

Opioid-Free Action Plan For				
Expected Duration:	Likely Maximal Discomfort: Day			

- 1) When scheduling: Ask if long-acting numbing medicines are an option for your surgery.
- 2) 3 days before surgery, begin taking 500 mg of magnesium a day to reduce inflammation, and continue until pain-free.
- Before surgery, fill in the "Fun, Friend, and Treat" matrix with SPECIFIC AVAILABLE options. Make a copy for each place you'll be. Get movies, books, magazines or needed items for fun.
- 4) Over the counter medications (calculations page 2):
 - a. Immediately after surgery, take _____ tabs of ibuprofen (or Advil or Motrin). Repeat every 6 hours until the pain isn't a problem for you. Stop if stomach upset.
 - b. For the first day, add acetaminophen tabs between daytime ibuprofen doses, then only if needed for breakthrough pain (no more than 4x/day)

Example 145 lbs: 3 Advil every 6 hours; 1000mg Tylenol in between

- 5) Physical solutions: Use ice and vibration VibraCool Extended Unit for 20 minutes for more intense relief. You can use the ice as often as every 2 hours, vibration alone as long as you want. www.VibraCool.com Consider getting hot packs, weighted blanket, positioning pillows, or mechanical tape to try.
- 6) For moderate pain relief, go to your fun/friend distractions list.
- 7) For intense pain relief, have someone make an "emergency treat" wrapped food, gift, letter, playlist, or other surprise.
- 8) Sleep = pain management. If you can't sleep, take 25mg or 50mg of diphenhydramine (Benadryl) to help.

Check with your physician for expected duration and maximal pain.

"Magnesium, Benadryl, ibuprofen, acetaminophen, ice, and vibration are ok for you with this procedure."





Dr.

	Day 1	Day 2	Day 3	Day 4
Fun!	1)	1)	1)	1)
		2)	2)	
		3)		
Friends		1)	1)	1)
Visit		2)	2)	
Time				
Phone #				
Treat		1)	1)	
		2)		

Fun Ideas: Book Cooking Magazine Movie (which ones?) Music (album? Streaming? Playlist?) Games (board? Video? Iphone?) Meditation app Yoga (what YouTube address?) Podcasts Puzzles Sewing Crafting Shower Swimming (if allowed), Foam Roller, stretching, deep breathing

Treat ideas: Aroma Therapy, favorite allowable food, candy, "I'll draw you a hot bath" coupon, "I'll give you a massage" coupon, hot packs



WHY the Pain Plan Works

1) Pain goes down when you pay attention to something else. Fear of pain ramps it up. Having people to talk to, things to do, entertainment, and ways to enjoy yourself actually reduces fear and pain, because the part of your brain that processes pain is too busy. Meditating, yoga, stretching, massage and exercise block some pain from getting to the brain, and trigger pain relief and inhibition in the brain itself. Knowing you have a plan reduces fear as well, and making your own plan helps — it's called "the IKEA effect", you like your plan best if you make it.



- 2) Ibuprofen has been found in multiple studies to work better than opioids for dental surgery, fractures, carpal tunnel release, hand surgery, arthroscopic meniscectomy and many others. Dosing is 10mg/kg, so your weight in lbs (______ / 2.2 kg) = _____ kg x 10mg = _____ Over the counter ibuprofen usually comes in 200mg tabs of generic, Motrin, or Advil. Acetaminophen is 15mg/kg taken no more than 4 times/day.
- 3) The Oscillice™ technology in VibraCool has been tested in over 30 clinical trials for sharp pain. Intense flat ice reduces inflammation and causes the brain to decrease pain all over the body. The specific high frequency range of vibration in VibraCool activates the sympathetic system locally (increasing blood flow), while maximally stimulating the most potent touch receptor to inhibit pain. While some electrical stimulators or menthol creams also inhibit specific touch receptors, light oscillating mechanical force triggers all four receptors to reduce pain. Multiple studies suggest local vibration also stimulates repair.
- 4) Relieving general inflammation reduces pain, but supplements take a few days to become effective. 64% of people are magnesium deficient, and Magnesium relieves pain in four ways: neuro-anti-inflammatory, smooth muscle relaxer, general anti-inflammatory, and NMDA blocker (meaning any opioids are 1/3 more effective). Foods rich in magnesium include almonds, avocado, prunes, cashews, and chickpeas. For reducing inflammation, it is possible that CBD oil can help after a few days as well. Cannabidiol (CBD) is the non-psychoactive compound in hemp and cannabis. While many people are using it for pain, the best research at this time suggests an anti-oxidant effect and reduced inflammation, but the research is much less strong than for magnesium.
- 5) Sleep is one of the best ways to escape pain, and being well rested makes pain easier to tolerate. Being irritable makes pain worse. Benadryl (diphenhydramine) is an over the counter way to help make you sleepy. 25mg 6-12 years; 50mg for adults and teenagers to help sleep.

¹ Hallway A, Vu J, Lee J, et al. Patient Satisfaction and Pain Control Using an Opioid-Sparing Postoperative Pathway. Journal of the American College of Surgeons. 2019 Apr 26.

² Scully RE, Schoenfeld AJ, Jiang W, et al. Defining Optimal Length of Opioid Pain Medication Prescription After Common Surgical Procedures. JAMA surgery. 2018 Jan 1;153(1):37-43.

³ Ilyas AM, Miller AJ, Graham JG, Matzon JL. A Prospective, Randomized, Double-Blinded Trial Comparing Acetaminophen, Ibuprofen, and Oxycodone for Pain Management After Hand Surgery. Orthopedics. 2019 Mar 1;42(2):110-5.

⁴ Ilyas AM, Miller AJ, Graham JG, Matzon JL. Pain Management After Carpal Tunnel Release Surgery: A Prospective Randomized Double-Blinded Trial Comparing Acetaminophen, Ibuprofen, and Oxycodone. The Journal of hand surgery. 2018 Oct;43(10):913-9.

