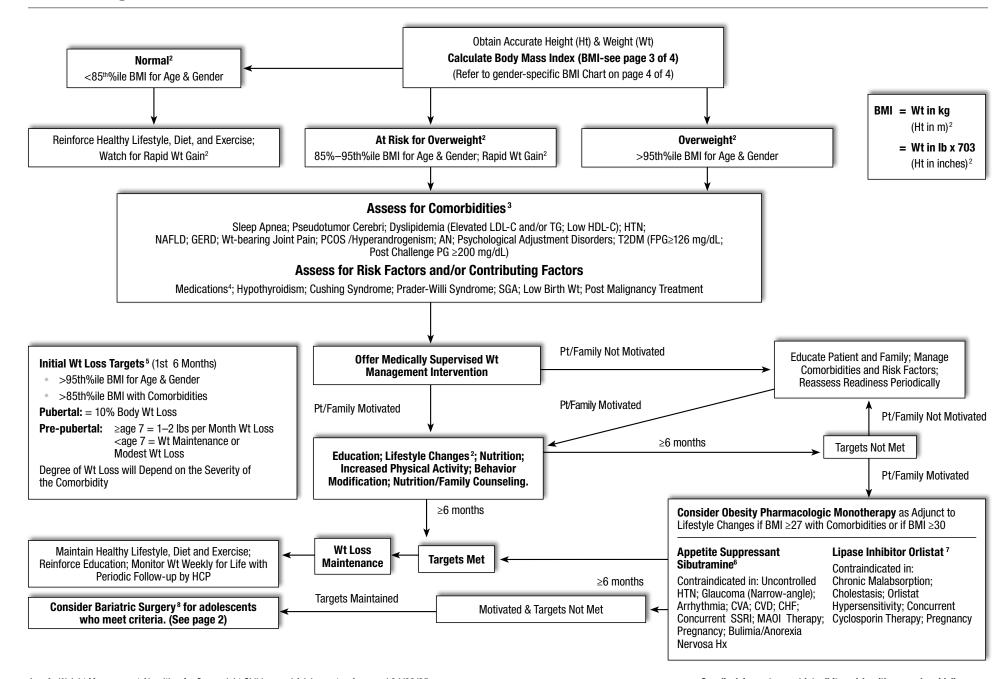
Weight Management Algorithm for Overweight Children and Adolescents¹







Abbreviations

AN: Acanthosis Nigricans CHF: Congestive Heart Failure CVA: Cerebrovascular Accident CVD: Cardiovascular Disease FPG: Fasting Plasma Glucose

GERD: Gastro-esophageal Reflux Disease

HCP: Health Care Professional

HDL-C: High-density Lipoprotein Cholesterol

HTN: Hypertension (>95th%ile Blood Pressure for Age

& Gender & Ht)

LDL-C: Low-density Lipoprotein Cholesterol **MAOI:** Monoamine Oxidase Inhibitors **NAFLD:** Non-alcoholic Fatty Liver Disease

PCOS: Polycystic Ovary Syndrome

SGA: Small for Gestational Age

SSRI: Selective Serotonin Reuptake Inhibitors

T2DM: Type 2 Diabetes Mellitus

TG: Triglycerides

Criteria for Bariatric Surgery⁸

Adolescents being considered for bariatric surgery should:

- Have failed 6 months of organized attempts at wt management, as determined by their primary care provider
- Have attained or nearly attained physiologic maturity
- Be severely obese (BMI ≥40) with serious obesityrelated comorbidities or BMI ≥50 with less severe comorbidities
- Demonstrate commitment to comprehensive medical and psychologic evaluations both before and after surgery
- Agree to avoid pregnancy for at least 1 yr postoperatively
- Be capable of and willing to adhere to nutritional guidelines postoperatively
- Provide informed consent to surgical treatment
- Demonstrate decisional capacity
- Have a supportive family environment

Footnotes:

- 1. Adapted from the Texas Council's Weight Loss Algorithm for Overweight and Obese Adults
- 2. Barlow SE, Dietz WH. Obesity evaluation and treatment: Expert Committee recommendations. The Maternal and Child Health Bureau, Health Resources and Services Administration and the Department of Health and Human Services. Pediatrics. 1998;102(3):E29
- 3. Barlow SE, Dietz WH. Obesity evaluation and treatment: Expert Committee recommendations. The Maternal and Child Health Bureau, Health Resources and Services Administration and the Department of Health and Human Services. Pediatrics. 1998;102(3):E29; and American Diabetes Association. Type 2 diabetes in children and adolescents. Pediatrics. 2000;105(3 Pt 1):671-80; Refer to appropriate Texas Diabetes Council algorithms
- 4. Medications that affect insulin sensitivity:

Inhaled steroids:

- 1000 mcg/day fluticasone (Flovent)
 Risperidone (Risperdal)
- 2000 mcg/day of all others

Oral Steroids:

- 20 days in previous year, or any within 60 days of screening
- L-asparaginase
- FK506 (Tacrolimus)
- Cyclosporine (Neoral/ Sandimmune)
- Niacin

Medications known to cause wt gain: Lithium

- Olanzapine (Zyprexa) Clozapine (Clozaril)
- Quetiapine (Seroquel)
- Ziprasidone (Geodon)
- Carbamazepine (Tegretol)
- Valproic acid (Depakote/ Depakene/Depacon)
- Tricyclic Antidepressants

- Insulin/Insulin Analogs
- Sulfonylureas
- Cyproheptadine
- Estrogens/Progestins

- 5. No evidence-based outcomes data are yet available for weight loss targets
- 6. Berkowitz RI, Wadden TA, Tershakovec AM, et al. Behavior therapy and sibutramine for the treatment of adolescent obesity: a randomized controlled trial. JAMA. 2003;289(14):1805-12; sibutramine is FDA-approved for ages ≥16 yr
- 7. McDuffie JR, Calis KA, Uwaifo GI, et al. Efficacy of orlistat as an adjunct to behavioral treatment in overweight African American and Caucasian adolescents with obesity-related co-morbid conditions. J Pediatr Endocrinol Metab. 2004;17(3):307-19; orlistat is FDA-approved for ages ≥12 yr
- 8. Inge TH, Krebs NF, Garcia VF, et al. Bariatric surgery for severely overweight adolescents: concerns and recommendations. Pediatrics. 2004;114(1):217-23
- 9. Rosner B, Prineas R, Loggie J, et al. Percentiles for body mass index in U.S. children 5 to 17 years of age. J Pediatr. 1998:132(2):211-22.

Additional References

Bobo N, Evert A, Gallivan J, et al. An update on type 2 diabetes in youth from the National Diabetes Education Program. Pediatrics. 2004;114(1):259-63

Garcia VF, Langford L, Inge TH. Application of laparoscopy for bariatric surgery in adolescents. Curr Opin Pediatr. 2003;15(3):248-55

Krebs NF, Jacobson MS; American Academy of Pediatrics Committee on Nutrition. Prevention of pediatric overweight and obesity. Pediatrics. 2003;112(2):424-30

APPENDIX. Weight (lb) for different combinations of height (inch) and BMI (kg/m²)

Height (in)		Weight (Ib)																
36	24	26	28	29	31	33	35	37	59	40	42	44	46	48	50	52	53	
37	25	27	29	31	33	35	37	39	41	43	45	47	49	51	52	54	56	
58	27	29	31	33	35	57	39	41	43	45	47	49	51	53	55	57	59	(
59	28	50	32	35	37	39	41	43	45	47	50	52	54	56	58	60	63	
40	30	32	34	36	39	41	43	45	48	50	52	55	57	59	61	64	66	
41	51	33	56	58	41	43	45	48	50	52	55	57	60	62	64	67	69	
42	5 5	35	58	40	45	45	48	50	53	55	58	60	63	65	68	70	73	
43	34	37	39	42	45	47	50	52	55	58	60	65	66	68	71	73	76	
44	56	38	41	44	47	49	52	55	58	60	63	66	69	71	74	77	80	
45	57	40	45	46	49	52	55	57	60	63	66	69	72	75	78	80	83	
46	39	42	45	48	51	54	57	60	63	66	69	72	75	78	81	84	87	
47	41	44	47	50	53	56	60	63	66	69	72	75	78	82	85	88	91	
48	43	46	49	52	56	59	62	65	69	72	75	78	82	85	88	92	95	
49	44	48	51	55	58	61	65	68	72	75	78	82	85	89	92	95	99	1
50	46	50	53	57	60	64	67	71	75	78	82	85	89	92	96	99	103	1
51	48	52	55	59	63	66	70	74	78	81	85	89	92	96	100	103	107	1
52	50	54	58	61	65	69	73	77	81	84	88	92	96	100	104	107	111	1
53	52	56	60	64	68	72	76	80	84	88	92	96	100	104	108	112	116	I
54	54	58	62	66	70	7-1	79	83	87	91	95	99	103	108	112	116	120	I
55	56	60	64	69	73	77	82	86	90	94	99	103	107	112	116	120	125	I
56	58	62	67	71	76	80	85	89	93	98	102	107	111	116	120	125	129	1
57 	60	65	69	74	78	83	88	92	97	101	106	111	115	120	125	129	134	1
58	62	67	72	7G	81	86	91	95	100	105	110	115	119	124	129	134	138	1
59	64	69	74	79	84	89	94	99	104	109	114	119	124	128	133	138	143	1
60	66	72	77	82	87	92	97	102	107	112	118	123	128	153	138	143	148	1
61	69	74	79	85	90	95	100	106	111	116	121	127	132	137	143	148	153	1
62	71	76	82	87	93	98	104	109	115	120	125	151	136	142	147	153	158	l
63	73	79	85	90	96	101	107	113	118	124	130	155	141	146	152	158	163	1
64	76	81	87	93	99	105	110	116	122	128	134	140	145	151	157	163	169	1
65	78	84	90	96	102	108	114	120	126	132	138	144	150	156	162	168	174	1
66 67	80	87	93	99	105	111	117	124	150	136	142	148	155	161	167	173	179	1
67 68	83 85	89 92	96 98	102	108 112	115	121	127	154	140	147	153	159	166	172	178	185	l l
69	88			105		118	125 128	131	158	144	151	158	164	171	177	184	190	
70	90	95 97	101 104	108	115 118	122 125	132	135 139	142 146	149 153	155 160	162 167	169 174	176 181	182 188	189 195	196 202	2
70 71	90 93	100	104	114	118	125	136	145				172	179	186		200	202 207	2
71 72	93 96	103	110	118	122	152	140	143	150 155	157 162	165 169	177	184	186	193 199	206	217	2
72 73	98	103	113	121	125	156	140	151	159	166	174	182	189	197	204	212	213	2
73 74	101	100	117	121	132	140	148	155	163	171	174	187	194	202	210	212	219	2
74 75	104	112	120	124	136	140	152	160	168	171	184	192	200	202	216	218	232	2
76	104	112	125	120	139	148	156	164	172	180	189	192	200	208	221	250	232	2
76 77	107	113	126	135	143	151	160	164	177	185	194	202	210	213	227	236	238	2
78	112	121	150	138	147	155	164	173	181	190	199	207	216	225	233	242	250	2
BM! (kg/m²)	13	I4	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	•••••

