Inline Supplementary 6. Content analysis of open-ended questions by criterion and type of validation

Validation criteria	Population validation		Expert validation	
	Results	Testimonials	Results	Testimonials
Clarity	Few adolescents made observations regarding the vocabulary in the materials; they did not understand words such as fatigue, standard conditions and conversion.		The experts considered that some terms would be difficult for adolescents to understand because of the wording (e.g., average weight, standard conditions of room temperature, the intensity of physical activity, probabilities, Bisfenol, properties, climate change, global warming, type-2 diabetes and mouthpieces).	"It's not the word itself, but rather the wording. It's drafted like a paragraph in a book. I think the infograph should be more concise" (M-MSP)
Acceptance	There was agreement among the adolescents that the information in the materials was clear, concrete and fun. They perceived it as useful and interesting, and commented on the beneficial consequences of adopting certain practices. They also stated that the	"Because I like the idea of drinking water. It's also well explained. And, yes, I understood it very well. It has a lot images that draw your attention. And the comparative table on the amount of water you should consume daily	The experts found the materials useful for adolescents because the information was important, current, educational, appropriate, complete, simple and very practical. Nonetheless, they	"The educational video is very effective for learning purposes. I think this one contains simple information and instructions that are easy to understand." (M-MSP)

	materials offered useful recommendations on ways to protect their health and the environment. They found the information fully applicable to daily life.	gives you a sort of more personalized idea of how well you're doing." (M-13-EPV-1)	recommended reducing the amount of information to avoid boring the young girls and boys, as well as including more examples.	
Appeal	The material was generally appealing to the adolescent girls and boys. Nonetheless, some suggested modifying the type and size of the letters as well as adding images to the infographs. Other suggestions included changing the voice of the presenters, although there was not consensus in this regard.	"Maybe the voices of the kids. From what I understand, they're from middle school, but the voices sound more like children from elementary school. Still, it's pretty good." (M-15-EPV-2)	Although the group of experts generally found the materials appealing, they made several important suggestions, for instance, to reduce the amount of information and modify the images of the students; some experts did not find the images to be representative of girls and boys in middle school. Another suggestion was to render the instructions clearer and more specific.	"The drawings of the boys and girls look childish, so middle-school adolescents might not like them." (M-MCS) "Finally, some of the instructions seem a little complicated The good thing about the video, though, is that it makes visually clear what has to be done. However, it reiterates a lot what is said, and this can be a little confusing." (M-MSP)

Identification	The majority of adolescents were in agreement that the illustrations did not represent them or their friends because they were caricatures, not real images. Additionally, some pointed out that young people that age take little interest in their health.
	Appearance: They don't look real; they
	renresent vounger

Appearance: They don't look real; they represent younger children. Their clothes, skin color and hairdos are different.

Practices: They don't have healthy habits, they don't care about their health and they are not interested in matters of health.

"My friends are human beings, not animated figures." (M-15-EP-3)

"Because I don't have a lot of friends with white skin and black hair. Also, they don't use those hairdos." (H-13-EPV-2)

"Most of us aren't even healthy and don't have any habits, only a minority does."
(M-14-EPV-3)

The experts were in agreement that the images in the materials depicted small children, not adolescents. They believed that the students would probably not identify themselves with the individuals in the materials.

"The images are very childish.
They're pretty, but they don't represent the youths in public middle schools in Mexico." (M-MCS)

"...The voices of the young people in the video sound like they belong to schoolchildren: their tones, the way they speak." (H-MCS)

Inducement to action

The adolescent girls and boys stated that the recommendations in the materials not only were easy to put into practice, but also would help them and their friends adopt a healthy lifestyle and protect their health and the environment. They recognized the benefits that would ensue from implementing the recommendations, for instance, in preventing disease and improving their quality of life.

In addition, they affirmed that it was important to disseminate the information and materials, that more people should become acquainted with them.

"Because I can follow the recommendation s in the infograph, drink water from water fountains, and do better in my daily activities."

(M-12-EP-1)

"... to
disseminate
greater
consumption of
drinking water
because, as
they say in the
interview, people
in Mexico
consume a lot of
sugary drinks.
So it's better to
have this
information." (H13-EPV-2)

The majority of experts reported that the materials were appealing and contained clear and simple instructions. They believed that this would make it easy for students to carry out the recommendation s.

One recurrent concern worth noting was that male students would perhaps not be interested in some of the activities proposed, e.g., personalizing water bottles and making proper use of water fountains.

"It's a simple activity, but I don't know if it will draw the attention of 14-15 year-old adolescents." (M-SP)

"This requires showing respect for a common space. As in most things, some youths will be able to comply adequately and others might not. It has to do with sociocultural aspects." (M-SP)