## Additional file 5

Table: Weight category calculation

Only patients with valid height and weight data were analysed (1). The WHO anthro tool for BMI z score for 0-5 year old (2) and the Stata anthroplus tool for BMI z score calculation for 5-19 years (3) was used to calculate BMI z scores for the age groups 0-5 years and 5-19 years. Age specific categories were than reclassified to "underweight "normal" "overweight" and "obesity" to be comparable across the different age groups as shown in the following table.

Weight category	BMI/z-score 0-5years	BMI/z-score 5-19 years	BMI adult (KG/m²)
Underweight	-4SD/- 2.01SD	Severe thinness (-4SD/-3SD)	Underweight (<18,5)
	-2SD/ -1.01SD	Thinness (<-2.99SD/-2.01)	
Normal	-1SD/0/+1SD	Normal (-2SD/0/+1SD)	Normal (18,5 / <25)
Overweight	1.01SD/2SD	Overweight (>1.01SD/2SD)	Overweight (25/ < 30)
Obesity	2.01SD/4SD	Obesity (2.01SD/4SD)	Obesity 1 (30/ <35)
			Obesity 2 (35/ <40)
			Obesity 3 (40+)

Legend: BMI: Body Mass Index; KG: Kilogram; SD: standard deviation.

## Bibliography

- 1. World Health Organization. A healthy lifestyle WHO recommendations. Europe 2010 6 May 2010. Contract No.: 10.08.2022. <a href="https://www.who.int/europe/news-room/fact-sheets/item/a-healthy-lifestyle---who-recommendations">https://www.who.int/europe/news-room/fact-sheets/item/a-healthy-lifestyle---who-recommendations</a>
- 2. World Health Organization. Child growth standards 2023 [The WHO Anthro Survey Analyser, anthro tool for BMI z score for 0-5 year old]. Available from: <a href="https://www.who.int/tools/child-growth-standards/software">https://www.who.int/tools/child-growth-standards/software</a>.
- 3. World Health Organization. Growth reference data for 5-19 years 2023 [Stata anthroplus tool for BMI z score calculation for 5-19 years]. Available from: <a href="https://www.who.int/tools/growth-reference-data-for-5to19-years/application-tools">https://www.who.int/tools/growth-reference-data-for-5to19-years/application-tools</a>.