Card 1, Side 1

Table 1: Classification of Overweight and Obesity by BMI	
Classification	BMI (kg/m^2)*
Underweight	< 18.5
Normal	18.5 – 24.9
Overweight	25.0 – 29.9
Obese I	30.0 – 34.9
Obese II	35.0 – 39.9
Obese III	≥ 40.0
** Disease risk for obesity-associated chronic health conditions is directly correlated with increasing BMI and waist circumference (WC)*	
Gender-specific cut-offs for increased waist circumference: • *Men waist circumference > 40 inches (102 centimeters)* • *Women waist circumference > 35 inches (88 centimeters)*	

Table 2: Common Obesity-Associated Conditions*
The following conditions are directly influenced by weight loss: • Hypertension** • Type 2 Diabetes and Pre-Diabetes** • Dyslipidemia** • Metabolic Syndrome • Obstructive Sleep Apnea • Degenerative Joint Disease (DJD) • Non-Alcoholic Fatty Liver Disease (NAFLD)
* Increased waist circumference is considered an obesity comorbidity equivalent **At least moderate evidence exists for modifying these conditions with weight loss

Table 3: Diagnosis of Metabolic Syndrome	
Three or more of the following risk factors indicate metabolic syndrome	Defining Level
Abdominal obesity: • Men* • Women	Waist circumference (WC): Greater than 40 inches (102 centimeters) Greater than 35 inches (88 centimeters)
Triglycerides	Greater than or equal to 150 mg/dL
HDL cholesterol: • Men • Women	 Less than 40 mg/dL Less than 50 mg/dL
Blood pressure	Greater than or equal to 130/85 mmHg
Fasting glucose	Greater than or equal to 100 mg/dL
** Some men can develop multiple metabolic risk factors when the WC is only marginally increased (e.g., 37-39 in (94-102 cm). Such persons may have a strong genetic contribution to insulin resistance, and should benefit from lifestyle changes (i.e., diet, exercise).*	

Table 4: Weight Loss Interventions Based on Risk and BMI (kg/m^2)			
Patient Classification	**Level 1**	**Level 2**	**Level 3**
BMI $\geq$ 25 kg/m^2 with obesity-associated chronic health condition(s)*	Diet, exercise, and behavior modification		
BMI $\geq$ 30 kg/m^2 or BMI $\geq$ 27 kg/ m^2 with obesity-associated condition(s)*	Diet, exercise, and behavior modification	Consider drug therapy	
BMI $\geq$ 40 kg/m^2 or BMI $\geq$ 35 kg/ m^2 with obesity-associated condition(s)*	Diet, exercise, and behavior modification	Consider drug therapy	Consider surgery
** Obesity-associated conditions are listed in Table 2*			

Table 5: Essential Elements of Weight Loss Treatment
• Obesity is a chronic disease requiring lifelong commitment to treatment and long-term maintenance • Obesity may not be the chief complaint in a patient encounter, yet it requires foremost attention • The primary care team plays an integral role in weight management • Screening, documentation, and regular assessment are critical to weight management • Assessment for obesity-associated chronic health conditions is an essential component of treatment decisions • Shared decision-making and assessment of patient motivation are fundamental to weight management • Comprehensive lifestyle intervention is central to successful and sustained weight loss • Tangible intermediate and long-term weight loss goals are critical to weight loss success • Energy deficit should be achieved through decreased caloric intake and increased physical activity • Pharmacotherapy and bariatric surgery may be considered as adjuncts to comprehensive lifestyle intervention

Table 6: Nutrient Composition of the Dietary Approaches to Stop Hypertension (DASH) Diet	
Nutrient	**Recommended Intake**
Saturated Fat	6% of total calories
Total Fat	27% of total calories
Carbohydrate	55% of total calories
Fiber	30 grams/day
Protein	18% of total calories
Cholesterol	150 mg/day
Total calories (energy)*	Balance energy intake and expenditure to maintain desirable body weight/prevent weight gain.
*Daily calorie expenditure should include at least 30 minutes of moderate physical activity/day. To avoid weight gain, the total should be approximately 60 minutes per day.	

Source: U.S. Department of Health and Human Services; National Institutes of Health; National Heart, Lung, and Blood Institute; NIH Publication No. 06-4082; Originally Printed 1998, Revised April 2006.

Card 1, Side 2

BMI Chart

Upper Limit Border Points for Category of Overweight/Obesity by Height (inches)					
BMI (kg/m^2)	**25**	**30**	**35**	**40**	**45**
Height			**Stage 1**	**Stage 2**	**Stage 3**
(inches)	**Normal**	**Overweight**	**Obese**		
58	119	143	167	191	215
59	124	148	173	198	222
60	128	153	179	204	230
61	132	158	185	211	238
62	136	164	191	218	246
63	141	169	197	225	254
64	145	174	204	232	262
65	150	180	210	240	270
66	155	186	216	247	278
67	159	191	223	255	287
68	164	197	230	262	295
69	169	203	236	270	304
70	174	209	243	278	313
71	179	215	250	286	322
72	184	221	258	294	331
73	189	227	265	302	340
74	194	233	272	311	350
75	200	240	279	319	359
76	205	246	287	328	369
Adapted from *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report*					

Table 7: Recommended Dosage for Selected Obesity Drug Therapy Each drug is indicated if the patient's BMI is ≥30 kg/m^2 or >27 kg/m^2 in the presence of 1 or more obesity-associated conditions		
Drug	**Recommended Dosage and Administration**	**Contraindications and Cautions**
Orlistat 120 mg capsule	120 mg, three times a day • Taken with or within 1 hour of each meal containing fat • Omit dose if a meal is skipped or a meal contains no fat • Take daily multivitamin (containing fat soluble vitamins A, D, E, and K at least two hours prior to orlistat	• Contraindicated during pregnancy (FDA category X) • Not recommended for mothers who are nursing • Increased gastrointestinal adverse effects when taken with diets high in fat (greater than 30% of total daily calories from fat) Drug Interactions: • Cyclosporine's concentrations may be reduced; monitor and adjust dose as necessary. Take cyclosporine 2 hours before or after orlistat. • May decrease absorption of some fat soluble vitamins (A, D, E, and K). Levels of vitamin D and beta-carotene may be low in obese patients compared with non-obese subjects. • Patients taking warfarin should be monitored closely and warfarin dose adjusted accordingly • Levothyroxine: monitor for changes in thyroid function • Anticonvulsant efficacy may be reduced
Lorcaserin 10 mg tablet	10 mg two times a day • Maximum 20 mg/day • May be taken without regard to food • Consider stopping after 12 weeks if orlistat has not been effective in reducing weight more than 5% of initial body weight Dose in Patients with Renal Impairment • Not recommended in severe renal impairment or end stage renal disease Dose in Patients with Hepatic Impairment • Has not been studied in severe hepatic impairment; use with caution.	• Contraindicated during pregnancy (FDA category X) • Not recommended for mothers who are breastfeeding • Serotonin syndrome or neuroleptic malignant syndrome (NMS)-like reactions are theoretically possible • Extreme caution is advised if lorcaserin is combined with serotonergic or antidopaminergic drugs • Use with caution in patients with valvular heart disease, bradycardia, congestive heart failure, or those using drugs known to be 5-HT$_{2B}$ agonists • Potential for cognitive impairment and psychiatric reactions including sedation, euphoria and suicidal

		thoughts • Potential risk of hypoglycemia in patients being treated for diabetes • As a 5-HT_{2C} receptor agonists, use with caution in patients predisposed to priapism or using PDE-5 inhibitors • Risk for anemia, neutropenia, hyperprolactinemia Drug Interactions • Theoretical risk for serotonin syndrome such as with concomitant SSRIs/SNRIs • Moderate CYP 2D6 inhibitor
Phentermine/topiramate 3.75 mg/23 mg, 7.5 mg/46 mg, 11.25 mg/69 mg, 15 mg/92 mg Extended-release capsules (ER caps)	Dose Titration • One 3.75 mg/23 mg ER cap each morning for 14 days; then increase to 7.5 mg/46 mg each morning for an additional 12 weeks. • If a weight loss of 3% of baseline body weight is not achieved discontinue or increase the dose to 11.25 mg/69 mg each morning for 14 days; then increased to 15 mg/92 mg (maximum dose) each daily. • If after 12 weeks on 15 mg/92 mg the patient has not lost at least 5% of baseline body weight, discontinue treatment using every other day weaning over one week thereby decreasing risk of seizure Dose in Patients with Renal Impairment • Do not exceed 7.5 mg/46 mg once daily if creatinine clearance <50mL/min, and avoid in severe renal disease Doses in Patients with Hepatic Impairment • The dose in moderate hepatic impairment (Child-Pugh 7-9) should not exceed 7.5 mg/46 mg once daily, and avoid use in severe hepatic impairment	• Contraindicated during pregnancy (FDA category X) and use not recommended in breastfeeding mothers • Avoid use in glaucoma, hyperthyroidism, or within 14 days following use of a MAOI • Not recommended in patients with unstable cardiac or cerebrovascular disease • Potential for cognitive, mood and sleep disorders and topiramate-related general class warning for suicidal thoughts • Potential for metabolic acidosis and elevated creatinine • Potential risk of hypotension, CNS depression, hypokalemia, kidney stones, withdrawal seizures, and hypoglycemia in patients being treated for diabetes Drug Interactions • MAOI – phentermine is contraindicated during or within 14-days following administration of a MAOI • Oral contraceptives – a reduction in contraceptive efficacy is not anticipated but irregular bleeding (spotting) may be more frequent • Antiepileptic drugs – use with caution

Table 8: Schedule for Clinical and Biochemical Monitoring of the Post-Bariatric Surgery Patient

	Preoperative	1 month	3 months	6 months	12 months	18 months	24 months	Annually
Complete blood count	X	X	X	X	X	X	X	X
LFTs	X	X	X	X	X	X	X	X
Glucose	X	X	X	X	X	X	X	X
Creatinine	X	X	X	X	X	X	X	X
Electrolytes	X	X	X	X	X	X	X	X
Iron/ferritin	X			X[a]	X[a]	X[a]	X[a]	X[a]
Vitamin B12	X			X[a]	X[a]	X[a]	X[a]	X[a]
Folate	X			X[a]	X[a]	X[a]	X[a]	X[a]
Calcium	X			X[a]	X[a]	X[a]	X[a]	X[a]
Intact PTH	X			X[a]	X[a]	X[a]	X[a]	X[a]
25-D	X			X[a]	X[a]	X[a]	X[a]	X[a]
Albumin/prealbumin	X			X[a]	X[a]	X[a]	X[a]	X[a]
Vitamin A	X						Optional	Optional
Zinc	X			Optional	Optional		Optional	Optional
Bone mineral density and body composition	X				X[a]		X[a]	X[a]
Vitamin B1			Optional	Optional	Optional	Optional	Optional	Optional

Data indicate the suggested schedule for laboratory monitoring after bariatric surgery. LFT, Liver function tests.

[a] Examinations should only be performed after RYGB, BPD, or BPD/DS.[†] All of them are considered as suggested for patients submitted to restrictive surgery where frank deficiencies are less common.

[†]*RYGB = Roux-en-Y gastric bypass; BPD = biliopancreatic diversion; BPD/DS = biliopancreatic diversion with duodenal switch*

Source: Heber D, Greenway FL, Kaplan LM, et al. Endocrine and nutritional management of the post-bariatric surgery patient: An Endocrine Society clinical practice guideline. J Clin Endocrinol Metab. Nov 2010;95(11):4823-4843. Used with permission.

Screening, Diagnosis, Assessment, and Treatment of Overweight and Obesity: Algorithm