacity	Perceived susceptibility	Perceived severity	Perceived barriers	Perceived benefits (expectations)	Self-efficacy	Reinforcement (motivation)	Cues to action
PO2.1 Organizes an exercise program according to his/her requirements.	CO2.1A Remembers the characteristics and types of physical activity.  CO2.1B Identifies physical activities of interest.  CO2.1C Can explain what the best physical activity is for him/herself.		CO2.1D Determines which physical activity to do, as well as the time and frequency with which he/she will do it.			CO2.1E Perceives that he/she will be able to overcome the difficulties encountered in carrying out the chosen physical activity.	CO2.1F Perceives that, by developing an exercise program according to his/her requirements, he/she will better control his/her blood glucose and therefore be healthier.		CO2.1G The MAG reinforces and motivates individual and group achievements.	CO2.1H Facilitators teach the basics of physical activity to develop an appropriate and low-cost exercise program.
PO2.2 Allocates time and space for doing exercise.	CO2.2A Identifies strategies to implement an exercise program.		CO2.2B Analyzes his/her activities and chooses viable schedules to comply with, as well as appropriate spaces to implement, an exercise program.			CO2.2D Perceives that, within his/her activities, he/she will be able to find time and space to comply with his/her exercise program, and will be able to overcome the difficulties			CO2.2E MAG members share their difficulties and achievements as well as new solutions for doing exercise.	CO2.2F Facilitators promote reflection to cope with situations that make it difficult to comply with the participants' exercise programs properly and

			CO2.2C Analyzes dispositional factors in the environment that make it likely that he/she will fail to comply with his/her exercise program properly and in a timely manner (e.g., watching TV and family or work activities). Establishes actions to cope with these situations.			encountered in complying with the program.				in a timely manner.
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Supplementary [Appendix 2](#). Continuation...

3) Medications

**Behavioral Outcome 3: the person living with diabetes takes his/her medications or has them administered properly and in a timely manner.**

Performance objectives (POs)	Change objectives (CO)									
	Personal determinants								External determinants	
	Knowledge	Observational learning	Behavioral capacity	Perceived susceptibility	Perceived severity	Perceived barriers	Perceived benefits (expectations)	Self-efficacy	Reinforcement (motivation)	Cues to action
PO3.1 Establishes a medication program according to his/her medical prescription.	CO3.1A Can describe his/her medications as well as the proper way of taking them or having them administered.  CO3.1B Can explain the basic usefulness (functions) of his/her medications.		CO3.1C Develops a calendar with dates, times and doses for his/her medications.				CO3.1D Perceives that by having a medication program he/she will be able to comply with his/her pharmacological treatment properly and in a timely manner.		CO3.1E The MAG reinforces and motivates individual and group achievements.	CO3.1F Facilitators teach the physiological bases of the most common diabetes medications.

Supplementary **Appendix 2. Continuation...**

**4) Self-monitoring of capillary blood glucose**

**Behavioral Outcome 4: the person living with diabetes records his/her blood glucose levels regularly.**

Performance objectives (POs)	Change objectives (CO)									
	Personal determinants								External determinants	
	Knowledge	Observational learning	Behavioral capacity	Perceived susceptibility	Perceived severity	Perceived barriers	Perceived benefits (expectations)	Self-efficacy	Reinforcement (motivation)	Cues to action
PO4.1 Has the instruments available to measure his/her glucose.	CO4.1A Recognizes the usefulness of measuring his/her capillary glycemia.  CO4.1B. Identifies instruments and methods for taking glycemia.		CO4.1C Obtains the necessary inputs for taking capillary glycemia.			CO4.1D Perceives that the difficulties in obtaining the necessary inputs for taking capillary glycemia can be overcome.	CO4.1E Perceives that having the necessary inputs for taking capillary glycemia permits carrying out his/her glycemic control.		CO4.1F The MAG proposes strategies to ensure that the necessary supplies are available for measuring capillary blood glucose.	CO4.1G Facilitators teach the usefulness and utilization of capillary blood glucose meters.
PO4.2 When needed, he/she asks for help to measure his/her glucose.	CO4.2A Identifies places and people that can help him/her monitor his/her glucose.		CO4.2B Sets places and times to measure his/her glucose.				CO4.2C Feels that by asking for help, he/she will be able to measure his/her glucose.	CO4.2D Feels able to ask for help measuring his/her glucose.	CO4.2E The MAG proposes places and people to ask for help when measuring glucose.	CO4.2F Facilitators motivate people to ask for help measuring glucose.
PO4.3 Measures his/her glucose as prescribed together with his/her health provider.	CO4.3A Recognizes that frequent glucose measurement is part of a successful treatment for controlling his/her blood sugar levels	CO4.3B Observes others measure their glucose.	CO4.3C Applies the skills acquired to measure his/her glucose.		CO4.3D Is aware that if he/she does not monitor his/her glucose, episodes of hyper or hypoglycemia may occur without his/her		CO4.3E Perceives that by monitoring his/her glucose he/she will make better decisions to control him/herself.	CO4.3F Feels capable of measuring his/her glucose.	CO4.3G MAG members share their difficulties and achievements as well as new solutions for measuring their glucose.	



	and preventing complications.				knowing, and this can lead to serious complications.					
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**Supplementary Appendix 3. Structure of the workshops of the Healthy Living Educational Strategy for people living with diabetes type 2**

<b>Activity (Duration)</b>	<b>Session 1</b>	<b>Session 2</b>	<b>Session 3</b>	<b>Session 4</b>
Introduction to the sessions (5 min)				
<b>Video/flipchart (10 min)</b>	Nutrition	Exercise	Medication	Glucose self-monitoring
Communication between facilitators and attendees (30-40 min)				
<b>Workbook (15-20 min)</b>	-Schedules for mealtimes -Eating plans	-Times for working out -Types of exercise	Recommendations	Record blood glucose concentrations
<b>Practical work (30-50 min)</b>	Learning how to make a one-day menu	Learning how to make an exercise plan	Learning how to make a pill organizer	Learning how to make a daily blood glucose registration