

Guidelines for Elective Joint Replacement Surgery

Thank you for your interest in elective joint replacement surgery.

Medicine is changing rapidly. There is an increasing focus on quality, optimal outcomes, and the prevention of complications. To best serve our joint replacement patients, the SOS joint replacement surgeons have implemented requirements for elective joint replacement, consistent with clinical research findings, to produce more predictable and better outcomes, reduce complications, and increase safety. In the past, we have solicited the assistance of our primary care and specialist physicians, to "clear the patient" for elective surgery. We have decided to raise the bar even higher to achieve more predictable and more optimal outcomes, reduce potential complications, and improve care.

Commensurate with this, we have developed and implemented strict guidelines for elective joint replacement surgery which include the following:

- body mass index (BMI) of less than 40 (see table at end of document)
- albumin level of greater than 3.5
- hemoglobin A1c level of less than 8.0
- blood sugars less than 170
- smoking cessation

Obviously, the surgeon can best control the surgical procedure, but we have substantially less control over the postoperative healing and rehabilitative processes, and the occurrence of potential complications such as medical complications (heart attack and stroke), infection, blood clots (deep vein thrombosis), pulmonary embolism, wound healing problems, stiffness, etc.

Our culture has an epidemic of weight related health issues. However, we think we can improve outcomes, and reduce incidence of surgical complications, by more rigorously selecting patients for elective surgery, and insisting on preoperative optimization of factors such as those mentioned above.

It's not uncommon for people with knee and hip joint pain from osteoarthritis to be overweight. Yet knee and hip replacement surgery in overweight patients presents many challenges.

If you're in constant pain, the last thing you want to do is walk, jog or work out, so it's easy to put on extra weight, but unfortunately, numerous studies show that obesity complicates both the recovery and long-term success of joint replacement surgery. Though many patients don't want to wait for surgery, clinical outcomes studies suggest that it's best to lose weight before the surgery if at all possible.

The joint replacement physician experts in the SOS practice have determined that patients with a body mass index (BMI) greater than 40 should postpone surgery until after undergoing a weight loss program under the direction of a primary care provider. Those patients who have unsuccessfully tried weight loss regimens and have other problems such as diabetes, hypertension, sleep apnea or high cholesterol might visit a bariatric surgeon and discuss weight-loss options. Physical therapy, low impact exercise programs, nutritional counseling, Weight Watchers, and in some cases, gastric bypass surgery may be considered. We recommend speaking to your primary care physician about this, if applicable. Further information is attached.

Increased BMI is associated with complications such as wound infection, wound healing issues, and early prosthetic failure. These are serious complications that can have profound implications, often resulting in a far worse situation than the initial arthritis itself.

It is important for overweight patients with hip and knee arthritis to set realistic expectations before undergoing joint replacement surgery. For example:

- The surgery will not change a patient’s weight. Studies show that obese patients will continue to gain weight after surgery unless they make lifestyle changes.
- Surgery will improve pain but will not remove all discomfort, especially getting out of chairs, climbing stairs and during other daily activities.
- Patients with diabetes must carefully manage their blood sugar during the perioperative period to avoid an infection and should watch for local wound complications and blood clots.
- Obesity may decrease the life span of knee implants on young patients, warranting future surgeries.

Thank you for starting the journey to joint replacement surgery with us. Together we can attain the best possible result for you.

Weight in Pounds

	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250
4'	30.5	33.6	36.6	39.7	42.7	45.8	48.8	51.9	54.9	58.0	61.0	64.1	67.1	70.2	73.2	76.3
4'2"	28.1	30.9	33.7	36.6	39.4	42.2	45.0	47.8	50.6	53.4	56.2	59.1	61.9	64.7	67.5	70.3
4'4"	26.0	28.6	31.2	33.8	36.4	39.0	41.6	44.2	46.8	49.4	52.0	54.6	57.2	59.8	62.4	65.0
4'6"	24.1	26.5	28.9	31.3	33.8	36.2	38.6	41.0	43.4	45.8	48.2	50.6	53.0	55.4	57.9	60.3
4'8"	22.4	24.7	26.9	29.1	31.4	33.6	35.9	38.1	40.4	42.6	44.8	47.1	49.3	51.6	53.8	56.0
4'10"	20.9	23.0	25.1	27.2	29.3	31.3	33.4	35.5	37.6	39.7	41.8	43.9	46.0	48.1	50.2	52.2
5'	19.5	21.5	23.4	25.4	27.3	29.3	31.2	33.2	35.2	37.1	39.1	41.0	43.0	44.9	46.9	48.8
5'2"	18.3	20.1	21.9	23.8	25.6	27.4	29.3	31.1	32.9	34.7	36.6	38.4	40.2	42.1	43.9	45.7
5'4"	17.2	18.9	20.6	22.3	24.0	25.7	27.5	29.2	30.9	32.6	34.3	36.0	37.8	39.5	41.2	42.9
5'6"	16.1	17.8	19.4	21.0	22.6	24.2	25.8	27.4	29.0	30.7	32.3	33.9	35.5	37.1	38.7	40.3
5'8"	15.2	16.7	18.2	19.8	21.3	22.8	24.3	25.8	27.4	28.9	30.4	31.9	33.4	35.0	36.5	38.0
5'10"	14.3	15.8	17.2	18.7	20.1	21.5	23.0	24.4	25.8	27.3	28.7	30.1	31.6	33.0	34.4	35.9
6'	13.6	14.9	16.3	17.6	19.0	20.3	21.7	23.1	24.4	25.8	27.1	28.5	29.8	31.2	32.5	33.9
6'2"	12.8	14.1	15.4	16.7	18.0	19.3	20.5	21.8	23.1	24.4	25.7	27.0	28.2	29.5	30.8	32.1
6'4"	12.2	13.4	14.6	15.8	17.0	18.3	19.5	20.7	21.9	23.1	24.3	25.6	26.8	28.0	29.2	30.4
6'6"	11.6	12.7	13.9	15.0	16.2	17.3	18.5	19.6	20.8	22.0	23.1	24.3	25.4	26.6	27.7	28.9
6'8"	11.0	12.1	13.2	14.3	15.4	16.5	17.6	18.7	19.8	20.9	22.0	23.1	24.2	25.3	26.4	27.5
6'10"	10.5	11.5	12.5	13.6	14.6	15.7	16.7	17.8	18.8	19.9	20.9	22.0	23.0	24.0	25.1	26.1
7'	10.0	11.0	12.0	13.0	13.9	14.9	15.9	16.9	17.9	18.9	19.9	20.9	21.9	22.9	23.9	24.9

<http://www.freebmicalculator.net>

Underweight
 Normal
 Overweight
 Obesity