

# Impact of Weight on Quality of Life Assessment Tools

Quality of Life Consulting offers two highly consistent, widely used assessment tool for the impact of weight on quality of life: IWQOL-Lite for adults and IWQOL-Kids for children and adolescents.

Together, these tools have been successfully employed in numerous pharmaceutical and clinical trials.

## **IWQOL-Lite for Adults**

Impact of Weight on Quality of Life-Lite (IWQOL-Lite) is a validated, 31-item, self-report measure of obesity-specific quality of life available in more than 40 languages.

- In addition to a total score, there are scores on five domains:
  - o Physical function
  - o Self-esteem
  - o Sexual life
  - o Public distress
  - o Work
- Good internal consistency (ranging from .90 to .96) <sup>1</sup>
- Good test-retest reliability (.83 to .94) <sup>2</sup>
- Responsive to weight loss and weight gain <sup>3,4</sup>
- Sensitive to treatment-seeking status <sup>5,6</sup>
- Sensitive to degree of obesity <sup>7</sup>
- A scale structure supported by confirmatory factor analysis <sup>1</sup>
- Recommended by the European Association of Endoscopic Surgery
- Listed in Patient-Reported Outcome and Quality of Life Instruments Database <u>PROQOLID</u>
- Listed in <u>The Compendium of Quality of Life Instruments</u>
- Listed in the On-Line Guide to Quality-of Life-Assessment (OLGA)
- Listed in <u>Suggestions for the Pre-surgical Psychological Assessment of Bariatric Surgery Candidates</u>
- Reviewed in Handbook of Assessment Methods for Eating Behaviors and Weight-related Problems: Measures, Theory, and Research (second edition). Allison DB, Baskin ML, eds.; Sage Publications: Thousand Oaks, CA: 33-78 (Chapter entitled "Assessment of health-related quality of life in obesity and eating disorders" by Kolotkin RL, Haaz S, Fontaine KR.) <a href="http://www.uk.sagepub.com/refbooksProdTOC.nav?prodId=Book230593">http://www.uk.sagepub.com/refbooksProdTOC.nav?prodId=Book230593</a>

# Questions and Licensing Information

If you would like information about licensing IWQOL-Lite and IWQOL-Kids, or have questions about their design or usage, please contact the primary developer through her website:

Ronette L. Kolotkin, PhD Quality of Life Consulting 732 Ninth Street #563 Durham, NC 27705 Phone: (919) 493-9995 http://qualityoflifeconsulting.com/

IWQOL-Lite copyright Duke University



## Available Languages for the IWQOL-Lite:

- 1. Afrikaans for South Africa
- 2. Arabic for UAE (United Arabic Emirates)
- 3. Arabic for Israel
- 4. Bengali for India
- 5. Bulgarian for Bulgaria
- 6. Catalan for Spain
- 7. Cebuano for Philippines
- 8. Chinese for Hong Kong
- 9. Chinese for Taiwan
- 10. Czech for Czech Republic
- 11. Danish for Denmark
- 12. Dutch for Netherlands
- 13. Dutch for Belgium
- 14. English for Australia
- 15. English for Canada
- 16. English for India
- 17. English for Malaysia
- 18. English for New Zealand
- 19. English for Philippines
- 20. English for Singapore
- 21. English for South Africa
- 22. English for the UK (including Ireland)
- 23. English for the United States
- 24. Estonian for Estonia
- 25. Finnish for Finland
- 26. French for France

- 27. French for Belgium
- 28. French for Canada
- 29. French for Switzerland
- 30. German for Germany
- 31. German for Austria
- 32. German for Switzerland
- 33. Greek for Greece
- 34. Gujarati for India
- 35. Hebrew for Israel
- 36. Hindi for India
- 37. Hungarian for Hungary
- 38. Italian for Italy
- 39. Italian for Switzerland
- 40. Japanese for Japan
- 41. Kannada for India
- 42. Korean for Korea
- 43. Latvian for Latvia
- 44. Lithuanian for Lithuania
- 45. Malay for Malaysia
- 46. Malay for Singapore
- 47. Malayalam For India
- 48. Mandarin for China
- 49. Mandarin for Malaysia
- 50. Mandarin for Singapore
- 51. Marathi for India
- 52. Norwegian for Norway
- 53. Oriya for India
- 54. Polish for Poland
- 55. Portuguese for Portugal
- 56. Portuguese for Brazil
- 57. Punjabi for India
- 58. Romanian for Romania

- 59. Russian for Russia
- 60. Russian for Estonia
- 61. Russian for Israel
- 62. Russian for Latvia
- 63. Russian for Lithuania
- 64. Russian for Ukraine
- 65. Sesotho for South
- 66. Slovakian for Slovakia
- 67. Spanish for Spain
- 68. Spanish Harmonized for Latin America & US
- 69. Spanish for Argentina
- 70. Spanish for Chile
- 71. Spanish for Costa Rica
- 72. Spanish for Mexico
- 73. Spanish for Peru
- 74. Spanish for Puerto Rico
- 75. Spanish for the USA
- 76. Swedish for Sweden
- 77. Swedish for Finland
- 78. Tagalog for Philippines
- 79. Tamil for India
- 80. Tamil for Malaysia
- 81. Telugu for India
- 82. Thai for Thailand
- 83. Turkish for Turkey
- 84. Ukrainian for Ukraine
- 85. Urdu for India
- 86. Xhosa for South Africa
- 87. Zulu for South Africa



#### References

- <sup>1</sup> Kolotkin RL, Crosby RD, Kosloski KD, Williams GR. <u>Development of a brief measure to assess</u> guality of life in obesity. <u>Obesity Research</u>. 2001;9:102-11.
- <sup>2</sup> Kolotkin RL, Crosby RD. <u>Psychometric evaluation of the Impact Of Weight On Quality Of Life-Lite Questionnaire (IWQOL-Lite) in a community sample.</u> Quality of Life Research. 2002;11 (2):157-71.
- <sup>3</sup> Kolotkin RL, Crosby RD, Williams GR, Hartley GG, Nicol S. <u>The relationship between health-related quality of life and weight loss.</u> Obesity Research. 2001;9:564-71.
- <sup>4</sup>Engel SG, Crosby RD, Kolotkin RL, Hartley GG, Williams GR, Wonderlich SA, Mitchell JE. <u>The impact of weight loss and regain on obesity-specific quality of life: mirror image or differential effect</u>. Obesity Research. 2003;11:1207-13.
- <sup>5</sup> Kolotkin RL, Crosby RD, Williams GR. <u>Health-related quality of life varies among obese subgroups</u>. Obesity Research. 2002;10:748-56.
- <sup>6</sup> Kolotkin RL, Crosby RD, Pendleton R, Strong M, Gress RE, Adams TD. <u>Health-related quality of life in patients seeking gastric bypass surgery vs. non-treatment-seeking controls.</u> Obesity Surgery. 2003;13:371-7.
- <sup>7</sup> White MA, O'Neil PM, Kolotkin RL, Byrne TK. <u>Gender, race, and obesity-related quality of life at extreme levels of obesity. Obesity Research.</u> 2004;12:949-55.

# IWQOL-Kids for Children and Adolescents Age 11 – 19.

The IWQOL-Kids is modeled after the IWQOL-Lite and designed for use by adolescents aged 11 to 19. Each item begins with the phrase, "Because of my weight," and contains five response options, ranging from "always true" to "never true."

Characteristics of the IWQOL-Kids:

- 27 items
- In addition to a total score, there are scores on four domains:
  - o Physical Comfort
  - o Body Esteem
  - o Social Life
  - o Family Relations



- Good internal consistency (ranging from 0.88 to 0.95 for scales, and equal to 0.96 for total score)
- Sensitive to differences among BMI groups and between clinical and community samples
- Responsive to weight loss/social support intervention
- Listed in the On-Line Guide to Quality-of Life-Assessment (OLGA)
- Listed in the Patient-Reported Outcome and Quality of Life Instruments Database PROOOLID
- Listed in <u>Suggestions for the Pre-surgical Psychological Assessment of Bariatric Surgery Candidates</u>
- Available in a parent-proxy form

## Available Languages for the IWQOL-Kids:

- Arabic for Kuwait
- Chinese (Mandarin)
- Dutch
- Dutch for Belgium
- English for US
- Finnish
- French for Belgium
- Hebrew
- Korean

- Malay
- Mandarin
- Portuguese
- Portuguese for Brazil
- Russian
- Spanish
- Spanish for Mexico
- Spanish for US
- Swedish

### References

Kolotkin RL, Zeller, M, Modi, AC, Samsa, GP, Quinlan, NP, Yanovski, JA, Bell, SK, Maahs DM, Gonzales de Serna, D, Roehrig, HR. <u>Assessing weight-related quality of life in adolescents.</u> Obesity (Silver Spring) 2006; 14: 448-457.

Hoedjes, M., Makkes, S., Halberstadt, J., et al. <u>Health-Related Quality of Life in Children and Adolescents with Severe Obesity after Intensive Lifestyle Treatment and at 1-Year Follow-Up</u>. Obesity Facts, 2018.

Prout, Parks E, Moore, RH, Li, Z, Bishop-Gilyard, CT, Garrett, AR, Hill, DL, Bruton, YP, Sarwer, DB. Assessing the Feasibility of a Social Media to Promote Weight Management Engagement in



Adolescents with Severe Obesity: Pilot Study. JMIR Res Protoc 2018;7(3):e52; DOI: 10.2196/resprot.8229

van Rinsum, CE, Gerards, SMPL, Rutten, GM, van de Goor, IAM, Kremers, SPJ. <u>The coaching on lifestyle (CooL) intervention for obesity, a study protocol for an action-oriented mixed-methods study.</u> BMC Public Health (2018) 18:117. DOI 10.1186/s12889-017-5010-4

Zeller, MH, Pendery, EC, Reiter-Purtill, J, et al. <u>From adolescence to young adulthood:</u> <u>trajectories of psychosocial health following Roux-en-Y gastric bypass.</u> Surgery for Obesity and Related Diseases. 2017, 13 (7), 1196-1203.

Christie D, Hudson LD, Kinra S, et al. <u>A community-based motivational personalised lifestyle intervention to reduce BMI in obese adolescents: results from the Healthy Eating and Lifestyle Programme (HELP) randomised controlled trial.</u> Archives of Disease in Childhood Published. Online First: 07 July 2017. doi: 10.1136/archdischild-2016-311586

Bonham, MP, Dordevic, AL, Ware, RS, Brennan, L, Truby, H. <u>Evaluation of a Commercially Delivered Weight Management Program for Adolescents.</u> The Journal of Pediatrics, 2017, http://dx.doi.org/10.1016/j.jpeds.2017.01.042.

Utzinger L.M., Gowey M.A., Zeller M., Jenkins T.M., Engel S.G., Rofey D.L., Inge T.H., Mitchell J.E. and On behalf of the Teen Longitudinal Assessment of Bariatric Surgery (Teen-LABS) Consortium (2016). Loss of control eating and eating disorders in adolescents before bariatric surgery. International Journal of Eating Disorders; DOI: 10.1002/eat.22546.

Inge T.H., Courcoulas A.P., Jenkins T.M., et al. Weight Loss and Health Status 3 Years after Bariatric Surgery in Adolescents. New England Journal of Medicine, November 6, 2015; DOI: 10.1056/NEJMoa1506699.

Dordevic A.L., Bonham M.P., Ware R.S., Brennan L., Truby H. <u>Study protocol: Evaluation of 'JenMe'</u>, a commercially-delivered weight management program for adolescents: a randomised <u>controlled trial.</u> BMC Public Health, 2015; 15:563 DOI: 10.1186/s12889-015-1923-y.

Zeller M.H., Inge T.H., Modi A.C., Jenkins T.M., Michalsky M.P., Helmrath M., et al. <u>Severe Obesity and Comorbid Condition Impact on the Weight-Related Quality of Life of the Adolescent Patient.</u> The Journal of Pediatrics, 2015; 166(3), 651-659

Modi A.C., Zeller M.H. <u>The IWQOL-Kids(©): Establishing minimal clinically important difference scores and test-retest reliability.</u> International Journal of Pediatric Obesity, 2011 Jun; 6(2-2): e94-6.

