

THERAPEUTIC OPTIONS FOR OBESE KIDNEY TRANSPLANT CANDIDATES

From The Renal and Pancreas Transplant Division of Saint Barnabas Health Care System

BMI	CLASSIFICATION
18.5–24.9	normal weight
25.0–29.9	overweight
30.0–34.9	class I obesity
35.0–39.9	class II obesity
Over 40.0	class III obesity

What defines obesity?

Obesity is often measured by a parameter known as the body mass index (BMI), which takes into

account an individual's height and weight.

What are the adverse effects of obesity on health?

Obesity can predispose a person to a variety of illnesses including high blood pressure, heart disease, type II diabetes mellitus and osteoarthritis. Specific to kidney transplantation, obesity is associated with increased: 1) length of

hospital stay, 2) rate of readmission to the hospital, 3) wound complications, 4) infections, 5) risk of development of post-transplant diabetes mellitus, and 6) risk of kidney transplant failure.


Can I be ruled out as a transplant candidate because of obesity?

Kidney transplantation is associated with an increased life expectancy as well as an improved quality of life compared to dialysis. Unfortunately, due to the numerous complications associated with obesity in the kidney transplant patient, an individual must have a BMI of less than or equal to 35 to qualify for a kidney transplant. Studies have shown that fewer than one out of 10 morbidly obese patients on dialysis will be able to lose sufficient weight by dieting and exercising alone to become eligible for a kidney transplant.

WEIGHT	LBS	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215
	KGS	45.5	47.7	50.0	52.3	54.5	56.8	59.1	61.4	63.6	65.9	68.2	70.5	72.7	75.0	77.3	79.5	81.8	84.1	86.4	88.6	90.9	93.2	95.5	97.7
HEIGHT	IN/CM	UNDERWEIGHT				HEALTHY				OVERWEIGHT				OBESE				EXTREMELY OBESE							
5'0"	152.4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
5'1"	154.0	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	36	37	38	39	40
5'2"	157.4	18	19	20	21	22	22	23	24	25	26	27	28	29	30	31	32	33	33	34	35	36	37	38	39
5'3"	160.0	17	18	19	20	21	22	23	24	24	25	26	27	28	29	30	31	32	32	33	34	35	36	37	38
5'4"	162.5	17	18	18	19	20	21	22	23	24	24	25	26	27	28	29	30	31	31	32	33	34	35	36	37
5'5"	165.1	16	17	18	19	20	20	21	22	23	24	25	25	26	27	28	29	30	30	31	32	33	34	35	35
5'6"	167.6	16	17	17	18	19	20	21	21	22	23	24	25	25	26	27	28	29	29	30	31	32	33	34	34
5'7"	170.1	15	16	17	18	18	19	20	21	22	22	23	24	25	25	26	27	28	29	29	30	31	32	33	33
5'8"	172.7	15	16	16	17	18	19	19	20	21	22	22	23	24	25	25	26	27	28	28	29	30	31	32	32
5'9"	175.2	14	15	16	17	17	18	19	20	20	21	22	22	23	24	25	25	26	27	28	28	29	30	31	31
5'10"	177.8	14	15	15	16	17	18	18	19	20	20	21	22	23	23	24	25	25	26	27	28	28	29	30	30
5'11"	180.3	14	14	15	16	16	17	18	18	19	20	21	21	22	23	23	24	25	25	26	27	28	28	29	30
6'0"	182.8	13	14	14	15	16	17	17	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	28	29
6'1"	185.4	13	13	14	15	16	16	17	17	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27	28
6'2"	187.9	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	27	27
6'3"	190.5	12	13	13	14	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	26	26
6'4"	193.0	12	12	13	14	14	15	16	17	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	26

The formula to determine BMI = 703 x your weight in pounds divided by your height in inches x your height in inches.

SAINT BARNABAS HEALTH CARE SYSTEM
 Renal and Pancreas Transplant Division
 Saint Barnabas Medical Center
 Newark Beth Israel Medical Center



What are my options for weight loss?

Patients at Saint Barnabas Medical Center or Newark Beth Israel Medical Center who are turned down as a kidney transplant candidate because of obesity (BMI greater than 35) have the option of participating in our study, “Therapeutic Options for Obese Kidney Transplant Candidates”. Study participants will work with a multidisciplinary weight loss team that includes a dietician, psychologist, behavioral therapist, exercise physiologist and nephrologist. In addition, a highly experienced surgeon from our Centers will explain the potential surgical options for weight loss, known as bariatric surgery.

What is bariatric surgery?

Bariatric surgery consists of two surgical options for weight loss: Laparoscopic Adjustable Gastric Banding and Gastric Bypass procedure. Gastric banding involves the laparoscopic (minimally invasive) placement of a silicone prosthetic device around the top portion of stomach leading to a sensation of early fullness and subsequent decrease in food consumption. Gastric bypass results in the division of the stomach into a small upper pouch and a lower, larger, “remnant” pouch, thus limiting the amount of food consumption. The typical recovery time is 2 to 4 days after gastric banding and 2 to 4 weeks after gastric bypass surgery. The surgeon will discuss all the potential side effects of bariatric surgery at the time of your consultation with the surgeon.

How fast is the weight loss and when will I be listed for a kidney transplant?

Individuals need to achieve a BMI of less than or equal to 35 to be actively listed for a kidney transplant. The rate of weight loss is different among individuals and also depends on following a good diet and exercise regimen after surgery. On average, individuals are able to lose over 60 percent of their excess weight by 9 to 12 months with Gastric Bypass, allowing them to achieve a BMI of less than or equal to 35 to become eligible for a kidney transplant. For example, if an individual is 5 feet and 9 inches tall and weighs 265 pounds, he would have a BMI of 39 and would not qualify for a kidney transplant. After gastric bypass, that individual would be expected to lose approximately 60 pounds at about 9 to 12 months. The subsequent BMI would be 31 and, as a

result, he would qualify for a kidney transplant. On average, individuals lose 20 percent of their weight with Gastric Banding.

How do I get enrolled in the weight loss study?

The first step is to make an appointment for a kidney transplant evaluation. The appointment can be made by calling Saint Barnabas Medical Center at **973-322-5938** or Newark Beth Israel Medical Center at **973-926-7555**. During the transplant evaluation, the transplant coordinator and transplant physician will calculate your body mass index and give you a goal weight to achieve before you can be actively listed for a kidney transplant. At the same time, you will have the opportunity to meet a dietician and will be given the information to make an appointment with the bariatric surgeon.

Will I be able to gain time on the transplant wait list as I am losing weight?

If you are otherwise deemed a good transplant candidate at the transplant evaluation and your BMI is less than or equal to 40, you can gain time on the transplant list if you are motivated and willing to engage in an active weight loss plan. Early listing on the transplant list is important since the average waiting time for a kidney transplant is 3 to 5 years. You will not be called in for a kidney transplant until your BMI is less than or equal to 35. In addition, you will require a re-evaluation 6 months after your initial evaluation to make sure that progress has been made in regards to weight loss.

Aside from becoming a transplant candidate, are there other benefits of weight loss?

Weight loss from bariatric surgery has been associated with:

1. remission of type II diabetes mellitus
2. improvement in control of type II diabetes
3. improvement in cholesterol levels
4. improvement in physical activity levels
5. decreased risk of heart disease
6. improvement in life expectancy

Newark Beth Israel Medical Center; **1.877.878.7555** • Saint Barnabas Medical Center; **1.888.409.4707**