

**Table S1.** Parameters assessed in adults.

Parameters	Methods	ProxOb I	ProxOb II	ProxOb III	ProxOb IV	ProxOb V
<b>Clinical parameters</b>						
<i>Body weight</i>	Body weight scale (Seca Les Mureaux, France).	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Body height</i>	Standing stadiometer, barefoot (Seca Les Mureaux, France).	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>BMI</i>	Weight / height <sup>2</sup> (kg/m <sup>2</sup> ) - WHO reference values to determine weight status.	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Waist circumference</i>	Measured to the nearest 0.5 cm in a standing position with a standard nonelastic tape that was applied horizontally midway between the last rib and the superior iliac crest.	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Body composition</i>	Bioelectrical impedance Tanita MC780 multi frequency segmental body composition analyzer [1]	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Blood pressure</i>	SBP and DBP were measured in a seated position using an auditory stethoscope with a blood pressure cuff adapted to the arm circumference (Column Trimline graduated in mmHG, blood pressure cuff Welch Allyn).	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<b>Questionnaires</b>						
<i>Socio-medico-economic profile</i>	EQ5D 3L [2]		T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Precarity</i>	EPICES [3]	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Quality of life</i>	SF36 [4,5]	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Physical activity</i>	Ricci & Gagnon [6], IPAQ [7]	T0-T1-T2		T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Eating behaviors</i>	Food Frequency and habits questionnaire	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Eating profile</i>	TFEQ51 [8]		T0-T1-T2			
	TFEQ-R21 [9]			T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Sleep habits</i>	Sleep habits and routine questionnaire	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Parentality</i>	QAECEP [10,11]			T0-T1-T2	T0-T1-T2	T0-T1-T2-T3

DBP: Diastolic Blood Pressure; EQ5D: EuroQol 5 direction instrument; IPAQ: International Physical Activity Questionnaire; QAECEP: Questionnaire Auto-Évaluation Compétence Éducative Parentale; SBP: Systolic Blood Pressure; SF36: Short Form 36 items; T0: baseline; T1: second evaluation phase; T2: evaluation point after the first 6 months of independence; T3: final evaluation; TFEQ: Three Factors Eating Questionnaire; WHO: World Health Organization.

- [1] Verney, J.; Schwartz, C.; Amiche, S.; Pereira, B.; Thivel, D. Comparisons of a Multi-Frequency Bioelectrical Impedance Analysis to the Dual-Energy X-Ray Absorptiometry Scan in Healthy Young Adults Depending on Their Physical Activity Level. *J Hum Kinet*, **2015**, 47, 73–80. <https://doi.org/10.1515/hukin-2015-0063>.
- [2] Rabin, R.; de Charro, F. EQ-5D: A Measure of Health Status from the EuroQol Group. *Ann Med*, **2001**, 33 (5), 337–343. <https://doi.org/10.3109/07853890109002087>.
- [3] Bihain, H.; Laurent, S.; Sass, C.; Nguyen, G.; Huot, C.; Moulin, J. J.; Guegen, R.; Le Toumelin, P.; Le Clésiau, H.; La Rosa, E.; et al. Association among Individual Deprivation, Glycemic Control, and Diabetes Complications: The EPICES Score. *Diabetes Care*, **2005**, 28 (11), 2680–2685. <https://doi.org/10.2337/diacare.28.11.2680>.
- [4] Ware, J. E.; Sherbourne, C. D. The MOS 36-Item Short-Form Health Survey (SF-36). I. Conceptual Framework and Item Selection. *Med Care*, **1992**, 30 (6), 473–483.
- [5] Ware, J.; MA, K.; Keller, S. D. SF-36 Physical and Mental Health Summary Scales: A User's Manual. *2002*, 8, 23–28.
- [6] Laureyns, F. Laureyns & JM. Séné. Questionnaire d'auto-évaluation de l'activité physique d'après Ricci J et Gagnon L, modifié par F. Laureyns et JM. Séné <https://onaps.fr/outils-devaluation/> (accessed Nov 29, 2021).
- [7] Craig, C. L.; Marshall, A. L.; Sjöström, M.; Bauman, A. E.; Booth, M. L.; Ainsworth, B. E.; Pratt, M.; Ekelund, U.; Yngve, A.; Sallis, J. F.; et al. International Physical Activity Questionnaire: 12-Country Reliability and Validity. *Med Sci Sports Exerc*, **2003**, 35 (8), 1381–1395. <https://doi.org/10.1249/01.MSS.0000078924.61453.FB>.
- [8] Stunkard, A. J.; Messick, S. The Three-Factor Eating Questionnaire to Measure Dietary Restraint, Disinhibition and Hunger. *J Psychosom Res*, **1985**, 29 (1), 71–83. [https://doi.org/10.1016/0022-3999\(85\)90010-8](https://doi.org/10.1016/0022-3999(85)90010-8).
- [9] Cappelleri, J. C.; Bushmakin, A. G.; Gerber, R. A.; Leidy, N. K.; Sexton, C. C.; Lowe, M. R.; Karlsson, J. Psychometric Analysis of the Three-Factor Eating Questionnaire-R21: Results from a Large Diverse Sample of Obese and Non-Obese Participants. *Int J Obes (Lond)*, **2009**, 33 (6), 611–620. <https://doi.org/10.1038/ijo.2009.74>.
- [10] Gibaud-Wallston, J. Self-Esteem and Situational Stress: Factors Related to Sense of Competence in New Parents, University of Rhode Island, 1977.
- [11] Terisse, B.; Trudelle, D. Le Questionnaire d'auto-Évaluation de La Compétence Éducative Parentale (Q.A.E.C.E.P.), 1988.

**Table S2.** Parameters assessed in children.

Parameters	Methods	ProxOb I	ProxOb II	ProxOb III	ProxOb IV	ProxOb V
<b>Clinical parameters</b>						
<i>Body weight</i>	Body weight scale (Seca Les Mureaux, France).	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Body height</i>	Standing stadiometer, barefoot (Seca Les Mureaux, France).	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>z-BMI and BMI percentile</i>	Age and sex specific BMI percentiles for the French population were used to define obesity (97th) [12].	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Waist circumference</i>	Measured to the nearest 0.5 cm in a standing position with a standard nonelastic tape that was applied horizontally midway between the last rib and the superior iliac crest.	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Body composition</i>	Bioelectrical impedance Tanita MC780 multi frequency segmental body composition analyzer [13,14].	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Blood pressure</i>	SBP and DBP were measured in a seated position using an auditory stethoscope with a blood pressure cuff adapted to the arm circumference (Column Trimline graduated in mmHG, blood pressure cuff Welch Allyn).	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<b>Questionnaires</b>						
<i>Socio-medico-economic profile</i>	EQ5DY [15] 10-17 years-old		T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Quality of life</i>	AUQUEI [16] 5-7 years old 5-10 years old 8-10 years old		T0-T1-T2		T0-T1-T2	T0-T1-T2
	PESDQL [17] 5-7 years old 8-10 years old 8-12 years old 13-17 years old		T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2
	VSPA [18,19] 11-17 years old	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	
<i>Physical activity</i>	Ricci & Gagnon [6] Clinical PA and SB questionnaire [20]	T0-T1-T2	T0-T1-T2		T0-T1-T2	T0-T1-T2-T3
<i>Eating behaviors</i>	Food Frequency and habits questionnaire	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
<i>Eating profile</i>	CTFEQ-R21 [21] 5-10 years old 11-14 years old 8-14 years old 15-17 years old		T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3
	TFEQ51 [8] 15-17 years old		T0-T1-T2		T0-T1-T2	T0-T1-T2-T3
<i>Sleep habits</i>	Sleep habits and routine questionnaire	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2	T0-T1-T2-T3

AUQUEI: Auto-Questionnaire de Qualité de vie Enfant Imagé; BMI: Body Mass Index; CTFEQ : Children Three Factors Eating Questionnaire; DBP: Diastolic Blood Pressure; EQ5D: EuroQol 5 direction instrument; PESDQL: Pediatric Quality of Life Inventory; SBP: Systolic Blood Pressure; T0: baseline ; T1: second evaluation phase; T2: evaluation point after the first 6 months of independence ; T3: final evaluation; TFEQ: Three Factors Eating Questionnaire; VSPA: Vécu et Santé Perçue de l'Adolescent; WHO: World Health Organization.

[12] Cole, T. J.; Bellizzi, M. C.; Flegal, K. M.; Dietz, W. H. Establishing a Standard Definition for Child Overweight and Obesity Worldwide: International Survey. *BMJ*, **2000**, 320 (7244), 1240–1243. <https://doi.org/10.1136/bmj.320.7244.1240>.

[13] Verney, J.; Metz, L.; Chaplain, E.; Cardenou, C.; Pereira, B.; Thivel, D. Bioelectrical Impedance Is an Accurate Method to Assess Body Composition in Obese but Not Severely Obese Adolescents. *Nutr Res*, **2016**, 36 (7), 663–670. <https://doi.org/10.1016/j.nutres.2016.04.003>.

[14] Thivel, D.; Verney, J.; Miguët, M.; Masurier, J.; Cardenou, C.; Lambert, C.; Courteix, D.; Metz, L.; Pereira, B. The Accuracy of Bioelectrical Impedance to Track Body Composition Changes Depends on the Degree of Obesity in Adolescents with Obesity. *Nutr Res*, **2018**, 54, 60–68. <https://doi.org/10.1016/j.nutres.2018.04.001>.

- [15] Kreimeier, S.; Greiner, W. EQ-5D-Y as a Health-Related Quality of Life Instrument for Children and Adolescents: The Instrument's Characteristics, Development, Current Use, and Challenges of Developing Its Value Set. *Value Health*, **2019**, *22* (1), 31–37. <https://doi.org/10.1016/j.jval.2018.11.001>.
- [16] Manificat, S.; Dazord, A.; Cochat, P.; Nicolas, J. [Evaluation of the quality of life in pediatrics: how to collect the point of view of children]. *Arch Pediatr*, **1997**, *4* (12), 1238–1246. [https://doi.org/10.1016/s0929-693x\(97\)82616-4](https://doi.org/10.1016/s0929-693x(97)82616-4).
- [17] Varni, J. W.; Seid, M.; Rode, C. A. The PedsQL: Measurement Model for the Pediatric Quality of Life Inventory. *Med Care*, **1999**, *37* (2), 126–139. <https://doi.org/10.1097/00005650-199902000-00003>.
- [18] Sapin, C.; Simeoni, M.-C.; El Khammar, M.; Antoniotti, S.; Auquier, P. Reliability and Validity of the VSP-A, a Health-Related Quality of Life Instrument for Ill and Healthy Adolescents. *J Adolesc Health*, **2005**, *36* (4), 327–336. <https://doi.org/10.1016/j.jadohealth.2004.01.016>.
- [19] Simeoni, M. C.; Auquier, P.; Antoniotti, S.; Sapin, C.; San Marco, J. L. Validation of a French Health-Related Quality of Life Instrument for Adolescents: The VSP-A. *Qual Life Res*, **2000**, *9* (4), 393–403. <https://doi.org/10.1023/a:1008957104322>.
- [20] Fillon, A.; Masurier, J.; Boirie, Y.; Duclos, M.; Thivel, D. Development of a Adapted Questionnaire to Assess Physical Activity and Sedentary Behaviors among Young Children. *ONAPS' 2020 annual national workshop (Niort, France)*, **2020**.
- [21] Bryant, E. J.; Thivel, D.; Chaput, J.-P.; Drapeau, V.; Blundell, J. E.; King, N. A. Development and Validation of the Child Three-Factor Eating Questionnaire (CTFEQr17). *Public Health Nutr*, **2018**, *21* (14), 2558–2567. <https://doi.org/10.1017/S1368980018001210>.