

Prehabilitation

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PLANT-BASED
Health Professionals UK

Promoting Sustainable Health and Nutrition

Prehabilitation is the process of getting people as healthy as possible before surgery.

Having surgery is a bit like running a marathon. Our heart, lungs and muscles have to work harder to see us through the operation and recovery period.

Just as you would not prepare for a marathon by simply reading about it, **prehabilitation proactively prepares you for surgery** by improving fitness with healthy habits.

By doing so, emerging evidence suggests people have better outcomes. This includes fewer complications, faster recovery and better physical functioning after an operation.

Some, but not all hospitals offer prehabilitation programmes. They may vary by incorporating some or all of the following concepts, and generally last four to six weeks.

Exercise

Perform both aerobic and strengthening exercises

Try things like:

Aim to exercise for around 150 minutes per week

Aerobic exercises:

Walking
Cycling
Jogging
Swimming

Strengthening exercises:

High intensity interval training

Use of resistance bands
Weight training

Tips

- **Personalise exercise** to your abilities. Involve *fitness professionals* if needed
- It's better to do exercise that you **enjoy** and will *continue regularly*, rather than do intense exercise that you don't enjoy and won't repeat
- **Consider** group fitness classes if *motivation* is an issue
- **Involve** your doctor if *health issues* prevent you from exercising effectively
- **Keep** an *exercise diary* and track your progress



Respiratory exercises

Respiratory exercises performed before and after an operation helps open up the airways and move phlegm. They can reduce post-operative chest infections.

Try things like

Blowing up a small balloon in one breath and holding it for longer than 5 seconds

(Taken from the Imperial PREPARE programme)

Deep breathing exercises, such as this 6 step process

1. Sit upright in a supported chair
2. Breathe in and out normally
3. Take a slow deep breath in so that your ribs expand sideways and your lungs fill up with air and then exhale
4. Take a slow deep breath in and expand your lungs, hold that breath for three seconds and then slowly exhale
5. Repeat three times
6. If you feel dizzy or tired return to breathing in and out normally.

Repeat the exercises every two hours daily before your operation, and every one to two hours while you recover.



Nutrition

Healthy eating is vital in order to build strength and support the immune system.

Eat less

High calorie, fatty and processed food



Eat more

Fruits and Vegetables



Foods rich in omega 3 fatty acids

such as walnuts, ground flax seeds and chia seeds.



Protein - aim for 1.5 g per kg of body weight (double the normal requirement).



Try: A whole food, plant based diet

Maximises nutritious foods like vegetables, fruits, beans, wholegrains, nuts and seeds

Minimises processed foods, added sugar and oil and animal based foods (meat, eggs, dairy)

It has the added benefit of **improving** chronic conditions like heart disease, diabetes and high blood pressure, which **increase complications** after an operation

A low-fat, whole food plant based diet has been shown to improve:

Blood sugar control within 3 weeks

Blood pressure within 7 days

Ischaemic heart disease within 3 weeks



Involve a **nutritionist** if you have specific issues such as digestive problems, being underweight or obese.



Psychological wellbeing

Reducing anxiety leads to less post-operative pain, fewer infections and quicker recovery. It also leads to greater self-confidence and motivation.

Try things like

Engaging with members of the clinical team

to discuss any concerns or uncertainties, and obtain their support with decision making



Seeking emotional and psychological support

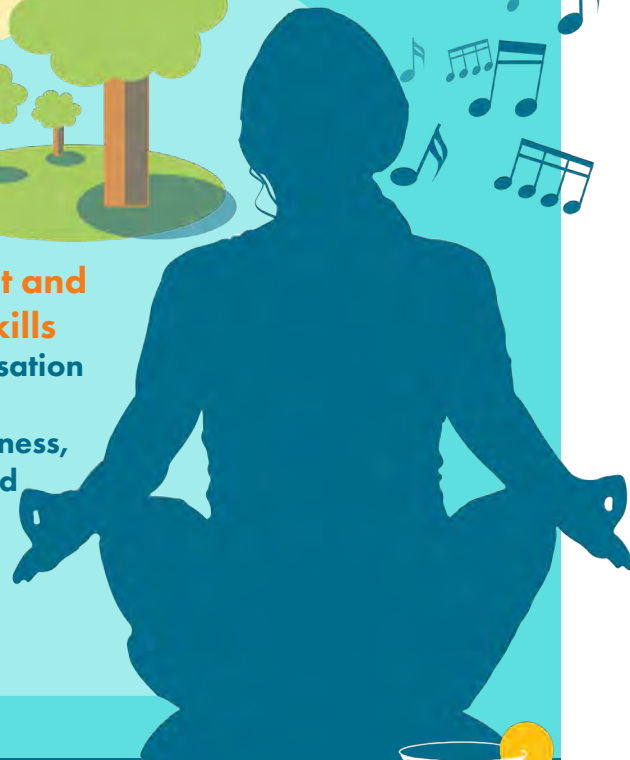
from family, friends, patient support groups or psychologists

Involving your family or carers in how you are thinking and feeling and coping



Stress management and relaxation skills

such as visualisation with relaxing music, mindfulness, meditation, and listening to relaxing music before sleeping



Smoking cessation

The effects of cigarette compounds disappear from the body in as little as 24 to 48 hours.

The earlier you stop smoking, the better. People who stop smoking at least one month before surgery have better outcomes.



Alcohol

Alcohol impairs the heart and can cause bleeding, post operative infections and heart and lung complications.

The rate of complications goes up the more alcohol you drink, and eliminating it for just four weeks before the operation has been shown to reduce complications.



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