**Appendix 1** Interview protocol to assess usability, feasibility, engagement (user testing), and formative evaluation

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| **Usability:** refers to the technical aspects of the app and the game interface. | **Download and Install**  Have you identified any issues while downloading and installing the app?  **Correction and understanding**  Did you observe any Portuguese errors, or did you have difficulty interpreting any information?  **Visibility and structure**  Have you identified and used all icons?  Did you have difficulty accessing any information?  Did you have difficulty understanding the function of any icon?  **Avatar**  What did you think of the game avatar?  **Gameplay**  Did you have any difficulty to feed the avatar, to choose the meal location, or to decide whether or not it would be held in company?  **Overall impression**  Did you dislike something about the app?  Was there anything about playing the game that made you feel uncomfortable? If yes, what did make you feel uncomfortable? |
| **Feasibility:** refers to how the strategy is realistic | **Completeness**  Do you consider the game is complete or there is still something missing?  Would you recommend any changes to improve the game?  **Relevance**  Do you recommend the game to others?  Do you consider the information provided in the game is important? |
| **Engagement**: refers to how the target audience interacted with the app | Please tell me how much did you like the game  (from 0 = didn't like it at all to 10 = very much)  Please tell me how difficult you thought the game was.  (from 0 = very easy to 10 = very difficult) |
| **Formative assessment:** refers to the interaction between gameplay, narrative and content. This allows a preliminary evaluation of the game learning objectives achievement | How did the food choice impact the food indicator?  Did you notice any difference between food and health indicators?  Did you notice any difference when choosing where the avatar had the meal? Did you notice any difference when the avatar had a meal alone or in company?  While you played, what events did happen to the avatar?  Has the avatar changed in physical shape and mood? If so, do you think it was due to food choice? |
|  | Is there anything else you want to tell me about the game that we did not talk about? |